POSTER SYMPOSIUM

#	DEFEND TIME*	Author	Cred	Institution	Category	Title of Poster
1	A	Hana Ahmed	BS	Florida State University College of Medicine	Basic Science	*The effects of Tualang Honey and the microbiome on UVB-induced processes in the skin of a murine model*
2	B	Abigail Cline	MD, PhD	Wake Forest School of Medicine	Clinical Research	*Patients' Adherence and Satisfaction Using a Novel Home UVB Phototherapy System*
3	C	Alexandra Collins	BA	Wake Forest School of Medicine	Clinical Research	*Analysis of Large Cohort Hidradenitis Suppurativa Patients: Risk factors and Socioeconomic Status*
4	D	Brianna De Souza	MD	Wake Forest School of Medicine	Clinical Research	*Intralesional Triamcinolone Acetonide for Treatment of Traction Alopecia*
5	A	Drew A. Emge	MD, MSc	Duke University Hospital System	Clinical Research	*Methicillin-resistant Staphylococcus aureus is an important pathogen in erythrodermic cutaneous T-cell lymphoma patients*
6	B	Beth Anne George	BA	Warren Alpert Medical School of Brown University	Clinical Research	*The Effects of Electronic Health Records on Triage and Closing Times: A Time Motion Study in an Academic Dermatology Department*
7	C	Nikita S. Goel	MD	University of North Carolina at Chapel Hill	Clinical Research	*Healthcare Utilization of Childhood Atopic Dermatitis*
8	D	Benjamin J Kahn	BA	Emory University School of Medicine	Clinical Research	*Knowledge gaps about actinic keratoses in patients with field cancerization*
9	A	Sree S. Kolli	BA	Wake Forest School of Medicine	Clinical Research	*Hidradenitis Suppurativa Has an Enormous Impact on Patients' Lives*
10	B	Michael Lehrer	MD	Mayo Clinic Arizona	Clinical Research	*Sun Protection Education Attitudes in Future School Teachers*
11	C	Alex Miles	BA	UNC Chapel Hill School of Medicine	Clinical Research	*Adverse events among Hidradenitis Suppurativa patients treated with infliximab*
12	D	Nwanneka Okwundu	DO	Hackensack Meridian Health-Pallisades Medical Center	Clinical Research	*Is Topical Treatment Effective for Psoriasis in Patients Who Failed Topical Treatment?*
13	A	Katelyn Peloza	BA	Dept. of Dermatology, Emory University	Clinical Research	*Use of Numeric Rating System and ItchyQoL in the Evaluation of Cancer Patients Treated with Immunotherapy*
14	B	Adrian Pona	MD	Wake Forest School of Medicine	Clinical Research	*Anecdote Increases Caregivers' Willingness to Use Topical Corticosteroids for Children with Atopic Dermatitis*
15	C	Adrian Pona	MD	Wake Forest School of Medicine	Clinical Research	*Demographics, Adherence, and Satisfaction of Home UV Phototherapy in Psoriasis*
16	D	Edward W Seger	MS	Wake Forest School of Medicine	Clinical Research	*Economic impact of container size on topical volume use*
17	A	Jacob Subash	MD, MBA	Grand Strand Hospital	Clinical Research	*Association between end stage renal disease and central scalp hair loss*
18	B	Anna C. Tappel	BS	University of Virgina School of Medicine	Clinical Research	*A Novel Treatment: An analysis of children's books about chronic pediatric dermatological conditions*
19	C	Santana D. VanDyke	BS	University of Virginia School of Medicine	Clinical Research	*Examination of the Benefits of Free Annual Skin Cancer Screenings*
20	D	Weston B. Wall	MD	Medical College of Georgia at Augusta University	Clinical Research	*Cadaveric Dissection Investigating Facial Artery Termination & Symmetry*

POSTER SYMPOSIUM

#	DEFEND TIME*	Author	Cred	Institution	Category	Title of Poster
21	A	Amena Alkeswani	BS	UABSOM	Clinical	*Kaposi Sarcoma Co-infected with Cytomegalovirus*
22	B	Mark M. Ash	MD, MS	University of North Carolina	Clinical	*Busulfan-associated dermatitis in bone marrow transplant recipients*
23	C	Robert Bai	MD	Virginia Commonwealth University	Clinical	*Lip leishmaniasis presenting as herpes labialis*
24	D	Rachel Balow Lee	BS	Virginia Commonwealth University	Clinical	*Enlarging Nodules on the Palms and Soles in a Patient with Untreated Hepatitis C*
25	A	Lindsey Bressler	MD	Medical University of South Carolina	Clinical	*CLOVES Syndrome: Institutional Experience with PIK3CA-related Overgrowth Spectrum Disorders*
26	B	Falon Brown	DO	CUSOM/Sampson Regional Medical Center	Clinical	*The great imitator strikes: a chancre of primary syphilis on the nipple*
27	C	Brianna Castillo	MD	Duke University	Clinical	*The common and the rare: tinea corporis and adult T-cell leukemia-lymphoma.*
28	D	Lauren Daugherty	MD	Emory University	Clinical	*Say Yes to the DRESS: Drug Reaction with Eosinophilia and Systemic Symptoms Secondary to Brentuximab Vedotin*
29	A	Brianna De Souza	MD	Wake Forest School of Medicine	Clinical	*Hypopigmented macules as manifestation of lichen planus and lichen planopilaris*
30	B	Ashley M. Dietrich	MD	UNC Dermatology	Clinical	*Eleven Years of Harlequin Ichthyosis: Long-term systemic retinoids are the key to improved survival, function, and quality of life*
31	C	Deborah Dorell	BS	Wake Forest School of Medicine	Clinical	*Congenital dermatofibrosarcoma protuberans diagnosed in an adult woman: a case report*
32	D	Deborah Negus Dorrell	BA	Wake Forest School of Medicine	Clinical	*Non-Uremic Calciphylaxis Treated with Intralesional Sodium Thiosulfate*
33	A	Jessica Dowling	BA	FAU Charles E. Schmidt College of Medicine	Clinical	*Tophaceous Gout on the Penis*
34	B	Jessica Dowling	BA	Charles E. Schmidt College of Medicine at Florida Atlantic University	Clinical	*Asboe-Hansen Sign in Toxic Epidermal Necrolysis*
35	C	Drew A. Emge	MD, MSc	Duke University Hospital System	Clinical	*A case of sclerotic Graft-versus-Host Disease from remote radiation exposure that was treated with low dose phototherapy*
36	D	Tyler Evans	PhD	University of Nebraska Medical Center	Clinical	*Metastatic Squamous Cell Carcinoma vs Buschke-Lowenstein Tumor*
37	A	Zachary Eyre	MD, MBA	Emory University	Clinical	*Self-Injection of Crushed Opioid Tablets Causing Small and Medium Vessel Necrotizing Vasculitis*
38	B	Sara Faulks	MD	Medical University of South Carolina	Clinical	*Capillary Malformation-Arteriovenous Malformation Syndrome: A case report and summary of our institutional experience*
39	C	Richard Flowers	MD	University of Virginia	Clinical	*Basal cell carcinoma arising in a tattoo*
40	D	Vernon Forrester	MD	University of Virginia	Clinical	*CNS and Cutaneous Tuberculomas: Mycobacterium haemophilum*
41	A	Darren J. Guffey	MD	University of Virginia	Clinical	*Coxsackie-induced iPhone malfunction. A new complication of an old disease.*

POSTER SYMPOSIUM

#	DEFEND TIME*	Author	Cred	Institution	Category	Title of Poster
42	B	Callie Hill	BS	UAB School of Medicine	Clinical	*Subcutaneous panniculitis-like T-Cell lymphoma: A mixed diagnostic approach to diagnosing a vague clinical picture*
43	C	Hallie Hinen	MD	Medical University of South Carolina	Clinical	*Atypical Cutaneous Presentation of Asymptomatic Stage IV Congenital*
44	D	Bonnie Hodge	BS	University of Mississippi Medical Center	Clinical	*Folly a deux: topical corticosteroid addiction in mother and son.*
45	A	Supriya Immaneni	BA	Northwestern University Feinberg School of Medicine	Clinical	*Scaly Patches on the Trunk and Vesicles on the Palms and Soles in Two Young Adults*
46	B	Sara James	MD	UNC- Chapel Hill	Clinical	*Generalized Lichen Nitidus: A Rare Clinical Entity*
47	C	Jack Levy	MD, MA	Emory University	Clinical	*Lymphedema-distichiasis Syndrome*
48	D	Jenny E. Liles	MD	Medical College of Georgia at Augusta University	Clinical	*A Case of Discoid Lupus Triggered by Resumption of Etanercept*
49	A	Richard Lucariello	MD	MUSC	Clinical	*Langerhans Cell Sarcoma: A Rare Malignancy*
50	B	Seth M. Martin	BA	University of Virginia Medical Center	Clinical	*Clinical and Neuroradiographic coorelation of Trigeminal Trophic Syndrome*
51	C	Cathy M. Massoud	MD	Virginia Commonwealth University Health System	Clinical	*Hemorrhagic pustules of the dorsal feet: an unusual keratoderma blenorrhagicum as a presenting sign of endemic reactive arthritis*
52	D	Sean McGregor	DO, PharmD	Wake Forest University	Clinical	*Psoriasiform Eruption Following Perianal Streptococcal Dermatitis in a Pediatric Patient*
53	A	Charlene Oldfield	MD	Eastern Virginia Medical School	Clinical	*Using X-ray to facilitate a timely diagnosis of calciphylaxis*
54	B	Charlene Oldfield	MD	Eastern Virginia Medical School	Clinical	*Atrophic dermatofibromasarcoma protuberans in a pediatric patient*
55	C	Christen Samaan	BS	Geisinger Commonwealth School of Medicine	Clinical	*Atrophia Maculosa Variloformis Cutis Following Blaschko's Lines*
56	D	Mariah Shaw	BA	University of Virginia	Clinical	*Linear Porokeratosis Associated with Bardet-Biedl Syndrome*
57	A	Margaret Snyder	BS	The Medical College of Georgia	Clinical	*Type V Aplasia Cutis Congenita with Fetus Papyraceus*
58	B	Katherine M. Stiff	BS	Northeast Ohio Medical University	Clinical	*Gentian Violet for Wound Healing in Pyoderma Gangrenosum*
59	C	Ryan M. Svoboda	MD, MS	Duke University	Clinical	*The Importance of Nodal Observation in Cutaneous T-Cell Lymphoma: Not Simply a Matter of Disease Progression*
60	D	Kelly Jo Tackett	BS	University of North Carolina Chapel Hill	Clinical Research	*Structural Racism and its Influence on the Severity of Atopic Dermatitis of African American Children*
61	A	Benjamin A. Tran	BA	University of Virginia	Clinical	*Case report: Sporadic de novo multiple cutaneous and mucosal vein malformations*
62	B	Santana D. VanDyke	BS	University of Virginia School of Medicine	Clinical	*Vancomycin-Induced Linear IgA Bullous Dermatosis Masquerading as Erythema Multiforme*
63	C	Leah Ellis Wells	BS	Mercer University	Clinical	*Disseminated zoster in a patient with newly diagnosed SLE*
64	D	Michelle Xu	MD	Medical University of South Carolina	Clinical	*Granular Cell Tumor in the Axilla: A Rare Diagnosis*

42nd Annual Southeastern Consortium for Dermatology
November 2 - 4, 2018
POSTER ABSTRACTS – ON DISPLAY

Poster # 1

The effects of Tualang Honey and the microbiome on UVB-induced processes in the skin of a murine model

Hana Ahmed BS, Erin M. Burns, PhD, Mohammed Asif Sherwani, PhD, Israr Ahmad, PhD, Kevin Yang, BS, Craig A. Elmets, MD
Florida State University College of Medicine

Category: Basic Science

Abstract: Ultraviolet radiation (UVR) causes inflammation and DNA damage of the skin cells (photocarcinogenesis) which leads to non-melanoma skin cancer (NMSC). UVB is a major contributor to photocarcinogenesis. Interest in photochemoprevention, or countering UVR-induced skin damage, utilizing dietary products has gained recent traction. Additionally, the role of the gut microbiome in skin health is not fully elucidated. The purpose of this study was to investigate the use of Tualang Honey (TH) prior to UVB exposure. TH has been shown to have anti-inflammatory, antioxidant, and possibly an anti-carcinogenic properties. We have previously demonstrated that TH led to a decrease in DNA damage and inflammatory markers following UVB in a keratinocyte cell line. In this study, male and female Skh-1 hairless mice were fed TH (0.1% v/v) for two weeks prior to a single dose of UVB (180 mj/cm2). Fecal samples were collected at three time points. DNA was isolated, sequenced, and analyzed. Additionally, inflammatory and immune markers were measured. Our data demonstrate that TH decreases UVB-induced immunosuppression, epidermal thickening, and alters the gut microbiome. Future studies will investigate the potential of TH as preventive treatment for NMSC by studying human cell lines and the human microbiome.

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Poster # 2

Patients' Adherence and Satisfaction Using a Novel Home UVB Phototherapy System

Abigail Cline MD, PhD, Emily L Unrue, BS, Steven R Feldman, MD, PhD
Wake Forest School of Medicine

Category: Clinical Research

Abstract: Objective: To evaluate patient adherence and satisfaction using a handheld, smartphone-connected, home phototherapy system. Methods: In this retrospective, open-label clinical study, treatment data was collected from 79 patients (eczema n=4, psoriasis n=30, vitiligo n=45) using a novel home phototherapy system under normal use conditions. Adherence was calculated using treatments/opportunities for the first 20 treatments or first 40 opportunities. Patient satisfaction was measured using a five-point scale. Results: Patient ages ranged from 7-71 with 40 females and 39 males. Median adherence was 74%. Almost a third of patients were 90-100% adherent. The mean number of treatment spots was 17.7. Mean patient satisfaction was 3.6, with female satisfaction of 3.9 and male satisfaction of 3.4 (p=0.04). There were no differences in adherence or spots treated between genders or age-groups. Conclusion: Adherence was high with both gender groups and age-groups using the novel home UVB phototherapy system. Satisfaction was better among female patients.

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Poster # 3

Analysis of Large Cohort Hidradenitis Suppurativa Patients: Risk factors and Socioeconomic Status

Alexandra Collins BA, Aditi Senthilnathan, BS, Deborah Dorrell, BA, Lindsay C. Strowd, MD, FAAD, Rita O. Pichardo, MD
Wake Forest School of Medicine

Category: Clinical Research

Abstract: Known risk factors for the development of hidradenitis suppurativa (HS) include tobacco smoke and obesity. Other risk factors have yet to be identified. The purpose of this study is to obtain basic demographics to elucidate risk factors for the development of HS. A retrospective chart review of patients seen at Wake Forest Baptist Medical Center (WFBMC) with a diagnosis of HS from January 2012 to June 2018 was performed (N=760). Patient demographic information was collected including patient gender, zip code, insurance payor, Body Mass Index (BMI), and tobacco status. This study shows that tobacco use, obesity, and low socioeconomic status were associated with HS patients. The geographic distribution of the HS cohort reveals that the majority of patients reside in lower socioeconomic areas. HS patients seen in our healthcare system were disproportionately insured by Medicaid compared to the dermatology outpatient clinic as a whole and NC general population. Ongoing research on this patient cohort aims to examine healthcare utilization patterns including frequency of emergency department visits and inpatient admissions for HS related reasons. If we can identify a cohort of patients heavily utilizing inpatient and ED resources, we can target this group for educational intervention and improve outpatient healthcare access.

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Poster # 4

Intralesional Triamcinolone Acetonide for Treatment of Traction Alopecia

Brianna De Souza MD, Laura Uwakwe MD, Andrea Tovar MD, Amy McMichael MD
Wake Forest School of Medicine

Category: Clinical Research

Abstract: Introduction: Traction alopecia (TA) is a form of hair loss caused by continuous and prolonged tension on the hair. The earliest sign of TA is perifollicular erythema and pruritus. Recommended treatment of TA includes intralesional steroid injections to decrease the inflammatory process, however, there is little evidence in the literature to support this treatment. Objective: To evaluate the efficacy and safety of intralesional triamcinolone acetonide injections (ILK) and topical minoxidil in the management of TA in 6 African American women. Methods: A retrospective chart review was performed in 6 TA patients. Treatments included in the study were >1 ILK injection (5mg/mL) and minoxidil. Management of TA was assessed by comparing the photographs, before and after ILK treatment, for changes in hair density along the frontotemporal hairline. All patients had been instructed to avoid tension-related hair care practices. Results: All subjects demonstrated a visible increase in hair density along the frontotemporal hairline following their first or second treatment. No patients reported any serious adverse effects from the injections. Conclusion: Triamcinolone acetonide injections with topical minoxidil may be an effective method of treating traction alopecia. Additionally, it is imperative that dermatologists caution against grooming practices that exert tension on the hairline.

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Poster # 5

Methicillin-resistant Staphylococcus aureus is an important pathogen in erythrodermic cutaneous T-cell lymphoma patients

Drew A. Emge MD, MSc, Roland Bassett, MS, Madeleine Duvic, MD, Auris O. Huen, MD, PharmD
Duke University Hospital System

Category: Clinical Research

Abstract: Background: Mycosis fungoides (MF) and Sezary syndrome (SS) are cutaneous T cell lymphomas (CTCL) in which erythroderma can occur. Staphylococcus aureus prevalence is increased in CTCL patients and contributes to CTCL disease progression. Our aim was to further define patient and S. aureus factors associated with response to antibiotic treatment in erythrodermic CTCL patients. Methods: Our study was a retrospective chart review of patients with erythrodermic MF/SS who had S. aureus infection or colonization treated at the University of Texas MD Anderson Cancer Center's Melanoma and Skin Clinic between 2012-2016. Results: Twenty-six erythrodermic CTCL patients had 50 documented findings of S. aureus colonization or infection events. Seventeen of the 50 (34%) events were methicillin resistant S. aureus (MRSA). Thirty-three percent of MRSA events were initially treated with dicloxacillin before sensitivity data returned. The MRSA isolates were sensitive to trimethoprim-sulfamethoxazole (92%) and doxycycline (88%). Conclusions: There was a high prevalence of MRSA events, which makes it an important pathogen in erythrodermic CTCL patients. Clinicians treating CTCL patients should provide adequate antibiotic coverage for MRSA and have a low threshold for inpatient treatment when S. aureus is suspected in erythrodermic CTCL patients.

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Poster # 6

The Effects of Electronic Health Records on Triage and Closing Times: A Time Motion Study in an Academic Dermatology Department

Beth Anne George BA, Parker Woolley, B.A., Angela J. Lamb, M.D.
Warren Alpert Medical School of Brown University

Category: Clinical Research

Abstract: Electronic Health Record (EHR) systems have been rapidly adopted across hospitals to improve health care delivery, but are cited as a source of dermatologists' dissatisfaction due to high overhead costs and lost productivity. This study investigated the relationship between EHR adoption and clinical documentation time. A time-motion study was conducted at two dermatology practices that are part of a teaching hospital. Time to triage, patient status (new or follow-up), time to close the patient's chart and charting system used (paper or EHR) were recorded. Using Welch's t-tests, means between the two charting systems were compared. Dermatologists and medical assistants were observed across 358 patient visits. A decrease in time spent closing charts was observed when the EHR was used. This decrease was non-significant for new patients (-3.5 seconds per visit, $p = 0.65$) but was significant for follow-up patients (-22.1 seconds, $p = 0.00021$). Non-significant decreases in time spent triaging new patients (-17.8 seconds, $p = 0.34$) and follow-up patients (-10.9 seconds, $p = 0.24$) were observed with the EHR. Our data suggests that EHR adoption may decrease the time spent closing charts of follow-up patients. Future research addressing time allocations to other clinical tasks are needed.

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Poster # 7

Healthcare Utilization of Childhood Atopic Dermatitis

Nikita S. Goel MD, Anna Silverstein, BS, Diana B. McShane, MD, Dean S. Morrell, MD, Craig Burkhart, MD
University of North Carolina at Chapel Hill

Category: Clinical Research

Abstract: Background: Childhood atopic dermatitis (AD) is a chronic inflammatory skin condition with increasing prevalence and healthcare utilization. Objective: To evaluate the impact of medical complexity and comorbidities associated with AD. Methods: We retrospectively reviewed 258 consecutive pediatric patients seen at The University of North Carolina Dermatology clinic with AD over 3 months in 2018. Patients were divided based on mild, moderate, or severe disease. Pharmacy dispensing records were assessed for medication compliance. Prevalence of prior selected comorbidities and complexity of medical regimen were evaluated amongst each group with an odds ratio analysis. Results: Medication compliance was similar amongst all AD categories. Patients with severe AD had higher pharmacy visits, refills of class one topical steroids, and use of systemic corticosteroids ($p<0.05$). Patients with any degree of AD on at least 10 medications had more frequent visits with dermatology, medication refills, and comorbidities ($p<0.05$). There was no statistical difference between ethnicity and type of insurance. Conclusion: Despite similar medication compliance rates between AD groups, patients with severe AD or with at least10 medications had a higher utilization of healthcare resources. Further research is needed to help reduce the healthcare burden on patients with severe AD.

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Poster # 8

Knowledge gaps about actinic keratoses in patients with field cancerization

Benjamin J Kahn BA, Brenda Morales-Pico, MD, Travis Blalock, MD, Howa Yeung, MD, Benjamin Stoff, MD
Emory University School of Medicine

Category: Clinical Research

Abstract: Background Actinic keratoses (AKs) are common in the United States, but only 6-7% of adults report familiarity with the lesions. Basic knowledge about AKs in affected patients is poorly characterized, despite the correlation between knowledge of AK risk factors and readiness to reduce UV radiation exposure in this population. Methods We administered a basic knowledge assessment survey about AKs to 30 consecutive patients with diffuse AKs at a Mohs clinic. Results Patients averaged 4.4 correct answers of a possible 8. About one-quarter of participants were unable to identify the typical appearance of AKs or did not know that AKs are considered precancerous. Previous treatment for AKs did not affect the proportion of correct answers to any of the questions. Conclusion Knowledge about AKs is poor in this sample of patients with diffuse AKs, even among previously-treated patients. Educational materials addressing specific knowledge gaps, including the appearance and symptoms of AKs and their risk of progression to skin cancer, should be developed to enhance patient decision-making and adherence to therapy.

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Poster # 9

Hidradenitis Suppurativa Has an Enormous Impact on Patients' Lives

Sree S. Kolli BA, Aditi Senthilnathan, BS, Leah A. Cardwell, MD, Irma Richardson, Steven R. Feldman, MD, PhD, Rita O. Pichardo, MD
Wake Forest School of Medicine

Category: Clinical Research

Abstract: Background: Hidradenitis Suppurativa (HS) has a severe effect on overall health and well-being. The purpose of this study is to measure the health-related quality of life in a population of HS patients. Methods: 150 HS patients were recruited to complete the Short Form (SF)-36 questionnaire to evaluate physical and mental health. 10 domains were evaluated: Physical Functioning (PF), Role-Physical (RP), Role-Emotional (RE), Emotional well-being (EW), Social Functioning (SF), Vitality (VT), Body Pain (BP), General Health (GH), Physical Component Score (PCS) and Mental Component Score (MCS). The health outcomes of U.S adults and psoriasis populations were obtained from previous studies to compare to health outcomes in HS population. Results: 65 patients completed the questionnaire. The average scores for the PF, RP, VT, SF, BP, GH, PCS and MCS dimensions of hidradenitis patients were 1-50% and 19-60%, lower than for psoriasis and general populations, respectively. The dimension for which hidradenitis was not worse than psoriasis was emotional well-being which was 1% higher. Conclusions: The health-related quality of life of the HS population is much worse than the U.S. adult and psoriasis populations.

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Poster # 10

Sun Protection Education Attitudes in Future School Teachers

Michael Lehrer MD, Pamela Kulinna, Shannon Mulhearn, Matthew Buras, Jordan Montoya, Aaron Mangold
Mayo Clinic Arizona

Category: Clinical Research

Abstract: Background: Ultraviolet radiation exposure is the most important modifiable risk factor for the development of skin cancer. Children and adolescents are a population particularly vulnerable to excessive UV exposure. Schools are important players in primary skin cancer prevention. Methods: A questionnaire was sent to 1493 students enrolled in the Mary Lou Fulton Teacher College at Arizona State University. The questionnaire assessed future teacher's current level of knowledge, confidence, and educational experience regarding sun safety. Responses were stratified against: year of study, sex, race, skin type, and family history of skin cancer. Results: 348 students completed the survey. 50.0% of respondents believe that teachers play an important role in skin cancer prevention while 10.6% disagreed with this statement. 75.3% feel they have not received sufficient training in sun safety education while only 7.5% felt adequately prepared. Responses were not affected by: year of study, sex, skin type, or family history of skin cancer. White students were more likely to indicate they were underprepared compared to non-white students. Conclusion: Undergraduate students pursuing careers in education are under educated regarding sun safety. Further studies to identify specific education gaps and may reduce excessive UV radiation exposure during childhood.

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Poster # 11

Adverse events among Hidradenitis Suppurativa patients treated with infliximab

Alex Miles BA, Ashley Oskardmay, BS, Christopher J. Sayed, MD
UNC Chapel Hill School of Medicine

Category: Clinical Research

Abstract: Infliximab has shown early evidence of efficacy in suppressing Hidradenitis Suppurativa (HS) activity, but dosing and safety of infliximab within this population remains largely unknown. In this study we examined clinically reported adverse events from HS patients treated with infliximab. A retrospective chart review identified 52 HS patients (Hurley stage 2-3), at a single institution, treated with long-term infliximab as titrated to patient response (5 mg/kg q8wks to 10 mg/kg q4wks. Adverse events were determined as those reported in patient charts. Over a cumulative observed exposure time of 48.8 years, 10 (19%) patients experienced a total of 12 adverse events, mostly mild. Most common were mucocutaneous infections (n=4), chest pain (n=2) or flu-like symptoms (n=2). One obese, diabetic patient was diagnosed with sepsis. One patient became pregnant while taking infliximab. Rate of adverse events did not significantly differ based on starting (p=0.75) or final (p=0.70) infliximab dose. Overall infusions were well tolerated, with only one temporary discontinuation due to an adverse event. The higher dosing regimens in our sample did not seem to influence adverse events. Lastly, our sample demonstrates that infliximab use in HS patients has a safety profile comparable to the general safety profile of infliximab.

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Poster # 12

Is Topical Treatment Effective for Psoriasis in Patients Who Failed Topical Treatment?

Nwanneka Okwundu DO, Leah Cardwell, MD, Abigail Cline, MD, PhD, Irma Richardson, MHA, Steven R. Feldman, MD, PhD
Hackensack Meridian Health-Pallisades Medical Center

Category: Clinical Research

Abstract: Nwanneka Okwundu, DO1, Leah Cardwell, MD1, Abigail Cline, MD, PhD1, Irma Richardson, MHA1, and Steven R. Feldman, MD, PhD1,2,3 1 Center for Dermatology Research, Department of Dermatology, Wake Forest School of Medicine, Winston-Salem, North Carolina Background: Psoriasis patients are often resistant to topical corticosteroids. Poor treatment outcomes may be due to poor adherence. Objectives: To determine if resistance to topical treatments can be overcome under conditions promoting adherence. Methods: Twelve psoriasis patients treated with topical 0.25% desoximetasone spray were randomized to either twice daily phone call reminders or no phone call and were treated for 2 weeks. Pruritus Visual Analog Scale (VAS), Psoriasis Area and Severity Index (PASI), Total Lesion Severity Score (TLSS), and, Investigator Global Assessment (IGA) assessed disease severity. Results: 10 of the 12 subjects had failed previous treatment with topical clobetasol. Nevertheless, most subjects improved in most scoring parameters. 100%, 91.7%, 83.3%, and 58.3% had improvements in itching, PASI, TLSS, and IGA, respectively. The percent reduction in itching ranged from 67-100% and 50-86% and PASI improvement ranged from 18-63% and 0-55% for the phone call and no phone call groups, respectively. TLSS and IGA improvements were of lower magnitude but showed a similar pattern with numerically greater improvements in the phone call reminder group. No subject had worsening itching, PASI, TLSS, or IGA. Conclusion: Psoriasis resistant to topical treatments is often due to poor adherence rather than ineffectiveness of applied topical corticosteroids.

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Poster # 13

Use of Numeric Rating System and ItchyQoL in the Evaluation of Cancer Patients Treated with Immunotherapy

Katelyn Peloza BA, Frances Walocko, MD, Rajini K. Murthy, MD, Suephy C. Chen, MD, MS, Howa Yeung, MD
Dept. of Dermatology, Emory University

Category: Clinical Research

Abstract: Checkpoint inhibitor immunotherapy revolutionized cancer treatment but cutaneous adverse events are frequent and impair quality of life (QoL). We characterized itch severity and QOL impact in patients referred for immunotherapy-related cutaneous adverse events at the Winship Cancer Institute from September 1, 2017 to June 14th, 2018 using numeric rating scale (NRS) and ItchyQoL. 12 patients were included; 42% were male. 68% had melanoma, 17% advanced squamous cell carcinoma, 17% merkel cell carcinoma, and 8% renal cell carcinoma. 33% received nivolumab (33%), 33% pembrolizumab, and 25% combination immunotherapy. 92% of patients with cutaneous adverse events reported pruritus. 75% and 33% required medium- or high-potency topical steroids and 17% required systemic steroids. Mean NRS was 7.4 (SD 3.2). Mean ItchyQoL total score, and symptom, functioning, and emotions subscales were 54 (SD 23.0), 15 (SD 6.2), 17(SD 7.7) and 23 (SD 11.0). NRS highly correlated with overall ItchyQoL score (Pearson's r=0.78, P=0.04), but correlation with symptoms (0.75, P=0.051), emotions (r=0.67, P=0.1) or functioning (r=0.75, P=0.053) subscales were not significant. Itch from immunotherapy imposes high levels of HRQoL impairment. Inclusion of itch-specific HRQoL metrics captures may be useful to evaluate a broad range of patient-centered outcomes for cutaneous adverse events in immunotherapy.

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Poster # 14

Anecdote Increases Caregivers' Willingness to Use Topical Corticosteroids for Children with Atopic Dermatitis

Adrian Pona MD, Matthew C. Johnson, BS, Abigail Cline, MD, PhD, Chelsea Kesty, BS, Steven R. Feldman, MD, PhD
Wake Forest School of Medicine

Category: Clinical Research

Abstract: Objective: Assess caregivers' willingness to treat their child's atopic dermatitis(AD) with topical corticosteroid when presented with clinical trial evidence, anecdote, or both and assess whether using "steroid" reduces willingness to use topical corticosteroids. Methods: 480 subjects were randomized to receive either clinical trial, anecdotal evidence, or both. Evidence was presented with either "medication" or "topical steroid". Caregivers were randomized to control with either the medication's efficacy and safety profiles or were informed they would not receive that information. Results: Medication willingness was similar among caregivers receiving either clinical trial evidence, anecdotal evidence, or both. Willingness was higher when "medication" was used rather than "topical steroid". Caregivers were more willing to use "medication" or "topical steroid" if they received the efficacy and safety profile than caregivers specifically told that they would not be informed of efficacy and safety information (P<0.001). Conclusions: Caregivers reported greater willingness to treat their child's AD when presented with anecdote alone, or combined with clinical trial evidence, than those specifically told they would not be informed of a medication's efficacy or safety profile. Using the term "topical steroid" rather than "medication" showed a consistent decrease in caregivers' willingness to treat; however, the decrease was not statistically significant.

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Poster # 15

Demographics, Adherence, and Satisfaction of Home UV Phototherapy in Psoriasis

Adrian Pona MD, Abigail Cline MD, PhD, Sree S. Kolli, BS, Steven R. Feldman, MD, PhD
Wake Forest School of Medicine

Category: Clinical Research

Abstract: Objective: To gather insights in adherence and satisfaction in patients with psoriasis using a novel localized home UVB phototherapy device. Methods: Prospective, open label clinical study enrolling 36 subjects with localized plaque-type psoriasis were initiated on thrice weekly home narrowband UVB for 10 weeks. Subjects spot treated both study and control lesions. Initial adherence, defined as total treatment over first 20 treatments, and long-term adherence, defined as total thrice weekly treatments over total treatment period, were measured alongside a five-grade satisfaction survey. Results: Mean age was 43.9. Initial adherence was 55% and long-term adherence was 56%. There was no significant difference between gender and age, adherence, spots treated, and satisfaction. Mean satisfaction in males and females was 3.3 and 3.8, respectively. Of all age groups, subjects aged 30-39 reported the most spots being treated (10-29, P=0.014; 40-49, P=0.002; 60-69, P=0.002). Subjects with more spots to treat reported diminished adherence (P=0.03, R= -0.63). Conclusion: Localized home UVB phototherapy offers a satisfying treatment option in limited plaque-type psoriasis in both males and females. Adherence was stable throughout the study. As spot treatments increase, adherence decreases.

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Poster # 16

Economic impact of container size on topical volume use

Edward W Seger MS, Emily Unrue BS, David Aung-Din MHS, Abigail Cline MD PhD, Steven R Feldman MD PhD
Wake Forest School of Medicine

Category: Clinical Research

Abstract: Introduction Topical medication prescription often lacks detailed instruction, leading to insufficient application and suboptimal results. The purpose of this study is to compare costs of topical medication use when patients are provided a large vs a small container. Methods Average topical medication applied was determined previously as 16.0 mg/cm2 from large (453g) container and 9.9 mg/cm2 from small (30g) container. Cost per gram hydrocortisone and triamcinolone was determined from average cost at 5 national pharmacies. Average body surface area (BSA) of 1.5m2 was used. Results Cost per gram was much higher when purchased in a small size versus a large size container. Applying hydrocortisone ointment BID to 5% BSA would cost $67.20 vs $23.66 from a small vs large container. Triamcinolone was $50.76 more expensive when using smaller container, despite 32% less ointment applied. Discussion Topical therapies are expensive and often applied inadequately. Recommending a larger container is cheaper per gram and also will lead to more medication being applied, possibly improving clinical response. Application instructions are important and may reduce differences seen based on container size. Conclusion Container size should be considered when prescribing a topical treatment as volume used and patient costs may be impacted

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Poster # 17

Association between end stage renal disease and central scalp hair loss

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Grand Strand Hospital

Category: Clinical Research

Abstract: Central centrifugal cicatricial alopecia (CCCA) is a scarring alopecia predominately affecting African American (AA) women with an unknown pathogenesis. Renal fibrosis is a final pathway of end stage renal disease (ESRD) that requires dialysis. The common pathologies of inflammation and fibrosis between CCCA and ESRD along with high prevalence in the AA population are worthy of exploration. We hypothesize an increased prevalence of central scalp hair loss (CHSL) in AA women on dialysis. CHSL was used as a surrogate measure instead of obtaining a scalp biopsy. Selection criteria included AA women age 30-75 undergoing dialysis. Subjects completed a survey that delineated clinical history of hair loss, hair grooming practices, family history, scalp photography and a CSHL hair assessment. The mean age of the 72 subjects was 57.8(SD+/-10.3). 49 subjects(68.1%) had CHSL based on clinical observation [mean age 58.7(+/-10.8)]. 23(31.9%) subjects did not have CSHL [mean age of 55.8(+/-8.9)]. Subjects with CHSL was 68.1%, which is higher ($p<0.0001$) than the 2.7% reported for African women in the general population. There appears to be significantly more cases of CSHL in AA women on dialysis than expected based on previous studies. This information may lead to pathogenesis mechanisms and treatments for CCCA.

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Poster # 18

A Novel Treatment: An analysis of children's books about chronic pediatric dermatological conditions

Anna C. Tappel BS, Nicole Cresce, MD, Barrett Zlotoff, MD
University of Virgina School of Medicine

Category: Clinical Research

Abstract: Bibliotherapy is the utilization of storybooks for disease education. Studies have supported that bibliotherapy can be effective for education and behavioral modification in pediatric diseases resulting in improved clinical outcomes, however no studies have investigated the use of bibliotherapy for pediatric dermatological disease. The purpose of this study was to assess the availability of and to analyze storybooks about chronic pediatric dermatological conditions. Selection criteria included: 1) primarily about a chronic dermatological condition; 2) illustrated; 3) less than $20; 4) written in English. The storybooks were identified and acquired through the Google, Amazon, and Barnes & Noble websites. Thirty-one storybooks were identified about 9 different chronic pediatric conditions with dermatological manifestations: alopecia, albinism, atopic dermatitis, birthmarks, neurofibromatosis type 1, psoriasis, Sturge-Weber syndrome, systemic lupus erythematous, and vitiligo. Authors included parents, professional authors, teachers, a health care aide, and a mechanical engineer. Storybooks about several chronic pediatric dermatological conditions are currently available. Only 6 of the stories included information about disease treatment with the majority instead focusing on diseases' emotional and psychosocial implications. None were written by medical doctors. Future studies are needed to examine if comprehensive, accurate storybooks about chronic pediatric dermatologic conditions improve clinical outcomes or patient quality of life

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Poster # 19

Examination of the Benefits of Free Annual Skin Cancer Screenings

Santana D. VanDyke BS, Mark A. Russell, MD
University of Virginia School of Medicine

Category: Clinical Research

Abstract: There is insufficient evidence regarding the benefits of annual skin cancer screenings. However, the American Academy of Dermatology (AAD) continues to advocate for annual free skin cancer screenings in communities across the United States. In this study, data obtained from AAD sponsored annual free skin cancer screenings hosted by the University of Virginia Department of Dermatology from 2009 to 2018 were reviewed to examine the potential benefits of these screenings. Of the 2,305 patients seen, 9.33% were presumptively diagnosed with skin cancer, 25.86% were presumptively diagnosed with premalignant skin lesions, and 28.72% were referred for biopsy/follow-up care. Unfortunately, we did not have data confirming our presumptive diagnoses nor did we have data regarding whether or not our patients actually followed up with a dermatologist after the screenings. However, despite these limitations, we feel that this study demonstrates the potential benefits of free annual skin cancer screenings. These screenings have the potential to diagnose both melanoma and non-melanoma skin malignancies, particularly in patients who would not otherwise see a physician. Furthermore, these screenings provide the opportunity to educate the public on sun safety, tanning bed avoidance, and skin cancer identification.

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Poster # 20

Cadaveric Dissection Investigating Facial Artery Termination & Symmetry

Weston B. Wall MD, Silas M. Money, B.S., Anna C. Edmondson, Ph.D., Loretta S. Davis, M.D.
Medical College of Georgia at Augusta University

Category: Clinical Research

Abstract: The course and branching pattern of the facial artery (FA) are subjects of great debate. According to the classic anatomical definition, the FA enters the face at the angle of the masseter muscle, passes forward and upward to the angle of the mouth, and then upward along the side of the nose where it ends as the angular artery. Recent literature has shown variation in the termination of the FA. Therefore, the purpose of this study was to provide further insight into the termination of the FA and to compare the symmetry between left and right hemi-faces. The FA was dissected in 36 hemi-faces from 18 embalmed adult cadavers (9 male, 9 female; ages 52-99). The symmetry and termination of the vessel were documented for each cadaver. The lateral nasal artery was the prominent termination point of the FA on both left and right hemi-faces. Symmetry existed in only 50% of dissected cadavers. A high percentage of cadavers had an absent FA (13.9%). Our study confirms the significant variation in branching and termination of the FA. Detailed knowledge of facial anatomy, as presented here, is essential to safely perform dermatologic procedures, such as soft-tissue filler injection and facial surgery.

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Poster # 21

Kaposi Sarcoma Co-infected with Cytomegalovirus

Amena Alkeswani BS, Peter G Pavlidakey, MD, Allen S.W. Oak, MD
UABSOM

Category: Clinical

Abstract: Background: Kaposi sarcoma (KS) is the most common malignancy in acquired immunodeficiency syndrome (AIDS) patients. It is a vascular neoplasm that occurs as a result of infection with a human herpesvirus (HHV-8). Cytomegalovirus (CMV) is highly prevalent in the general population and can cause localized or disseminated disease in AIDS patients. However, the coexistence of these two entities in a cutaneous lesion is rare, especially in the post-highly active antiretroviral therapy (HAART) era. Case: A 42-year-old male with HIV presented with a growing painful ulcerated white nodule with an overlying telangiectatic vessel on the medial right third toe that he noticed 4 weeks ago. He was started on HAART therapy 10 days earlier with a CD4 count of 220. A superficial shave biopsy revealed a vascular proliferation which was diffusely positive for HHV-8 consistent, a finding specific to KS. In addition, scattered inclusion bodies were observed indicating coinfection with CMV. Conclusion: Although KS typically presents as painless reddish to violaceous macules or patches involving skin and mucosa, it may progress to plaques or nodules. It is important to be able to recognize these morphological variants to avoid potential misdiagnosis and improper management.

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Poster # 22

Busulfan-associated dermatitis in bone marrow transplant recipients

Mark M. Ash MD, MS, Paul B. Googe, MD
University of North Carolina

Category: Clinical

Abstract: Introduction: Busulfan is a chemotherapy agent used in conditioning regimens prior to bone marrow transplantation (BMT) and peripheral blood stem cell transplantation (PBSCT). Well-established dermatologic adverse reactions to busulfan include alopecia [1, 2], toxic erythema [3], mucositis [2], and toxic epidermal necrolysis [4]. We present two cases of busulfan-associated dermatitis. Case 1: An 18-year-old male with blastic plasmacytoid dendritic cell neoplasm of the left leg was treated with an allogenic BMT after conditioning with busulfan and fludarabine. Six days after conditioning, he developed new asymptomatic small dark comedonal-like follicular papules on his legs that later developed on his trunk, neck, and head. Biopsy showed atypical keratinocytes with maturation disarray. Case 2: A 47-year-old male with B-cell lymphoblastic leukemia complicated by myelodysplastic syndrome was treated with an allogeneic fully-matched related PBSCT after conditioning with busulfan and fludarabine. Twenty-five days after transplantation, the patient developed a pruritic erythematous maculopapular rash of the bilateral forearms and blanchable erythema of the trunk. Punch biopsy showed atypical keratinocytes with maturation disarray. Conclusion: Our two cases demonstrated the classic busulfan-induced keratinocyte dysplasia and the associated clinical variability of busulfan-associated dermatitis. Because busulfan-associated dermatitis is less well-known, it may be clinically mistaken for graft-versus-host disease after BMT.

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Poster # 23

Lip leishmaniasis presenting as herpes labialis

Robert Bai MD, Mark Cameron Mochel, M.D., W. Kenneth Blaylock, M.D.
Virginia Commonwealth University

Category: Clinical

Abstract: A 36-year-old Ethiopian male with no significant past medical history presented with an enlarging lip plaque for 6 months. Patient self-treated with a heated spoon prior to using topical docosanol cream and oral acyclovir. None of these treatments were effective. He arrived in the U.S. from Ethiopia 1 year prior. Examination revealed several pink perifollicular 2mm papules coalescing into 2cm by 2cm plaque on upper right cutaneous and vermillion lip. A punch biopsy was performed, showing loose aggregates of foamy histiocytes containing amastigotes with kinetoplasts. The organisms stained positive with Giemsa. The findings were consistent with Leishmaniasis. Tissue samples were also sent to CDC, with PCR results consistent with Leishmaniasis aethiopica. Our patient was treated by Infectious Disease with intravenous sodium stibogluconate for a total of 4 weeks. Treatment was complicated by mild amylase and lipase elevation, which resolved during treatment. The plaque improved significantly by the end of treatment. Oral miltefosine was also considered but our patient was concerned about its potential reproductive adverse effects. This case highlights lip leishmaniasis, an unusual form of leishmaniasis, presenting as refractory herpes labialis. Clinicians should obtain a thorough travel history and consider leishmaniasis in their differential diagnosis.

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Poster # 24

Enlarging Nodules on the Palms and Soles in a Patient with Untreated Hepatitis C

Rachel Balow Lee BS, Marissa Milchak, MD, Mark Mochel, MD, W. Kenneth Blaylock, MD
Virginia Commonwealth University

Category: Clinical

Abstract: Palmoplantar fibromatosis (also known as Dupuytren disease or Ledderhose disease) is a benign but disabling hyperproliferative condition affecting the fascia of the palms and soles. Our patient is a 49-year-old woman who presented with progressively enlarging nodules on the bilateral palms and soles. Medical history was significant for chronic untreated hepatitis C, multiple transient ischemic attacks, seizure disorder, tobacco abuse, and recently diagnosed inflammatory arthritis. She presented to clinical attention after years of pain and increasing disability associated with both enlargement and spread of palmoplantar nodules and cords. Biopsy of one of the largest nodules on the sole revealed superficial fibromatosis, consistent with a diagnosis of palmoplantar fibromatosis. Interestingly, our patient's history of chronic liver disease, tobacco use, and epilepsy have all been reported as known associations with this rare condition. Management of this condition is multifaceted, with aims of controlling any underlying risk factors as well as providing symptomatic relief through surgical, radiologic, and medical options based on patient preferences and extent of disease.

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Poster # 25

CLOVES Syndrome: Institutional Experience with PIK3CA-related Overgrowth Spectrum Disorders

Lindsey Bressler MD, Avni Patel, BS, Lara Wine Lee, MD, PhD
Medical University of South Carolina

Category: Clinical

Abstract: CLOVES syndrome is a PIK3CA-related overgrowth spectrum (PROS) disorder caused by an activating mutation that results in excessive proliferation. We present a patient with a clinical diagnosis of congenital lipomatous overgrowth, vascular malformations, epidermal nevi, and skeletal abnormalities (CLOVES Syndrome). He was prenatally diagnosed with a mass in the left axilla and suspected bilateral clubbed feet, and was born preterm via C-section due to non-reassuring fetal status. The patient was found to have extensive lymphatic malformations in the right thorax and was intubated due to respiratory distress. On examination bilateral triangle-shaped feet with widely spaced toes, a left leg larger than the right leg, and lipomatous subcutaneous tissue of the left leg consistent with a diagnosis of CLOVES syndrome. CLOVES syndrome is a relatively rare diagnosis with few cases reported worldwide. This case, in addition to our review of our institutional experience with PROS will provide an important addition to the evolving understanding of PROS.

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Poster # 26

The great imitator strikes: a chancre of primary syphilis on the nipple

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CUSOM/Sampson Regional Medical Center

Category: Clinical

Abstract: Syphilis, “the great imitator,” presents with a wide range of mucocutaneous and systemic manifestations. The primary chancre classically occurs in the genital region, however up to 6.33% can be extragenital. Among the extragenital chancres reported in the literature, 5.1% occurred on the breast with only 5% of those occurring in men. A 43-year-old healthy man visited our clinic for drainage from the nipple for one month. Exam was notable for a poorly defined, scaly erythematous plaque on the areola with a superficial erosion of the nipple. The rapid plasma reagin (RPR) titer was found to be 1:32, with positive anti-treponemal antibodies. Histopathological examination of the biopsy specimen revealed epidermal hyperplasia with dense underlying superficial, deep perivascular and interstitial infiltrate surrounding benign bundles of smooth muscle. The infiltrate was composed of abundant lymphocytes, plasma cells, histocytes and neutrophils. Immunohistochemical staining for T. pallidum revealed numerous spirochetes scattered inside the inflammatory cell infiltrate throughout the dermis. Based on these findings, the patient was diagnosed with an extragenital chancre of primary syphilis on the nipple. With a resurgence in the incidence of syphilis, it is important to remind practitioners of the more unusual presentations of this disease.

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Poster # 27

The common and the rare: tinea corporis and adult T-cell leukemia-lymphoma.

Brianna Castillo MD, Elise A. Olsen, MD
Duke University

Category: Clinical

Abstract: Adult T-cell leukemia-lymphoma (ATLL) is a rare malignancy associated with the human t-cell lymphotropic virus type 1 (HTLV-1). HTLV-1 infections are most prevalent in Japan. Approximately 50% of patients with ATLL have skin manifestations. We present a 71 year old African American male, referred to us by Oncology with a 17 year history of a skin rash. He was recently diagnosed with ATLL after workup of elevated WBC, confirmed by bone marrow (BM) biopsy and positive HTLV-1 Ab. He had denied previous international travel and blood transfusions. Upon skin examination, he had large, coalescing, hyperpigmented, patches with peripheral scale on his trunk and extremities that were KOH positive. A punch biopsy showed an atypical lymphocytic infiltrate, a positive clone that matched the BM, and an abundant amount of fungus. A skin culture grew T. rubrum. The patient was treated with IFN-alpha and oral fluconazole with significant improvement. This case offers several teaching points: (1) Even without an obvious source of HTLV-1 infection, ATLL should be considered when CTCL involves blood. (2) CTCL can be complicated by superficial dermatophyte infections. (3) Recognition, diagnosis, and treatment of secondary skin diseases can alter staging, and therefore, management, potentially saving patients from aggressive therapies.

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Poster # 28

Say Yes to the DRESS: Drug Reaction with Eosinophilia and Systemic Symptoms Secondary to Brentuximab Vedotin

Lauren Daugherty MD, Justin Cheeley, MD
Emory University

Category: Clinical

Abstract: Brentuximab vedotin (BV) is a systemic chemotherapy approved November 2017 for relapsed CD30+ mycosis fungoides (MF). The most common side effect is peripheral neuropathy, with dermatologic effects of pruritus and rash occurring uncommonly. Drug reaction with eosinophilia and systemic symptoms (DRESS), characterized by facial edema, morbilliform eruption, fevers, lymphadenopathy, eosinophilia, and organ dysfunction, has been associated with several chemotherapies, but never in conjunction with BV. We present a patient with CD30+ MF recently treated with BV who presented with flu-like symptoms, fever, and facial papules with vacuolar interface inflammation on histology several weeks after initiation of BV. Labs revealed peripheral leukocytosis with eosinophilia and elevated aminotransferases and creatinine. Upon re-challenge with lower dose BV the patient had recrudescence of her symptoms. BV was discontinued from the patient's MF treatment plan and systemic corticosteroids were administered. This first known reported case of DRESS in association with BV highlights the importance of considering the diagnosis despite an atypical clinical exam and a suspected inciting medication without known DRESS association, particularly if newly approved and without available long-term safety data.

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Poster # 29

Hypopigmented macules as manifestation of lichen planus and lichen planopilaris

Brianna De Souza MD, David Arnold DO, Melissa B. Hoffman MD, Amy McMichael MD
Wake Forest School of Medicine

Category: Clinical

Abstract: Introduction Lichen planus (LP) is an idiopathic inflammatory disease of the skin, hair, nails and mucous membranes. Classic cutaneous LP is characterized by violaceous flat-topped papules. While the pigmented variant has been described, there is only one previous report of LP presenting primarily with hypopigmentation. Patient Information The first patient is a 59-year-old black male who initially presented 4 years prior with classic polygonal, violaceous papules, some with surrounding halo of hypopigmentation. Biopsy showed findings classic for LP. Patient improved on hydroxychloroquine, but approximately 9 months after discontinuing it, he developed new non-scaly hypopigmented macules on trunk, face and extremities. The second patient is a 53-year old black male who presented for hypopigmented macules on his scalp that began 2 years prior. Multiple biopsies all showed perifollicular lichenoid lymphocytic inflammation and scarring alopecia in a pattern consistent with lichen planopilaris. In both patients, after ruling out other causes of hypopigmentation, a diagnosis of LP was made. Both patients were started on hydroxychloroquine and have experienced stabilization of their disease. Conclusion While numerous clinical variants of LP have been reported, hypopigmented LP is not described. We suspect that the hypopigmented variant may represent a more common presentation of LP than is actually reported because many providers do not biopsy hypopigmented macules under the assumption they are secondary to post-inflammatory changes. Given the significant inflammation and disease course in our patients, awareness of and testing for this hypopigmented subtype is warranted to best guide management.

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Poster # 30

Eleven Years of Harlequin Ichthyosis: Long-term systemic retinoids are the key to improved survival, function, and quality of life

Ashley M. Dietrich MD, Dean S. Morrell, MD
UNC Dermatology

Category: Clinical

Abstract: Harlequin ichthyosis (HI) is a rare life-threatening congenital ichthyosis affecting neonates presenting with severe, classic plate-like hyperkeratosis with deep fissures, eclabium, and ectropion. In past years, mortality was high with death resulting from respiratory insufficiency, sepsis, hypothermia, and dehydration. Initiating systemic retinoids, such as acitretin, early has been shown to dramatically decrease mortality. However, as more patients survive the newborn period, uncertainty remains regarding effective, safe long-term treatment to improve quality of life and functionality of these patients. We describe our experience over the last eleven years. Our patient initially presented as a 1-day old premature infant male with striking diffuse hyperkeratotic plate-like scaling, ectropion, and eclabium. We initiated acitretin at 1mg/kg/day with NICU monitoring. He followed in our clinic on and off over the last ten years, and thus on and off acitretin. We highlight the severity of his now generalized erythrodermic ichthyosis while off acitretin with lack of extremity function. However, while on acitretin (~0.6mg/kg/day), 50% urea cream, and Vaseline, he describes significantly improved quality of life. He continues to tolerate the medication without significant side effects with appropriate lab monitoring every three to six months.

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Poster # 31

Congenital dermatofibrosarcoma protuberans diagnosed in an adult woman: a case report

Deborah Dorell BS, Leonora Bomar, MD, Emily Dothard, MD
Wake Forest School of Medicine

Category: Clinical

Abstract: A 28-year-old female presented to a dermatology outpatient clinic for evaluation of a depressed lesion on her lower back that had been present since nine weeks of age. The lesion was occasionally painful and had developed new hyperpigmented papules in recent years. She had been seen four years previously for the same lesion and was thought to have aplasia cutis or burnt-out morphea. On exam, there was an indurated atrophic brown plaque with an exophytic, hyperpigmented papule at the inferior edge on the midline lower back. Pathology showed a diffuse spindled cell proliferation involving the deep dermis and subcutaneous fat with a storiform pattern consistent with dermatofibrosarcoma protuberans. The patient had further workup with imaging to evaluate for spinal involvement and metastases. A lumbar spine MRI showed edema and patchy enhancement contained to the subcutaneous fat in the back at the L2-L3 level, corresponding with the known mass. An abdomen/pelvis CT revealed an incidental 6mm pulmonary nodule, but no other evidence of disease. The patient underwent radical resection of the back sarcoma with surgical pathology showing free margins. This patient represents a rare case of congenital dermatofibrosarcoma protuberans.

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Poster # 32

Non-Uremic Calciphylaxis Treated with Intralesional Sodium Thiosulfate

Deborah Negus Dorrell BA, Zeynep Meltem Akkurt, MD, William W Huang, MD, MPH
Wake Forest School of Medicine

Category: Clinical

Abstract: A 59-year-old female with a history of rheumatoid arthritis on methotrexate and infliximab presented to the dermatology clinic with a nine-month history of severely painful bilateral lower leg ulcerations. She had a presumptive diagnosis of pyoderma gangrenosum and had been started on mycophenolate with no response. Initial examination revealed large malodorous ulcerations of the posterior and medial aspects of bilateral lower legs with yellow exudate, and some areas of necrotic crust. Biopsy at this time showed subcutaneous tissue deposits of calcium in the vessel walls consistent with calciphylaxis. The patient had no history of renal disease, and blood tests showed normal renal function. Mycophenolate was discontinued, and treatment with intralesional sodium thiosulfate and wound care were initiated. She received weekly injections for seven weeks and saw marked improvement in the lesions. This case report presents a patient with non-uremic calciphylaxis who benefited from intralesional sodium thiosulfate injections.

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Poster # 33

Tophaceous Gout on the Penis

Jessica Dowling BA, Derek W. Nickerson, Heather O'Connor, Dan Lopez, Dirk M. Elston,
FAU Charles E. Schmidt College of Medicine

Category: Clinical

Abstract: We present a case of a rare and unusual dermatologic manifestation of gout. Gout is the result of defective uric acid metabolism, which can lead to inflammatory arthritis and cutaneous tophi. A 34-year-old white male, with a past medical history of poorly controlled gout, was referred to dermatology with a slowly growing group of firm white bumps on his penis. Physical exam was significant for a 3 cm non-tender, hard, multinodular and well-marginated chalky-white plaque on the dorsal penile shaft. Also remarkable were hard white subcutaneous nodules on the helices, MTP joints, right knee and ankles. Differential diagnosis of the penile lesion included dystrophic calcification, calcinosis cutis, milia en plaque and gouty tophi. A biopsy was performed and formalin-fixed H&E stained slides revealed amorphous pink material within the center of palisading granulomas lined by histiocytes and giant cells. Scattered crystal remnants were also identified within the center of the granulomas. The histology was consistent with tophaceous gout. At follow-up, the patient opted for surgical debulking of the penile tophi via curettage. His allopurinol was also re-started. Although tophaceous gout is frequently encountered in clinical practice, gouty tophi on the penis has only previously been reported in the literature once before.

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Poster # 34

Asboe-Hansen Sign in Toxic Epidermal Necrolysis

Jessica Dowling BA, Kathryn L. Anderson, MD, William W. Huang, MD
Charles E. Schmidt College of Medicine at Florida Atlantic University

Category: Clinical

Abstract: The dermatology service was consulted for a 25-year-old female admitted for suspected Stevens-Johnson Syndrome. The patient was started on amoxicillin seven days prior. Patient had erythematous macules coalescing into patches with overlying flaccid bullae, some denuded, involving the face, chest, abdomen, back, bilateral upper extremities, bilateral thighs, and labia majora and minora. On palpation of the flaccid bullae, an Asboe-Hansen sign was elicited. A shave biopsy was performed of the newly elicited bullae. Pathology showed a subepidermal bulla with confluent necrosis of the epidermis and minimal inflammatory infiltrate. Based on the clinical findings involving greater than 30% of the patient's body surface area and the pathology findings, a diagnosis of toxic epidermal necrolysis (TEN) was made. Although classically associated with the pemphigus group of diseases, the Asboe-Hansen sign is of diagnostic value to the pathologist in diagnosing TEN by reproducing the same microscopic appearance of a fresh, spontaneous blister. A fresh bulla should always be biopsied as older bullae may exhibit epithelial cell regeneration and disturb an accurate diagnosis. An accurate and early diagnosis of TEN is imperative, as prognosis is strongly correlated with the speed at which the offending drug is discontinued and appropriate medical treatment is initiated.

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Poster # 35

A case of sclerotic Graft-versus-Host Disease from remote radiation exposure that was treated with low dose phototherapy

Drew A. Emge MD, MSc, Joanna Hooten, MD, Keith Sullivan, MD, Nelson Chao, MD, Krista Rowe-Nichols, RN, MSN, Adela Rambi Cardones, MD, MHSc
Duke University Hospital System

Category: Clinical

Abstract: Cutaneous chronic Graft-versus-Host-Disease (cGVHD) is a complication of hematopoietic stem cell transplantation (HSCT). The sclerotic variant of cGVHD is associated with significant morbidity and late non-relapse mortality. The pathogenesis is unknown, but the isomorphic and isoradiotopic effects by ionizing radiation and ultraviolet light have been described in sclerotic cGVHD. We present a case of a 55-year-old female diagnostic radiologist who had previously received an HSCT for Philadelphia chromosome-positive acute lymphoblastic lymphoma. She developed sclerotic cGVHD, with marked severity localized to her right upper extremity that had previously been exposed to incidental radiation in her 25-year career. This case is unique in that the putative trauma inciting the sclerotic cGVHD occurred remotely, at low-level, and repetitively rather than immediately in the peri- or post-transplant period as in previous reports. Her case illustrates that there could be a link between chronic radiation exposure, epigenetic modifications, and development of exaggerated cGVHD localized to the site of the occupational radiation exposure. We also report the patient's successful response to a modified, low-dose psoralen UVA light after failed topical and oral therapies. This aspect of the case is also unique in ultraviolet light exposure usually exacerbates sclerotic cGVHD, which is contradictory to current knowledge.

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Poster # 36

Metastatic Squamous Cell Carcinoma vs Buschke-Lowenstein Tumor

Tyler Evans PhD, Ahmad Aleisa, MD, Bruce H. Thiers, MD, Laura Winterfield, MD, MPH
University of Nebraska Medical Center

Category: Clinical

Abstract: Most head and neck cancers are squamous cell carcinomas. Head and neck squamous cell carcinoma (HNSCC) is the sixth most common cancer by incidence worldwide1. The most common sites of distant metastasis include lung, liver, and bone2. We present a patient with squamous cell carcinoma of the oral cavity with possible metastasis to the skin of the intergluteal cleft. Overall, skin metastasis from HNSCC is rare with an incidence of only 0.8%-1.3%3. Skin metastases commonly manifest as painless, solitary or multiple subcutaneous nodules. They are distinguishable from primary cutaneous squamous cell carcinomas as these nodules are completely isolated from the overlying epidermis4. Our patient was a 36-year-old male with a history of squamous cell carcinoma of the oral cavity who presented with a very tender, well-demarcated, symmetric, exophytic perianal plaque with an erythematous rolled and heaped up border (figure 1). It was clinically suggestive of condyloma or the genital variant of verrucous carcinoma (Buschke-Lowenstein tumor). However, biopsy was consistent with metastatic squamous cell carcinoma. Treatment options for HNSCC skin metastasis include surgical excision, chemotherapy, and radiation. His clinical course can be seen on our poster. References: 1)www.who.int/selection_medicines/committees/expert/20/applications/HeadNeck.pdf. 2) K.T. Pitman, J.T. Johnson. Skin metastases from head and neck squamous cell carcinoma: incidence and impact. Head Neck, 21 (1999), pp. 560-565 3) P. Zbaren, P. Lehmann. Frequency and sites of distant metastases in head and neck squamous cell carcinoma. Arch Otolaryngol Head Neck Surg, 113 (1987), pp. 762-764 4) V. Trivedi et al. An exceptional case of cutaneous metastasis of squamous cell carcinoma of the lip. Journal of Cancer Research and Practice, 4 (2017), pp 156-158

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Poster # 37

Self-Injection of Crushed Opioid Tablets Causing Small and Medium Vessel Necrotizing Vasculitis

Zachary Eyre MD, MBA, Brian Bishop MD MPH, Jamie Mackelfresh MD, Justin Cheeley MD
Emory University

Category: Clinical

Abstract: A 40-year-old female with a history of Crohn's disease and recently diagnosed acute necrotizing glomerulonephritis with C-ANCA positivity and negative PR3 status post cyclophosphamide infusions presented with a 1-month history of tender, ulcerated cutaneous nodules and palpable purpura on the upper and lower extremities as well as acute on chronic renal insufficiency with gross hematuria. A punch biopsy of a purpuric thigh nodule demonstrated necrotizing vasculitis involving small to medium-sized dermal vessels, with polarized light microscopy revealing intraluminal refractive particulates. The patient admitted to self-injecting crushed hydromorphone tablets into her peripheral IV while previously hospitalized. Of the potentially polarizable excipients contained in hydromorphone tablets, microcrystalline was deemed to be etiologic and has been reported as causing granulomatous vasculitis in the pulmonary vasculature. This is the first known reported case of mixed small and medium vessel cutaneous vasculitis attributable to self-injection of a polarizable substance. Patients who present with mixed vessel vasculitis should be queried regarding intravenous drug abuse and polarized light microscopy may be utilized in the histologic examination to avoid unnecessary immunomodulatory therapies and erroneous diagnoses.

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Poster # 38

Capillary Malformation-Arteriovenous Malformation Syndrome: A case report and summary of our institutional experience

Sara Faulks MD, Ashley Wilson, BS, Lara Wine Lee, MD, PhD
Medical University of South Carolina

Category: Clinical

Abstract: Capillary malformation-arteriovenous malformation (CM-AVM) syndrome is a recently described condition that presents as a cutaneous capillary malformation and has been found to be associated with RASA-1 as well as EPHB4 mutations. One third(1) of patients will have an associated AVM that can involve the brain or spine. We present a case of a patient who was diagnosed with CM-AVM at 21 months of age after presenting with red macules and patches with halos on his head, neck, and extremities, as well as shaking episodes of unknown etiology. He was subsequently clinically diagnosed with CM-AVM syndrome, found to have a RASA-1 mutation, and brain MRI revealed an AVM in the posterior left frontal lobe. Six cases of CM-AVM have been reported at the Medical University of South Carolina (MUSC) over the past three years. Of these six cases, two were found to have an associated cerebral AVM, and there were also variations in the presenting complaint, family history, age at diagnosis, particular phenotype, and mutation found. This case report and summary of our institutional experience demonstrates the importance of recognizing a relatively newly described condition that can have serious implications if it goes undiagnosed. 1. Orme CM1, Boyden LM, Choate KA, Antaya RJ, King BA. Capillary malformation--arteriovenous malformation syndrome: review of the literature, proposed diagnostic criteria, and recommendations for management. Pediatr Dermatol. 2013 Jul-Aug;30(4):409-15. doi: 10.1111/pde.12112. Epub 2013 May 13.

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Poster # 39

Basal cell carcinoma arising in a tattoo

Richard Flowers MD, Shadi Khalil PhD, Mary B Noland MD, Thomas Cropley MD
University of Virginia

Category: Clinical

Abstract: We here present a highly unusual case of a basal cell carcinoma arising within a tattoo. The patient reported a 5 year history of an asymptomatic growing lesion on the left upper arm, which had been treated with various topical agents including antifungals, steroids, and emollients. On evaluation, he had a 8 cm scaly erythematous plaque overlying a large left upper arm tattoo with overlying nodular component. Punch biopsy revealed a nodular basal cell carcinoma and associated tattoo pigment. Topical imiquimod was applied five nights weekly for six weeks with follow up in coming weeks. Basal cell carcinomas have rarely been reported to arise with a tattoo. Tattoo pigment or skin trauma may induce malignant proliferation although the association may be coincidental. The differential diagnosis of a chronic plaque within a tattoo is extensive and instructive and includes dermatitis (lichen simplex chronicus, tattoo pigment reaction), infection (atypical mycobacterial, tinea incognito/Majocchi's, deep fungal), sarcoidosis or other malignant growths.

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Poster # 40

CNS and Cutaneous Tuberculomas: Mycobacterium haemophilum

Vernon Forrester MD, Darren J. Guffey, Barbara B. Wilson
University of Virginia

Category: Clinical

Abstract: Mycobacterium haemophilum is an under-recognized pathogen known to cause infections in immunocompromised hosts and young, healthy children. It is a slow growing acid-fast bacillus (AFB) belonging to the group of nontuberculous mycobacteria (NTM). To date, only four cases of central nervous system (CNS) involvement have been reported in the literature. Each of these cases involved patients infected with human immunodeficiency virus. To our knowledge, we present the first case of a M. haemophilum infection involving the skin and CNS in a patient with common variable immunodeficiency (CVID).

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Poster # 41

Coxsackie-induced iPhone malfunction. A new complication of an old disease.

Darren J. Guffey MD, Darren J. Guffey, MD
University of Virginia

Category: Clinical

Abstract: A 31 year old previously healthy female developed acute onset fever, chills, sore throat associated with shallow ulcers on the soft palate, and oval-shaped pink macules on the hands and feet. The pink macules on her hands and feet evolved into exquisitely tender deeply erythematous papules and vesicles. The patient complained of itching, burning pain, and extreme fullness in her hands. Several days after the onset of her eruption she found that she could no longer unlock her iPhone using the fingerprint scanner. The active phase of her eruption lasted for 2 weeks before she started to experience desquamation of the palms and soles. One month after symptom onset she developed onychomadesis of the right thumbnail. All told, her iPhone failed to recognize her fingerprint for a full month.

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Poster # 42

Subcutaneous panniculitis-like T-Cell lymphoma: A mixed diagnostic approach to diagnosing a vague clinical picture

Callie Hill BS, Callie Hill, Apphia Wang MD, Boni Elewski MD, Peter Pavlidakey MD
UAB School of Medicine

Category: Clinical

Abstract: Subcutaneous panniculitis-like T-Cell lymphoma (SPTCL) is a rare subtype of cutaneous T-cell lymphoma, associated with a range of clinical symptoms from mild to severe. Most commonly, this disease is described as following a slowly progressing course, associated with vague constitutional symptoms and good prognosis. This case report describes the clinical presentation and findings of SPTCL in a 31-year-old female and describes the challenges of recognizing and properly diagnosing and treating this disease. Specific tests, including immunohistochemical and immunoperoxidase staining and genotypic analysis of T-cell receptors, were employed to reach the diagnosis. The choice of treatment for these patients can also be challenging, as an array of interventions have been described in past cases. Here we describe a successful treatment course that included a six-cycle course of combined chemotherapy followed by maintenance therapy and surveillance. This patient showed excellence response evidenced by a progressive decrease in metabolic activity of malignant lesions, lack of new lesions, and remaining without symptoms. While this disease is rare, it is important to include SPTCL in the differential when considering patients with a panniculitis-like picture.

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Poster # 43

Atypical Cutaneous Presentation of Asymptomatic Stage IV Congenital

Hallie Hinen MD, Emily Nyers 4th year medical student, Caleb Dunn, MD Dermatology Resident PGY4, Lara Wine Lee, MD PhD
Medical University of South Carolina

Category: Clinical

Abstract: Neuroblastoma is a malignancy that most commonly arises from the adrenal gland. It has very rarely been reported to present with cutaneous metastases, as advanced disease is typically associated with systemic symptoms including fevers, weight loss, bone pain, opsoclonus-myoclonus syndrome, and a palpable abdominal mass. We report a case of an otherwise asymptomatic one-week-old male infant who presented with soft skin-colored to pink grouped papules and nodules bilaterally on the soles. Biopsy revealed neuroblastoma, with positive staining for synaptophysin and chromogranin. Concurrent imaging revealed bilateral adrenal masses and liver, soft tissue, and possible inguinal and axillary lymphoid metastases. Diagnosed as intermediate risk stage 4 disease with n-myc negativity and INPC favorability, the patient proceeded to undergo eight cycles of chemotherapy with carboplatin, cyclophosphamide and etoposide per ANBL0531 study protocol. On follow-up with pediatric dermatology at age 15 months, the patient was meeting developmental milestones with clinically improved cutaneous lesions. Follow-up nuclear medicine adrenal scan and CT imaging has shown disease stability and no development of new lesions. This case is remarkable due to atypical cutaneous presentation in the absence of systemic symptoms and serves as a salient reminder to entertain malignancy in the differential for subcutaneous nodules in an infant.

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Poster # 44

Folly a deux: topical corticosteroid addiction in mother and son.

Bonnie Hodge BS, Thy Huynh, MD, Robert T. Brodell, MD, FAAD
University of Mississippi Medical Center

Category: Clinical

Abstract: Topical corticosteroid (TCS) addiction is characterized by central facial rashing that appears with attempts at discontinuation. We report a novel folie a deux-like case in which two family members concurrently developed this condition from a shared prescription. Initially prescribed for her 6-year-old child's nummular eczema, a 34-year-old mother began using betamethasone 0.05% cream for her own scaling nasolabial rash. Both achieved symptom improvement for their respective ailments but developed intense perioral rashing with each attempt at discontinuation. Their concurrent cycle of withdrawal, flare, resumed use, and improvement, compounded by the parent-child relationship, makes this an interesting type of folie à deux because both experienced the physical and psychological discomfort of withdrawal. They were successfully treated with a "cold turkey" approach bolstered by topical and systemic antimicrobials. This method, which stresses that time is the best "medicine," requires persistent reassurance and support by the physician. The case not only calls to attention the psychological aspect of TCS addiction but brings to light the reality of prescription sharing. Topical corticosteroids are one of the most commonly shared dermatologic prescriptions. Therefore, in light of their addictive potential, great care should be taken by the physician to educate patients on proper use.

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Poster # 45

Scaly Patches on the Trunk and Vesicles on the Palms and Soles in Two Young Adults

Supriya Immaneni BA, Raj Chovatiya, MD, PhD, Christina Clarke, MD
Northwestern University Feinberg School of Medicine

Category: Clinical

Abstract: Atypical morphologic variants of pityriasis rosea (PR) can occur in up to 20% of cases, complicating diagnosis. Aside from classic macular PR, atypical variants include inverse, papular, urticarial, purpuric, and vesicular, a very uncommon subtype. A healthy 28 year old Asian female (patient A) and 33 year old Asian male (patient B) independently presented to clinic in the same week for evaluation of a diffuse, erythematous, scaly, and minimally pruritic eruption. Patient A had oval, pink papules and plaques with a collarette of scale favoring skin tension lines on back, flanks, abdomen, and inner thighs with few papules on palms and soles. Patient B had oval, erythematous papules and plaques with a central collarette of scale along skin tension lines, in this case favoring the intertrigenous areas of the trunk, with additional vesicles overlying pink patches on the wrists and hands. After biopsies, Patient A was started on valacyclovir one gram twice daily for ten days and triamcinolone and desonide. With continued progression, she was transitioned to topical clobetasol. Patient B was also started on topical triamcinolone and desonide. Treatment for this condition was found to be mainly symptomatic, with topical corticosteroids showing good efficacy for pruritus.

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Poster # 46

Generalized Lichen Nitidus: A Rare Clinical Entity

Sara James MD, Diana McShane, MD
UNC- Chapel Hill

Category: Clinical

Abstract: Lichen nitidus is an inflammatory skin condition most commonly found in children and adolescents that can rarely become generalized. We present the case of a 13 year-old female with a 9-month history of skin colored to mildly erythematous papules located diffusely over her body. Biopsy was performed to confirm diagnosis of generalized lichen nitidus. We use this case as a platform to discuss the diagnosis and management of patients with this rare condition. We review the literature about the many reported associations with generalized lichen nitidus, including other inflammatory skin disorders, genetic syndromes, and systemic diseases. In particular, there have been several reports of an association between generalized lichen nitidus and lichen planus or Crohn's disease. Lastly, we outline the treatment options for this condition, which include topical or oral steroids, keratolytics, phototherapy, antihistamines, and more. We additionally incorporate before and after photos for our patient, who had an excellent clinical response to clobetasol ointment.

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Poster # 47

Lymphedema-distichiasis Syndrome

Jack Levy MD, MA, Mariam Amin, MD, Justin T. Cheeley, MD
Emory University

Category: Clinical

Abstract: Lymphedema-Distichiasis syndrome is a rare autosomal dominant condition caused by heterogeneous FOXC2 mutations resulting in physiologic aberrancies of several systems, including the lymphatic system. The syndrome typically presents with asymmetric lymphedema of the lower limbs beginning in late childhood or during puberty. As its name suggests, a variable expression of distichiasis is a nearly necessary finding for diagnosis. A 26-year-old woman with chronic, asymmetric lymphedema of the lower extremities presented to Emory University Hospital for worsening pain and swelling of the right lower extremity concerning for a recurrent cellulitis. The patient's chronic swelling began at the age of 16, initially without impairment of her mobility. In 2015, the patient experienced a trauma-induced cellulitis of the right lower extremity leading to significant worsening of her lymphedema and causing her to be bed-bound for the last three years. Consulting dermatologists at Emory University discovered an aberrant row of distichiatic lashes originating from the patient's upper eyelids. This case demonstrates the power of an early eyelash examination in a young patient with chronic lymphedema. Early identification of genetic causes of lymphedema and simple intervention with graded compression in such patients may prevent the devastating, disfiguring morbidity illustrated by this case of Lymphedema-Distichiasis Syndrome.

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Poster # 48

A Case of Discoid Lupus Triggered by Resumption of Etanercept

Jenny E. Liles MD, Loretta S. Davis, M.D.
Medical College of Georgia at Augusta University

Category: Clinical

Abstract: Tumor necrosis factor alpha (TNFα) inhibitors are well recognized triggers of immune mediated skin lesions (IMSLs) such as discoid lupus erythematosus (DLE). Here, we present a unique case of a patient with juvenile rheumatoid arthritis and systemic lupus erythematosus (SLE) overlap who had tolerated etanercept for over 10 years with stability of her SLE until she stopped the medication to undergo a large jaw surgery. Upon resuming etanercept, the patient quickly developed painful discoid scalp lesions. These were biopsied and found to be consistent with DLE, which had never previously been a manifestation of the patient's SLE. These lesions improved after discontinuation of etanercept. This case illustrates the possibility that discontinuation and then resumption of a TNFα inhibitor may trigger an IMSL even if the drug was previously well tolerated.

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Poster # 49

Langerhans Cell Sarcoma: A Rare Malignancy

Richard Lucariello MD, Nneamaka Ukatu, BA, Bruce H. Thiers
MUSC

Category: Clinical

Abstract: Langerhans cell sarcoma is a rare malignant neoplasm of Langerhans cells. It typically has an aggressive clinical course with multi-organ involvement and is associated with a poor prognosis. We report a case of a 77-year old female with a reported history of Langerhans cell histiocytosis presenting with confluent and discrete tender dermal nodules mainly on the right side of the face and scalp. There was a single papule on the right chest and left hand. There was no associated lymphadenopathy. A previous CT scan , PET scan, and labs showed no evidence of systemic disease. Her condition did not respond to prednisone, and she was unable to tolerate methotrexate. A biopsy was consistent with Langerhans cell sarcoma. She was referred to an oncologist and initially responded to radiation therapy. At the follow up, new annular indurated plaques with central necrosis were present on the left thumb and upper back, which were treated with intralesional methotrexate. Her clinical course was complicated by lung metastasis, which were treated with chemotherapy. This case is remarkable due to the very rare nature of this malignancy.

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Poster # 50

Clinical and Neuroradiographic coorelation of Trigeminal Trophic Syndrome

Seth M. Martin BA, Patrick Carr, MD, Jeanne Young, MD
University of Virginia Medical Center

Category: Clinical

Abstract: Trigeminal trophic syndrome (TTS) is a rare etiology of unilateral facial paresthesia, anesthesia, and falcate ulcerations in the trigeminal nerve distribution. After excluding malignancy, it is important for the dermatologist to be able to differentiate TTS from the various types of factitial dermatitis. While both etiologies present similarly and are due to self-injury, the disease mechanism, treatment, and prognosis differ. Most commonly due to iatrogenic causes, a variety of underlying pathologic mechanisms can lead to TTS. We present here a classic case of TTS that developed in a 40-year-old male with history of diabetes mellitus, coronary artery disease, and hypertension 3 months after a stroke in the left medulla. Symptoms included left-sided pruritus and dysesthesia most prominent in a V2 distribution. Physical exam showed an ulceration extending from the left nasal bridge to the upper cutaneous lip with obliteration of the left nasal ala. Imaging of stoke revealed involvement of the medullary trigeminal nucleus. We instructed the patient in proper wound-care and educated him on importance of eliminating digital manipulation. Early identification of TTS by the dermatologist with a thorough history can prevent inappropriate treatment and workups. This characteristic case provides an ideal teaching platform to discuss this interesting pathology.

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Poster # 51

Hemorrhagic pustules of the dorsal feet: an unusual keratoderma blenorrhagicum as a presenting sign of endemic reactive arthritis

Cathy M. Massoud MD, Mark Mochel, MD, Joi Lenczowski, MD, Julia R. Nunley, MD
Virginia Commonwealth University Health System

Category: Clinical

Abstract: A 39-year-old African American man presented one week after treatment of gonococcal urethritis with a four-day history of painless hemorrhagic pustules arising on bilateral dorsal feet with spread to bilateral insteps, followed by asymmetric lower extremity arthralgias. Physical exam demonstrated violaceous papules coalescing with larger erythematous-based thin pustules with central hemorrhage, localized to bilateral dorsal feet. Extension to plantar feet was present. Exam was negative for oral and genital involvement and scleral injection. Labs revealed leukocytosis, negative serologies for HIV and syphilis IgG, and negative urine PCR for N. gonorrhea and C. trachomatis. Gram stains and cultures from acral pustules and joint aspiration were negative. Shave biopsy revealed subcorneal and intraepidermal neutrophilic aggregates, epidermal acanthosis, and superficial perivascular lymphocytic and neutrophilic infiltrates. PAS stains were negative. Clinicopathologic correlation of recent gonococcal urethritis, acral psoriasiform hyperplasia with neutrophils, and polyarticular arthralgias was supportive of reactive arthritis with keratoderma blenorrhagicum. Treatment with prednisone and celecoxib also effected cutaneous improvement. Keratoderma blenorrhagicum arises in only 10% of reactive arthritis cases and typically localizes to plantar skin. This case highlights the importance of cutaneous findings as the presenting sign of systemic disease, and emphasizes the value of clinicopathologic correlation in achieving a diagnosis.

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Poster # 52

Psoriasiform Eruption Following Perianal Streptococcal Dermatitis in a Pediatric Patient

Sean McGregor DO, PharmD, Emily Chea, BS, Rita Pichardo, MD
Wake Forest University

Category: Clinical

Abstract: Perianal streptococcal dermatitis is a less recognized trigger for guttate psoriasis but has been reported in the pediatric literature. Herein, we report the case of a 4-year-old female who developed guttate and plaque-type psoriasis following treatment of perianal streptococcal dermatitis. Upon initial consultation, there was well demarcated and confluent erythema of perianal region with involvement of the labia majora and minora. A diagnosis of perianal streptococcal dermatitis and vulvovaginitis was suspected and the patient was empirically treated with amoxicillin and mupirocin ointment. The patient returned for follow up 4 weeks later and physical examination revealed resolution of perianal streptococcal dermatitis and newly developed erythematous scaly psoriasiform papules and plaques on the upper buttocks. The patient was subsequently treated with triamcinolone 0.1% cream with successful resolution. There is a well-established link between streptococcal infections and the development of psoriasis. As a result, tonsillectomies or antibiotics targeting S. pyogenes have been advocated for refractory or recurrent cases of guttate psoriasis. However, the role for each is unclear and there is conflicting evidence to support this strategy. Thus, it is important for clinicians to recognize the association between streptococcal disease and treat each accordingly.

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Poster # 53

Using X-ray to facilitate a timely diagnosis of calciphylaxis

Charlene Oldfield MD, Scott Whitlock, MD, Adelaida Gyurjyan-Bunch, MD, Abby Van Voorhees, MD
Eastern Virginia Medical School

Category: Clinical

Abstract: Calciphylaxis is an uncommon cutaneous-systemic disease involving vascular calcification, most frequently affecting patients with end-stage renal disease. Early diagnosis and treatment are paramount due to its high mortality rate. While a skin biopsy can be performed to help facilitate diagnosis, histopathology is non-specific and can result in additional non-healing wounds. The role of radiology, such as x-ray or bone scans, has recently been explored as a sensitive means of diagnosing calciphylaxis in lieu of biopsy. We report a case of calciphylaxis, where in combination with clinical and laboratory data, x-ray was used to facilitate diagnosis. Radiologic imaging, when combined with other clinical data, may enable a more rapid diagnosis of calciphylaxis. Furthermore, it provides additional diagnostic data in patients where biopsy is not a feasible or practical option.

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Poster # 54

Atrophic dermatofibromasarcoma protuberans in a pediatric patient

Charlene Oldfield MD, Arjun Saini MS4, Edward Prodanovic MD
Eastern Virginia Medical School

Category: Clinical

Abstract: Dermatofibrosarcoma protuberans (DFSP) is a an uncommon low to intermediate grade soft tissue neoplasm, which accounts for approximately 1% of all soft tissue carcinomas. DFSP is characterized by dermal spindle cell proliferation of subcutaneous tissue that can be locally invasive with a high recurrence rate but rarely metastasizes. There are many variants of DSFP and most occur in the adult population with 1 in 1,000,000 occurring in the pediatric population. Atrophic type DSFP tends have a slow infiltrative growth and can often have a delayed diagnosis as it can resemble other benign lesions such as morphea, idiopathic atrophoderma, atrophic scar, anetoderma or lipoatrophy. We present a 14 year-old patient with a biopsy and FISH proven atrophic DFSP present for approximately 10 years. This case represents a rare neoplasm in the pediatric population. It is important for clinicians to recognize this variant of DFSP, as recognition can lead to a more timely diagnosis of DFSP.

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Poster # 55

Atrophia Maculosa Variloformis Cutis Following Blaschko's Lines

Christen Samaan BS, Mathew L. Palmer, MD, Howard Pride, MD
Geisinger Commonwealth School of Medicine

Category: Clinical

Abstract: Atrophia maculosa varioliformis cutis (AMVC) is a rare skin disorder first noted in 1918 by Heidingsfeld to describe the spontaneous development of numerous areas of macular atrophy on the face without prior trauma or inflammation. The etiology and pathogenesis of this skin disorder remains unknown. We present a case of a 25 year old female with depressed, linear, asymptomatic plaques on the right cheek that follows the pattern of Blaschko's lines and review 25 cases as reported in literature. Most of the patients described a spontaneous onset of the lesions and a gradual increase in size and number over time. The cheeks are the most commonly involved site. Of the 25 cases, we were able to map 15 to Blaschko's lines. Blaschko's lines are a manifestation of genetic mosaicism caused by a postzygotic mutation that occurs in early development. Our case shows that AMVC can follow Blaschko's lines. Similar to other diseases distributed along Blaschko's lines, the disorder may reflect mosaicism caused by a postzygotic mutation that occurred in early development. Our patient and the cases found in the literature may help to identify the gene and possible etiologies of the skin disorder.

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Poster # 56

Linear Porokeratosis Associated with Bardet-Biedl Syndrome

Mariah Shaw BA, Anna C. Tappel, BS, Nitin Tiwari, MD, Barrett Zlotoff, MD
University of Virginia

Category: Clinical

Abstract: We present a case of a 17-year-old male with Bardet-Biedl syndrome (BBS) and awaiting renal transplant who presented with a longstanding hyperpigmented eruption on the left trunk and upper extremity. The lesions were clinically and histologically consistent with linear porokeratosis (LP). BBS patients frequently require solid organ transplant; subsequent immunosuppression places them at especially high risk for malignant transformation of premalignant skin lesions, such as LP. Although BBS affects multiple organ systems, there are only a handful of case reports detailing associated cutaneous involvement and, to our knowledge, this is the first reported case of linear porokeratosis occurring in patient with BBS.

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Poster # 57

Type V Aplasia Cutis Congenita with Fetus Papyraceus

Margaret Snyder BS, Humza Ilyas, MD
The Medical College of Georgia

Category: Clinical

Abstract: Introduction: Aplasia cutis congenita (ACC) is a condition characterized by the congenital absence of skin layers in a localized or widespread area. A rare subtype of ACC has been described in multiple gestations in which one twin expires in-utero. Subsequent fetal papyraceus (FP), or mummification of the body, occurs as the viable, growing fetus compresses the deceased twin. This results in a phenomenon known as "vanishing twin syndrome". Most experts postulate that an ischemic insult from the dying tissue results in skin necrosis within watershed areas of the surviving fetus. Case: A twin pregnancy was complicated by the in-utero demise of twin A at 13-14 weeks. Delivery of twin B was induced at 35 weeks for intrauterine growth restriction. Upon delivery, it was evident that the infant was missing large portions of skin on his trunk and proximal extremities. He was managed conservatively with once daily dressing changes utilizing petrolatum and an absorbent hydrophilic polyurethane foam dressing. The involved areas subsequently granulated and were completely re-epithelialized by three months. Discussion: This case demonstrates a rare subtype of ACC in which a vascular incident from the in-utero death of a co-twin results in the necrosis of all skin layers.

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Poster # 58

Gentian Violet for Wound Healing in Pyoderma Gangrenosum

Katherine M. Stiff BS, Katelyn R. Glines, BS, Mikel E. Muse, BS, Abigail Cline, MD, PhD, Steven R. Feldman, MD, PhD, Joseph L. Jorizzo, MD and William W. Huang, MD, MPH
Northeast Ohio Medical University

Category: Clinical

Abstract: Background: Pyoderma gangrenosum (PG) is a rare autoinflammatory skin disease (Su 2004). Treatment is multifactorial, addressing inflammation, pain, underlying disease, if present, and the wound. Gentian violet (GV) has been used for hundreds of years in a variety of dermatologic conditions for its anti-inflammatory properties (Berrios 2011). This study aims to evaluate GV in wound healing for PG. Methods: We conducted a retrospective chart review of patients with PG treated with GV. The inclusion criteria were patients over 18 years old diagnosed with PG and treated with GV at the Wake Forest School of Medicine Department of Dermatology in the last 10 years. Exclusion criteria were patients who were not seen for follow up. The primary outcome was clinical improvement. Results: Of the 34 cases that met inclusion criteria, 70% improved with GV, 24% had no documented change, 3% initially improved then worsened, and 3% had unclear results. Limitations: There was no control group and parameters of clinical improvement were not clearly defined in the medical records. Conclusion: Gentian violet is a safe and cheap treatment that may improve resolution of PG lesions in addition to systemic therapy.

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Poster # 59

The Importance of Nodal Observation in Cutaneous T-Cell Lymphoma: Not Simply a Matter of Disease Progression

Ryan M. Svoboda MD, MS, Elise A. Olsen, MD
Duke University

Category: Clinical

Abstract: Patients with cutaneous T-cell lymphoma (CTCL) are known to be at increased risk of developing other distinct systemic malignancies, particularly of the hematologic variety. We describe three patients, each with a histologically distinct subtype of CTCL, who were subsequently diagnosed with Hodgkin's lymphoma. Two patients, one with primary cutaneous anaplastic large cell lymphoma and one with subcutaneous panniculitis like T cell lymphoma, were on MTX for 25 and 6 months respectively and without active skin lesions when a single new abnormal node was noted. One patient with MF had been treated with 9 months of bexarotene and was on MTX for 2 months prior to the development of multiple abnormal nodes. Each patient had nodular sclerosing Hodgkin's lymphoma on excisional node biopsy. Second malignancies in CTCL are not unusual, occurring in 15% of MF patients and a similar proportion in other types of CTCL. All newly apparent lymphadenopathy in CTCL patients, particularly in the absence of active skin lesions or in areas outside affected skin, warrants excisional biopsy both to explore potential nodal extension of CTCL as well as to evaluate for a second, distinct hematologic malignancy.

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Poster # 60

Structural Racism and its Influence on the Severity of Atopic Dermatitis of African American Children

Kelly Jo Tackett BS, Craig N. Burkhart, MD MS, Francis Jenkins, BS, Dean Morrell, MD, Diana McShane, MD
University of North Carolina Chapel Hill

Category: Clinical Research

Abstract: Introduction: The incidence of several diseases vary by race, ethnicity, social and economic conditions, and other environmental factors 1. Similar to other diseases, pediatric atopic dermatitis (AD) severity increases with older age, African American and Hispanic race/ethnicity, lower household income, home with a single parent, lower parental education level, dilapidated housing, and garbage on the streets2. However, racial disparities in mortality for several diseases persist despite adjustment for socioeconomic status. There is limited knowledge on the impact of structural racism in dermatology. Methods: An in-office, online survey was administered to a convenience sample of 201 pediatric AD patients. Severity was classified based on the treatment plan prescribed. The survey consisted of 58 questions in 5 domains: demographics, assessment of in-home overcrowding, assessment of community crowding, air quality, and litter. Results: Risk factors among patients with severe atopic dermatitis included black race, yearly income < $30,000, older homes, living in multiple homes, and lower education level of parents. Conversely, protective factors against severe atopic dermatitis were white race, income >$100,000, and higher education of parents. Conclusion: Our investigation adds structural racism as an important community characteristic that likely has significant affects on AD severity for black children in North Carolina.

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Poster # 61

Case report: Sporadic de novo multiple cutaneous and mucosal vein malformations

Benjamin A. Tran BA, Vernon J. Forrester, MD, Barrett J. Zlotoff, MD
University of Virginia

Category: Clinical

Abstract: Background: Multiple cutaneous and mucosal venous malformations (VMCM) is a rare disorder characterized by the development of venous malformations (VM) affecting cutaneous and mucosal surfaces that is caused by a gain-of-function mutation in the TEK gene. While classically inherited in an autosomal dominant fashion, somatic mosaicism of the TEK gene has been shown to cause a sporadic version of VMCM. Case presentation: A 73 year old Caucasian male with a history of multiple deep venous thromboses (DVT) presented to clinic with a several year history of easily compressible 2 cm to 6 cm subcutaneous bluish papules involving his mouth, face, and extremities. Biopsies of several lesions were consistent with VM. Differential diagnosis included cerebral cavernous malformations, multiple glomuvenous malformations, blue rubber bleb nevus syndrome, and VMCM. Given the absence of similar familial symptoms, lack of neurologic history, absence of gastrointestinal VMs, and the patient's ethnicity, the patient was diagnosed with sporadic VMCM. He was instructed to continue rivaroxaban due to risk of low grade disseminated intravascular coagulopathy (DIC) and DVTs often associated with VMCM. Conclusion: Sporadic VMCM is a potentially under recognized disease. Early recognition and management are important to avoid dangerous sequela such as DVTs and DIC.

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Poster # 62

Vancomycin-Induced Linear IgA Bullous Dermatosis Masquerading as Erythema Multiforme

Santana D. VanDyke BS, K. Jade Kindley, MD, Mary Margaret Noland, MD
University of Virginia School of Medicine

Category: Clinical

Abstract: A 75 year old female was admitted for bacterial meningitis and discharged home on ceftriaxone, vancomycin, and ampicillin. One week after discharge, she developed dusky targetoid lesions with bullae on the palms and soles, erythematous papules and scattered flaccid bulla on the bilateral thighs, and diffuse erythema and superficial desquamation of the inguinal folds. The acral lesions were most consistent with erythema multiforme (EM), but the flexural involvement was atypical. Vancomycin was restarted, and she subsequently developed tense bullae of the bilateral palms and soles and inguinal folds, some of which were in a "crown of jewels" configuration. Given these new findings in the setting of vancomycin use, linear IgA bullous dermatosis was suspected. Punch biopsies were consistent with this diagnosis, and direct immunofluorescence (DIF) was positive for IgA, IgG, and C3 along the dermal-epidermal junction. She was subsequently prescribed dapsone 50 mg daily with significant improvement. This case demonstrates a unique presentation of linear IgA bullous dermatosis since the lesions initially mimicked EM. The flexural involvement was also intriguing since this distribution most often occurs in the childhood form of this condition. Furthermore, DIF was positive for IgG and C3 in addition to IgA, which only occurs in a subset of cases.

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Poster # 63

Disseminated zoster in a patient with newly diagnosed SLE

Leah Ellis Wells BS, Laura Gray Pruitt, MD, Richard Marchell, MD, John S. Metcalf, MD
Mercer University

Category: Clinical

Abstract: Reactivation of varicella zoster virus can present in four different forms: classic localized zoster, dermatomal zoster with dissemination, atypical generalized zoster with or without visceral lesions, and visceral zoster in the absence of cutaneous lesions. Disseminated cutaneous zoster is defined as greater than 20 vesicular lesions outside of the primary and adjacent dermatomes. It is most commonly seen in immunocompromised patients, especially those with lymphoproliferative disorders. In immunocompromised patients, lesions of both HSV and VZV can be verrucous in appearance, mimicking lesions of HPV. We report a case of disseminated zoster that started as verrucous plaques on the buttocks of a patient with newly diagnosed SLE.

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Poster # 64

Granular Cell Tumor in the Axilla: A Rare Diagnosis

Michelle Xu MD, Victoria Lee Bolgiano, BS,
Medical University of South Carolina

Category: Clinical

Abstract: Granular cell tumor (GCT) is a soft tissue neoplasm that originates from the nervous system. GCT usually develops on the skin or mucosal surface and often involves the head and neck, trunk, and upper extremities. Approximately 5%-8% of all cases of GCT occur in the breast. A 63-year-old African American woman with a previous history of atypical lobular hyperplasia of the right breast presented to the dermatology clinic for evaluation of a thickened nodule in the left axilla of approximately 3 years' duration. She reported that the nodule began as an "inflamed hair follicle" associated with pruritus for which she endorsed chronically rubbing the site. Physical examination revealed a 3.0cm firm, mobile subcutaneous nodule with overlying hyperpigmentation and lichenification in the left axilla. The granular cell tumor was identified with an incisional biopsy with the use of S-100 and Ki-67 staining. The patient underwent surgical excision with no association found between her history of atypical lobular breast hyperplasia and GCT diagnosis. We present this case because of the rarity of this diagnosis and highlight the value of a thorough history, physical exam, and histopathological confirmation.

Portable Helical Scanning as a Means of Increasing the Convenience of Total Body Photography
Calisha Allen BS, Steven R. Feldman, M.D., Ph.D.
Wake Forest School of Medicine
Category: Clinical
Abstract: Total body photography is a valuable clinical tool for documentation and surveillance of dermatologic lesions, but equipment costs and operational logistics may provide barriers to use. Recent updates in technology include newer systems and novel approaches to whole body imaging that may alleviate some of these obstacles. This project is an independent product review of eight different imaging systems, which were evaluated and compared with respect to user operations, mobility, cost, and size. Two of the systems are manually operated, one is fully automated, and the remaining five are hybrid. Six of the eight are mobile, while only two are stationary and prices range from about $1000 to over $200,000. Scanning sizes range from 30.6ft3 to 468.4ft3, with most being between 30ft3 and 50ft3 and the portable device having a compacted storage size of 0.26ft3. Although not specifically designed for use in dermatologic imaging, the novel portable helical scanning technology provides the lowest price and most compact equipment with the only portable and fully automated option of all currently available systems. Future research into its clinical accuracy and reliability may provide a relatively low cost option for more automated, mobile, compact, and thus more convenient total body photography.
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Cutaneous Leishmaniasis: A Traveler's Disease of the New World
Dana Baigrie DO, Katrina Hansen DO, Luke Maxfield DO, Matthew Sincock MD, Laura Tanner MD,
Sampson Regional Medical Center
Category: Clinical
Abstract: New World cutaneous leishmaniasis is a tropical and subtropical protozoal infectious disease transmitted by the bite of the Lutzomyia sandfly. The most common species responsible for New World cutaneous leishmaniasis are L. mexicana and L. brasiliensis. The primary endemic areas include countries in Central and South America. In the United States, the affected individuals tend to be travelers, soldiers, or immigrants arriving from endemic areas. We report a case of limited cutaneous leishmaniasis in an otherwise healthy 29-year-old Caucasian female from North Carolina. She presented with chronic upper extremity ulcerative plaques of three months duration. The lesions appeared while vacationing in Hawaii and shortly after vacationing for several weeks in Guatemala, Belize, and Mexico. Speciation by the Centers for Disease Control showed L. mexicana. After the lesions failed to respond clinically to oral miltefosine, the patient was started on liposomal amphotericin B which led to slow involution of the skin lesions. This case highlights the importance of maintaining a high level of clinical suspicion with a low threshold for performing skin biopsies and further workup in patients presenting with exotic travel history and non-healing skin lesions.
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A Case of Scleromyxedema Resolving with Dupilumab
Virginia Barton MD, R. Andrew Jamison, MD, Marshall Shuler, MD
Greenville Health System
Category: Clinical
Abstract: A 65-year-old female with a history of atopic dermatitis was evaluated for an increasingly itchy rash with a "bumpy" appearance that had not improved with topical triamcinolone. Punch biopsy and lab work-up confirmed a diagnosis of scleromyxedema. After many failed topical treatments and systemic steroids, the patient returned with a flare of erythema and pruritis concerning for an exacerbation of atopic dermatitis. She was started on Dupilumab and was found to have dramatic improvement of the scleromyxedema papules and pruritis. This is the first report of scleromyxedema treated with Dupilumab. Dupilumab is an IgG4 monoclonal antibody that binds to the cell surface receptor IL-4Rα and thereby inhibits IL-4 and IL-13 activity, preventing downstream production of inflammatory mediators. In addition, IL-4 and IL-13 receptors are known to be present on skin fibroblasts and are involved with collagen and mucin production via JAK/STAT signaling pathways. Scleromyxedema is characterized by increased dermal

mucin, collagen, and fibroblasts, and is usually associated with a monoclonal gammopathy. We hypothesize that this patient's scleromyxedema is secondary to IgG activation of skin fibroblasts via IL-4Rα resulting in increased mucin and collagen deposition. Thus, her response is based on the blockade of this receptor via Dupilumab.

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Phrynoderma and keratomalacia in a child with severe dermatitis and food allergy

Kassahun Bilcha MD, Mary Spraker, MD
Emory University

Category: Clinical

Abstract: Vitamin A deficiency is an important cause of childhood blindness in some parts of the world but rare in developed countries. It can cause a keratinization disorder of the conjunctiva called keratomalacia and a follicular hyperkeratosis of the skin called phrynoderma. We report a 16-year old boy with dermatitis complicated by food allergies, food aversions and obsessive-compulsive behaviors. His diet was supplemented with elemental and homemade food substitutes for years. He presented with worsening pruritus and follicular papules on his arms and legs not responding well to moisturization and topical corticosteroids. This was followed by severe blurring of vision, dry eyes and eye irritation. Ophthalmology found bilateral corneal ulcerations, xerophthalmia and pinpoint conjunctival infiltrations (Bitot's spots) characteristic of keratomalacia. Serum vitamin A level was undetectable. He was supplemented with vitamin A. His vision rapidly improved, as did the phrynoderma. To our knowledge, this is the first report of vitamin A deficiency in a patient with dermatitis on dietary restrictions due to presumed food allergies. The relevance of food allergy in atopic dermatitis is complicated, but the associated myth and faddism can have serious health consequences. Nutritional assessment needs to be addressed in children on dietary restrictions

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Ulcerated Heliotrope Rash in a Patient with Anti-MDA5 Dermatomyositis

Meera Brahmbhatt MD, Justin Cheeley, MD
Emory University Department of Dermatology

Category: Clinical

Abstract: Anti-MDA5 subtype dermatomyositis (DM) includes cutaneous/oral ulcers and well as a higher incidence of interstitial lung disease (ILD). Ulcers can occur anywhere, but are largely located over joints/bony prominences. We present a patient with known anti-MDA5 DM and ILD who developed a painful ulcerated heliotrope rash after being admitted for worsening dyspnea. Her cutaneous presentation was significant for a heliotrope rash with reticulate violaceous patches and edematous plaques, especially along the eyelid margin with punched-out ulcers at the bilateral lateral canthi. Purulent discharge or vesicular lesions were not evident; therefore, her clinical appearance did not suggest superimposed viral or bacterial infection. Coupled with transaminase elevation, elevated CPK, elevated aldolase, and worsening respiratory failure, this cutaneous finding was most consistent with progression of her DM. She was treated with hydrocortisone ointment to her eyelids along with rituximab, IVIG and PLEX therapy with no improvement in her respiratory status. In the end, the patient and her family decided on hospice care. This is the first known case of ulcerated heliotrope rash in anti-MDA5 DM and highlights yet another distinctive clinical finding which may enhance recognition, disease monitoring, and treatment of this aggressive DM subtype.

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Comparing Adherence and Satisfaction of Psoriasis and Vitiligo Patients Using a Novel Home UVB Phototherapy System

Abigail Cline MD, PhD, Emily L Unrue, BS, Steven R Feldman, MD, PhD
Wake Forest School of Medicine

Category: Clinical

Abstract: Objective: To compare adherence and satisfaction of psoriasis patients to vitiligo patients using a handheld, smartphone-connected, home phototherapy system. Methods: In this retrospective, open-label clinical study, data was collected from 26 psoriasis patients and 42 vitiligo patients using a novel home phototherapy system under normal use conditions. Adherence was calculated using treatments/opportunities for the first 20 treatments or first 40 opportunities. Patient satisfaction was measured using a five-point scale. Results: Vitiligo patients had better median adherence compared to psoriasis patients (83% vs 54%, p=0.001), however satisfaction ratings were marginally higher with psoriasis patients (3.8 vs. 3.6). Psoriasis and vitiligo patients had no significant differences in the mean number of treatment spots (16 vs 19, respectively). Conclusion: Vitiligo patients were more likely to be adherent using the novel home UVB phototherapy system compared to psoriasis patients; however, treatment satisfaction was marginally better among psoriasis patients.

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Effect of Digital-Interventions to Increase Adherence of Psoriasis Patients on Methotrexate

Abigail Cline MD, PHD, Emily L Unrue, BS, Leah A. Cardwell, MD, Hossein Alinia, MD, Steven R Feldman, MD, PhD, William Huang, MD
Wake Forest School of Medicine
Category: Clinical Research

Abstract: Background: Patients adherence to methotrexate treatment is not well-characterized, and ways to improve methotrexate adherence have not been addressed. Purpose: To assess long term adherence to methotrexate treatment and to assess whether intermittent online contact with patients improves their use of the treatment. Methods: Subjects were recruited to participate in an intervention study assessing adherence to oral treatment for psoriasis. Subjects were randomized to receive either weekly digital-interventions assessing treatment adherence or no intervention. Subjects received medication bottles with electronic monitoring and were followed up with a standard-of-care office visit schedule to evaluate disease severity. Results: The intervention group took their medication correctly 77.1% of the weeks observed compared to the control group which averaged 64.5%. More intervention patients took their medication as directed compared to the control group (78.3% vs 64.2%, $p<0.0001$). Patients were most adherent around follow-up visits, with 100% of intervention patients and 80% of control patients taking their medication correctly during the week of a follow-up visit ($p=0.02$). Conclusions: Psoriasis patients' adherence to oral methotrexate is better than adherence to topical agents. Low cost, scalable digital interventions have the potential to increase patient adherence, although the mechanism for the improvement is not yet well defined.

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Multi-Ethnic Training in Dermatology Residency

Abigail Cline MD, PhD, Shadi Kourosh, MD, MPH, Susan Taylor, MD, Molly Storer Stout, MD, Valerie Callender, MD, Amy McMichael, MD
Wake Forest School of Medicine
Category: Clinical Research

Abstract: Introduction: Future dermatologists must be familiar with dermatological conditions in patients of various ethnic backgrounds. Aim: Do dermatology residents' feel their curriculum trains them enough regarding patients with skin of color? Methods: A 10-question survey was emailed to 109 dermatology residency programs Results: 43 residents completed the survey, with 18% from the Northeast (NE), 16% Southeast (SE), 30% Midwest (MW), 18% Southwest (SW), and 18% Northwest (NW). 34.9% of all responders agreed that a dedicated multi-ethnic skin clinic is important. 62.5% of NW responders agreed and 62.5% of NE responders disagreed with this statement ($p<0.005$). 23.2% of responders agreed that a rotation dedicated to skin of color is important for competence, 90.7% that dedicated lectures are important, & 44.1% that having a departmental expert is important for residents to gain competence in treating conditions affecting skin of color, including 71.4% of SE responders and 41.6% of MW responders ($p<0.005$). 83.7% agreed that reading textbook chapters is important for developing competence. Conclusions: Residents believe lectures and textbook chapters are more important than clinics or rotations to gain competence in treating patients with skin of color. In areas with less diversity, multi-ethnic skin clinics may be more important for adequate residency experience.

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Vitiligo Patients' Adherence and Satisfaction Using a Novel Home UVB Phototherapy System

Abigail Cline MD, PhD, Emily L Unrue, BS, Steven R Feldman, MD, PhD
Wake Forest School of Medicine
Category: Clinical

Abstract: Background: While phototherapy effectively treats vitiligo, clinic-based phototherapy can be time-consuming, expensive, and inconvenient. Home phototherapy addresses many of these obstacles. Objective: To evaluate patient adherence and satisfaction using a handheld, smartphone-connected, home phototherapy system for treatment of vitiligo. Methods: In this retrospective, open-label clinical study, treatment data was collected from 42 vitiligo patients (22 females and 20 males) using a novel home phototherapy system under normal use conditions. Adherence was calculated using treatments/opportunities over the first 20 treatments or first 40 opportunities. Patient satisfaction was measured using a five-point scale. Results: Patient ages ranged from 7-66, with a mean age of 38. Median adherence was 83%. Mean patient satisfaction was 3.6. There were no differences in adherence, spots treated, and satisfaction between genders or age groups. In male patients, the number of treatment spots negatively correlated with adherence

(R=-0.622, p=0.003). Conclusion: The smartphone connected home UVB phototherapy system offers a convenient and satisfactory treatment option for patients with vitiligo.

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Tufted Angioma of an Extremity

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Florida Atlantic University Charles E. Schmidt College of Medicine

Category: Clinical

Abstract: A 10 month-old boy presented for an erythematous patch of right arm, which appeared at 5 months of age and had not changed since appearance. Prior to dermatology referral, the patient's pediatrician had treated with topical mupirocin and hydrocortisone 2.5% cream without improvement. On presentation, the patient had a mottled erythematous patch of right medial upper extremity without surface change. A 3mm punch biopsy was performed. Pathology showed a vascular proliferation in the superficial dermis with spindled and polygonal cells. Vascular nature was confirmed with positive CD31 and Erg immunohistochemical stains. Diagnosis of tufted angioma was made. Tufted angioma (TA) is a rare, benign vascular tumor of uncertain pathogenesis, characterized histopathologically by "tufts" of capillaries within the dermis. TAs typically present during infancy on the neck or trunk. A life-threatening coagulopathy, Kasabach-Merritt phenomenon (KMP), occurs in approximately 10% of cases of TA and is characterized by profound thrombocytopenia and fibrinogen consumption. Baseline laboratory workup of our patient revealed mildly decreased fibrinogen and elevated D-dimer levels without thrombocytopenia or elevated PTT. This suggests asymptomatic patients with TA may present with coagulopathy in absence of KMP. Our case highlights the importance of baseline laboratory workup in patients presenting with TA.

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Cutaneous Leishmaniasis in an immunocompromised pediatric patient with acute lymphoblastic leukemia

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Category: Clinical

Abstract: Leishmaniasis is an infectious, protozoan disease caused by the parasite Leishmania. It is transmitted by the phlebotomine sandfly bite. It is most common in undeveloped countries. The clinical features depend of parasite genus, geographic area and patient's immunity. A 5-year-old male with acute lymphoblastic leukemia under treatment with CRI-16 (dexamethasone, vincristine, methotrexate and 6-mercaptopurine) chemotherapy in maintenance phase was evaluated at Hematology Department of the Hospital Nacional de Niños in San Jose, CR, with a history of one month evolution of a mosquito bite in the left lower limb that evolved into an ulcerated nodule. A smear for leishmania was done with negative results. He was treated with topical fusidic acid and trimethoprim/sulfamethoxazole x 1 month with no improvement and spreading of the lesions. Physical examination revealed ulcerated plaques with erythematous-violaceous borders on left lower limb and plaques with a fine scale and crust on right buttock. Multiple adenopathies in ascending fashion were noted. A smear resulted positive. Treatment with Meglumine antimoniate was started at 1250mg/day IM (56mg/kg/d) for 21 days. Chemotherapy was suspended during the time of treatment. The course was complicated with a bacterial infection. Patient has healed lesions with atrophic scaring and on chemotherapeutic treatment without complications.

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A case of generalized granuloma annulare successfully treated with narrowband UVB phototherapy

Ashley Craddock BA, Sara Braswell, MD, Lydia Johnson, MD
Virginia Commonwealth University School of Medicine

Category: Clinical

Abstract: Generalized granuloma annulare (GGA) can be a debilitating disease and a therapeutic challenge. There is no standard first-line therapy. Multiple treatments, including topical steroids, hydroxychloroquine, various immunosuppressants, phototherapy and others, have been tried. While multiple reports on psoralen with ultraviolet A exist, less is written about the use of narrowband UVB (nbUVB) to treat GGA. A 78-year-old female presented with a pruritic rash on her trunk and proximal extremities. Past medical history was negative for new medications. The rash did not respond to high potency topical steroids or hydroxychloroquine; prednisone provided minimal relief. Examination revealed violaceous thin annular plaques without scale on her abdomen, thighs, and upper extremities. A punch biopsy showed a palisaded granulomatous dermatitis. Clinical-pathologic correlation led to a diagnosis of GGA. Possible associations have been reported between GA and many diseases, including diabetes mellitus, dyslipidemia, thyroid disease, infection, and malignancy. The patient had extensive lab work-up, notable for hyperlipidemia and a monoclonal

gammopathy of undetermined significance. Treatment with nbUVB 2-3 times a week was initiated. After only 13 treatments, her pruritus was minimal, and the lesions had faded significantly. Narrowband UVB should be considered when treating patients with GGA, given its potential efficacy and minimal side effects.

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One Lip vs Two Lips in Lupus Erythematosus and Erythema Multiforme: Another Clinical Pearl

Deanna Dickerman MD, Kiley Fagan, BS, Loretta Davis, MD
Medical College of Georgia at Augusta University

Category: Clinical

Abstract: The oral mucosa is a well established location for lupus erythematosus (LE), but labial findings are less well described. A 20-year-old AAF with past history of CLE who had rapid onset of lower lip swelling and ulceration accompanied by new rash and intermittent fevers. On exam, there was marked edema and diffuse erosion of the lower vermillion lip. The upper lip was conspicuously spared. Biopsy demonstrated ulceration, epithelial necrosis and inflammatory infiltrates. Positive serologies on laboratory testing suggested LE, but the clinical differential included erythema multiforme (EM). To clarify whether selective involvement of the lower lip is more common in LE than EM, review of the literature over the past five years was conducted. 23 relevant cases of EM and 27 of LE were identified. Results showed EM involving both lips in 87% of cases. LE selectively involved only one lip in 71%. Selective involvement of the lower lip was the most common labial LE manifestation, occuring in 64% of cases. This supports the diagnosis of LE in this case. In conclusion, EM tends to involve both lips, whereas LE more often selectively involves the lower lip. Their different patterns of labial involvement may help to distinguish these two entities.

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Bullous drug eruption in an immunosuppressed transgender patient: a case report

Deborah N Dorrell BA, Beth Nichols, MD, Richard Marchell, MD
Wake Forest School of Medicine

Category: Clinical

Abstract: A 30-year-old transgender female with a history of HIV and AIDS on HAART presented to the ED with fever and chills for one week and headache for one day. Upon presentation, she was febrile to 102°F and head CT showed a new hypodensity of the left thalamus that could represent artifact or infectious sequela. She was admitted to rule out meningitis and started on Cefepime, Vancomycin, and Acyclovir as well as restarted on TMP-SMX. She also received acetaminophen and ibuprofen for headache. Infectious workup including brain MRI, LP, and blood cultures was negative. On day two of hospitalization, she developed a pruritic rash on her thighs and arms for which dermatology was consulted. Exam showed erythematous targetoid macules with a dusky center and either central or peripheral bullae. Differential diagnosis included infection or a bullous drug reaction. Punch biopsy from the left thigh demonstrated interface dermatitis with epidermal necrosis and pigment incontinence most consistent with fixed drug eruption likely caused by either TMP-SMX or NSAIDs. Discontinuation of these suspected medications was recommended. This case report illustrates the benefit of biopsy in differentiating between infection and drug reactions in bullous eruptions in an immunosuppressed patient.

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An Atypical Presentation of PLEVA: Case Report and Review of the Literature

Constance E. Ediale MS, Kayla H. Felix, MS, Kathryn Anderson, MD, Christine Ahn, MD, Amy J. McMichael, MD,
Augusta University/University of Georgia Medical Partnership

Category: Clinical

Abstract: Background: Pityriasis lichenoides et varioliformis acuta (PLEVA), also known as Mucha-Habermann disease, is a rare, self-limited, cutaneous disorder of unknown etiology. Pityriasis lichenoides encompasses a spectrum of clinical presentations with PLEVA representing the acute form and pityriasis lichenoides chronica, the chronic form. Clinically, PLEVA is characterized by sudden onset of scaly, erythematous macules and papules localized to the trunk and proximal extremities. Case Presentation: We report a 62-year-old female who presented with multiple erythematous papules and plaques on the palms, forearms, and dorsal feet. Histopathology revealed parakeratosis with erythrocyte extravasation and a brisk lichenoid inflammation, consistent with the clinical diagnosis of PLEVA. Conclusion: This case is notable for describing an uncommon distribution of PLEVA to the distal extremities. We aim to increase awareness of this atypical presentation of PLEVA which may present difficulties in diagnosis and therapy.

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Disseminated Cutaneous Larva Migrans

Lisa Edwards MD, Leah Ellis Wells, BS, Lara Wine Lee, MD, PhD

MUSC
Category: Clinical
Abstract: A 7-year-old caucasian male presented to the Medical University of South Carolina emergency room with pruritus and several, bilateral, serpiginous lesions which had disseminated over the course of several days from the soles of his feet to his upper thighs. His guardians reported the family owned two dogs and the patient frequently played outside barefoot. A diagnosis of cutaneous larva migrans was made based on his history and physical exam. Biopsy showed superficial and deep perivascular dermatitis with eosinophils, consistent with the diagnosis. The patient was successfully treated with oral ivermectin. Cutaneous larva migrans is endemic to developing countries, and is related to poor sanitation, inadequate treatment of animals for parasites, and walking barefoot. It occurs sporadically in the United States, particularly in the warm, humid southeast region, where the most common causative organism, Ancylostoma braziliense, can thrive. The pathognomonic serpiginous, slightly raised, pruritic lesions have a predilection for the ankles, feet, legs, and buttocks. Patients typically present with a singular, unilateral lesion, though less commonly an individual can have multiple bilateral lesions as was the case in this patient.
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Atypical facial herpes simplex and leukemia cutis as the initial presentation of Chronic Lymphocytic Leukemia

Joshua D. Eikenberg MD, MPH, Douglas J. Grider, MD, Philip E. Wakefield, MD, Mariana Phillips, MD
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Category: Clinical
Abstract: Chronic Lymphocytic leukemia (CLL) is the most common leukemia in adults worldwide. Occasionally patients with CLL can present with atypical herpes simplex infections. Rarely CLL can present with leukemia cutis. We describe a case of a 79-year-old female who presented to the hospital with infiltrative, erythematous plaques and papules involving most of the right side of her face. Multiple skin biopsies were performed. Skin biopsies demonstrated multinucleated keratinocytes with peripheral margination of chromatin and immunohistochemistry consistent with herpes simplex as well as a nodular lymphoid proliferation composed mostly of small lymphocytes and a few plasma cells with markers consistent with cutaneous involvement of CLL. Flow cytometry confirmed the diagnosis of CLL. The herpes simplex resolved with treatment with intravenous acyclovir but the leukemia cutis persisted. Patient continues to receive rituximab and bendamustine for CLL. This case illustrates that patients with CLL can simultaneously have both leukemia cutis in addition to other associated cutaneous diseases at the time of initial presentation.
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Bullous Congenital Ichthyosiform Erythroderma

Cecelia Elam BS, Laurel Cummings, MD, Mark Mochel, MD, Eric Parlette, MD
Virginia Commonwealth University
Category: Clinical
Abstract: We present a case of bullous congenital ichthyosiform erythroderma (bullous CIE) in a 39-year-old African American female with a lifelong history of pruritic, dry, thickened, and scaly skin with intermittent healing blisters. Patient had a strong paternal family history of similar complaints, affecting multiple males and females in every generation, including her son, who had generalized erythroderma and blistering at birth. On physical examination she had hyperkeratotic, corrugated plaques predominately on her upper and lower extremities, back, chest, abdomen, and flanks with relative sparing of AC fossae, palms, soles and face. Histopathologic examination of a plaque biopsy revealed epidermal hyperplasia with compact hyperkeratosis, diffuse superficial epidermolysis, and vacuolar degeneration and hypergranulosis with coarse keratohyalin granules in the granular layer, consistent with the diagnosis of bullous CIE. This rare cutaneous disorder is frequently misdiagnosed, as the clinical manifestations of bullous CIE evolve with the age of the patient, making prompt recognition and diagnosis difficult. At birth, predominate clinical findings are cutaneous erythema and blistering with transition to generalized hyperkeratosis by 4 months of age. Timely diagnosis and subsequent treatment and management is important, as this condition has many dermatologic, as well as psychosocial implications, including hypohydrosis, infection, and depression.
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Atypical presentation of Granular Cell Tumor treated with Mohs Micrographic Surgery

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Eastern Virginia Medical School
Category: Clinical
Abstract: Granular cell tumors are uncommon tumors of neural crest origin. This tumor commonly presents as a solitary, well circumscribed, skin-colored to brownish-red, dermal or subcutaneous nodule which may be tender or pruritic. Most

are benign tumors; however malignant granular cell tumors have been observed and are associated with poor prognosis. Here we present a 31-year old male with multiple recurrent, tender, subcutaneous nodules of the back, abdomen, neck, lower extremities, and upper extremities initially evaluated for a suspected diagnosis of epidermal inclusion cysts versus lipomas. Elective excision of three different lesions lead to the histologic diagnosis of granular cell tumor, staining strongly for S100. The atypical clinical presentation of multifocal cutaneous granular cell tumors of varying size (tumor sizes ranged from 5mm to 15 cm in greatest dimension) prompted further treatment. Following repeat re-excisions with positive margins, Mohs micrographic surgery was ultimately consulted to re-excise the largest tumor, with plans for future excisions. The objective of this clinical case report is to present a contrasting picture of atypical clinical presentation and typical histopathology of a rare tumor.

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Clinicopathologic Correlation and Controversy in Rowell Syndrome: A Case Report and Re-view of Literature

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Wake Forest University

Category: Clinical

Abstract: Case: A 31 year old female with a history of systemic lupus erythematosus (SLE) complicated by membranous lupus glomerulonephritis presented with a 1 week history of a rash following treatment of paronychia with clindamycin. Physical examination was notable for photodistrib-uted erythematous, scaly, annular plaques with a positive Nikolsky sign. Antibodies to SS-A/Ro were obtained and positive. A skin biopsy demonstrated areas of epidermal necrosis and dysker-atotic keratinocytes with overlying parakeratosis. A diagnosis of Rowell syndrome was suspect-ed and the patient was subsequently treated with oral prednisone and intravenous immunoglobulin (IVIg). Methods: A PubMed search for "Rowell syndrome" was performed and the literature was re-viewed. Results/Discussion: Rowell syndrome is a controversial cutaneous disorder. Major criteria for the diagnosis of Rowell syndrome include both lupus erythematosus and erythema multiforme lesions with a speckled ANA pattern. Minor criteria include chilblains, anti-La and anti-Ro antibodies, and reactive rheumatoid factor. Inciting factors, including medications, have been de-scribed. However, there is controversy regarding the pathogenesis and various treatments have been described. Teatment has been achieved with single or combination therapy of corticoster-oids, methotrexate, hydroxychloroquine and other agents. In our case, resolution was obtained with combination corticosteroids and IVIg.

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Container Size Influences Topical Medication Usage

Brittany Feaster BS, MHS, David Aung-Din, MS, Edward W. Seger, MS, Emily L. Unrue, BS, Abigail Cline, MD, PhD, Steven R. Feldman, MD, PhD
Meharry Medical College

Category: Clinical Research

Abstract: Background: Topical medications are used to treat numerous medical conditions in dermatology. Datum evaluating the impact of topical medication quantity on patient usage is lacking. Objective: To evaluate whether medication container size impacts the amount of topical medication patients apply. Methods: 128 subjects were recruited at Wake Forest Baptist University Dermatology Clinic to participate in a single blind, randomized controlled trial. We determined the weights of a topical ointment that was applied to a 24cm2 area from large (453g) and small (28.35g) volume containers. Results: There were statistically significant differences in patient application amount when comparing the small and large volume containers (p=0.0001). Patients applied on average 16.0 mg/cm2 from the large volume container and 9.9 mg/cm2 from the small volume container. Conclusions: Container size plays a role in moderating patient usage of topical treatments.

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Update in Shingles Prevention and the Role of Dermatologists.

Kayla H. Felix MS, Constance E. Ediale, MS, Amy J. McMichael, MD
Wake Forest School of Medicine

Category: Clinical Research

Abstract: Herpes zoster (HZ, Shingles) is skin infection that is estimated to affect almost 50% of individuals over age 85, with many suffering from long-term sequelae. A recombinant, adjuvanted vaccine was approved in 2017 to prevent HZ infection and sequelae with greater efficacy and safety than its precursor, a live-attenuated vaccine. Though dermatologists treat HZ, they have not historically played a systematic role in prevention. Recommendation of the live vaccine was minimal by physicians, including dermatologists, contributing to low awareness and utilization by patients. A review of current literature was completed to identify the current role of dermatologists in HZ prevention, efficacy and

safety of the recombinant vaccine, barriers to recommendation by dermatologists, and the feasibility of its administration in dermatology offices. Pubmed/MEDLINE was the primary database and keywords included HZ/shingles in dermatology, HZ prevention, and vaccines in dermatology. Original investigations and review articles were considered. Despite improvements with the new vaccine, dermatologists still face barriers to recommendation and administration. Nonetheless, patients depend on dermatologists for information regarding prevention of skin disease. Widespread encouragement of dermatologists to recommend vaccination against HZ is crucial, and dermatologists are in a prime position to make the vaccine more accessible to their patient population.

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Phytophotodermatitis: A Case of Lime Disease

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Wake Forest School of Medicine

Category: Clinical

Abstract: Introduction: Furocoumarins are photosensitizing substances produced by certain plants. When deposited on skin and exposed to ultraviolet radiation, they may cause an inflammatory eruption. Limes are the most common cause of phytophotodermatitis. Case presentation: A 25-year-old man presented to the dermatology clinic with a rash on the hands, chest, abdomen, right thigh, and ankles. These findings developed 2 weeks prior to presentation, after a boat trip on which he tore limes apart with his bare hands. Physical examination revealed pink patches with hyperpigmented rim and a drip pattern. The patient's exposure to limes and the examination were consistent with a diagnosis of phytophotodermatitis. Management and Outcome: The patient was prescribed desonide 0.05% cream to apply twice daily for inflammation. Discussion: Management of phytophotodermatitis depends on severity of the rash. Mild cases do not need treatment whereas the most severe cases may require admission to a burn unit for wound care. Anti-inflammatory medications are the mainstay of treatment. Bleaching creams and laser therapy may improve hyperpigmentation.

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Erosive Pustular Dermatosis of the Scalp Following Mohs Surgery

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Wake Forest School of Medicine

Category: Clinical

Abstract: Introduction: Erosive pustular dermatosis of the scalp (EPDS) is a rare, inflammatory disease that classically presents in elderly women with erosions and pustules on atrophic skin. Predisposing factors include trauma, skin grafting, actinic damage, and autoimmunity. Case Presentation: An 84-year-old woman presented to the dermatology clinic with a lesion on the scalp. It had grown for several months with no associated pain or pruritus. Her medical history was significant for Mohs surgery to remove a squamous cell carcinoma that extended to the skull, followed by an allograft. Physical examination revealed a heme-crusted papule at the superior portion of a well-healed flap site on the vertex. Management and Outcome: Upon return to clinic 12 weeks later, the lesion had progressed to an erythematous, crusted plaque with ulceration. Treatment for EPDS with topical clobetasol was initiated. The patient experienced complete resolution of the lesion at 4 weeks of therapy. Discussion: Providers should keep EPDS on their differential if they suspect cancer recurrence on the scalp. Histopathology often reveals nonspecific atrophy and chronic inflammation. The disease has a progressive course if left untreated. High-potency topical corticosteroids and topical calcineurin inhibitors are the mainstays of therapy.

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Intralesional and Topical Cidofovir for Multi-Drug Resistant Herpetic Dermatitis in a Bone Marrow Transplant Patient

Callie Hill BS, Cody Connor MD, Elizabeth Ergen MD
UAB School of Medicine

Category: Clinical

Abstract: The occurrence of acyclovir-resistant herpes simplex virus (HSV) is not uncommon in immunocompromised patients. Following bone marrow transplant, patients require antiviral prophylaxis over a long period of time. Consequently, anti-viral resistance can develop and result in refractory infection and the need for more potent therapy. Cidofovir is a nucleoside analogue that inactivates polymerase in a broad spectrum of DNA viruses when administered intravenously, topically, and intralesional. This case report describes a 68-year-old bone marrow transplant patient that presented with painful, multi-drug resistant herpetic dermatitis that developed following allogenic bone marrow transplant while on prophylactic acyclovir. The patient's herpetic lesion worsened, with occurrence of new ulcers, despite adequate courses of multiple antiviral drugs. The patient was then administered cidofovir both intralesional and

topically, and showed marked improvement following only one treatment. Here we will discuss the successful treatment of cidofovir delivered by two different routes, as well as the indications, dosing, and monitoring for this therapy.
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Return of the Great Imitator

Rachael Hilton MD, Mavinder Guram, BS, Lara Wine Lee, MD, PhD
Medical University of South Carolina
Category: Clinical

Abstract: Syphilis is a sexually transmitted bacterial disease, caused by the spirochete Treponema pallidum, which may progress through three disease stages. Once thought to be decreasing in incidence, syphilis has been on the rise for the past decade particularly among men who have sex with men (MSM) and HIV infected patients. We present the various manifestations of syphilis, including a case of misdiagnosed congenital syphilis and two secondary syphilis cases at our institution in the last year. With decreased cellular immunity in HIV, these patients are more likely to progress to secondary or tertiary stages before diagnosis; therefore, increasing the risk of transmission to partners and children. Since syphilis was fairly uncommon until recent years, many providers are less familiar with diagnosing secondary and tertiary syphilis. As the syphilis epidemic grows, practitioners should aim for early diagnosis and treatment to prevent further progression and transmission.
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Papular Secondary Syphilis with Associated Granulomatous Inflammation: A Rare Case Report

Latrice Hogue BA, Christine Ahn, MD, Zeynep Akkurt, MD, Omar Sangueza, MD
Wake Forest School of Medicine
Category: Clinical

Abstract: A 52-year-old male with a history of HIV presented with a one week history of a non-pruritic rash on his trunk and bilateral upper extremities. Physical examination revealed a diffuse erythematous papular rash distributed on his trunk and arms. The rash spared his palm, soles and oral mucosa. The patient was otherwise well-appearing and afebrile. His non-treponemal and treponemal tests were positive. Histopathologic examination of the skin lesion revealed superficial and deep perivascular granulomatous inflammation and epithelioid granulomas mixed with lymphocytes and plasma cells. Numerous spirochetes were highlighted throughout the dermis on Treponema pallidum immunohistochemical stain consistent with secondary syphilis. Patient was successfully treated with one dose of penicillin G benzathine. This case report presents a rare histopathological presentation of secondary syphilis with granulomatous inflammation.
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A Case of a Petechial Rash in an Otherwise Healthy 29-year-old Male

Nathan M. Johnson MD, Mariana Phillips, MD, Doug Grider, MD
Virginia Tech Carilion School of Medicine / Carilion Clinic
Category: Clinical

Abstract: Introduction: Scurvy, or ascorbic acid deficiency, is considered by many to be a disease irrelevant to the developed world. However, with increased awareness for subclinical vitamin C deficiency as well as the rise of restrictive eating patterns, clinicians should be aware of the characteristic clinical and histologic findings associated with scurvy, as highlighted by the following case. Case presentation: A 29-year-old male presented to the emergency department with 7-day history of an asymptomatic petechial, follicular rash of the bilateral lower legs and a large area of ecchymosis on his left posterior thigh. On admission, patient endorsed mild headache and arthralgia of the knees; ROS was otherwise negative. He had no PMH and denied alcohol or illicit drug use. Histology: Histological examination revealed superficial perivascular and perifollicular extravasation of erythrocytes without obvious vasculitis or vasculopathy. Specimen also demonstrated follicular hyperkeratosis with a corkscrew-shaped hair shaft in a bed of follicular debris. Discussion: Symptomatic scurvy can arise with as little as 3-6 months of insufficient vitamin C intake. While more commonly seen in patients at high risk for nutritional deficiencies (alcoholics, elderly or nursing home residents), it can also be seen in low-risk patients, including children, with restrictive or inadequately diverse diets.
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Confirmed Cutaneous Mycobacterium Haemophilum Infection in a Solid Organ Transplant Recipient

Steven Kent MD, Alex Kennon, MD, David Kent, MD, Loretta Davis, MD
Medical College of Georgia at Augusta University
Category: Clinical

Abstract: Mycobacterium haemophilum (MH), a nontuberculous mycobacterium frequently found in environmental habitats, is a rare cause of skin and soft tissue infection that mainly affects immunosuppressed individuals; especially those with acquired immunodeficiency syndrome and solid organ transplant recipients (SOTR). The most common cutaneous findings secondary to MH infection include asymptomatic, violaceous papulopustules that can develop into deep-seated, painful ulcers favoring the extremities. Herein, we present a case of confirmed MH infection in an immunocompromised liver transplant recipient. The patient initially presented with woody induration circumferentially encompassing the distal two-thirds of the lower left leg with numerous yellowish papules on a violaceous and hyperpigmented background with pinpoint ulceration. Punch biopsy revealed a granulomatous process with a deep, dense mixed inflammatory cellular infiltrate. Special stains and culture for deep fungal and atypical mycobacteria were negative. Multiple topical and systemic therapies were employed with no benefit. Due to lack of clinical improvement, a repeat excisional biopsy was performed and sent to the Center for Disease Control for further analysis revealing presence of MH 16s rRNA via polymerase chain reaction. The patient experienced drastic improvement with appropriate anti-tuberculous therapy. MH represents an exceedingly rare cause of cutaneous infection and should be considered in SOTR.

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Ramsay Hunt Syndrome

Chelsea Kesty BS, Zeynep Akkurt, MD
Wake Forest University with University of South Florida

Category: Clinical

Abstract: Ramsay Hunt syndrome, otherwise known as herpes zoster oticus, is the reactivation of herpes zoster in the geniculate ganglion. The occurrence of this syndrome presenting after herpes zoster rash has been well reported as well as debated in the literature. The clinical presentations vary and early diagnosis requires a high index of suspicion. We present a case of an 85-year-old man with a 9-day history of pain in the left shoulder, scalp and left neck. Two days ago, he noticed red bumps along the same distribution of the pain. He also noted decreased hearing in the left ear, that coincided with the onset of the rash. Clinically the lesions resembled herpes zoster in distribution and grouping. Upon follow up visit, the skin lesions had greatly improved, however along with decreased hearing he also noted drooling from the left corner of the mouth, and inability to close the left eyelid. He had mild dysarthria and left hemifacial weakness. The diagnosis of Ramsay Hunt was made clinically based on presentation and history of herpes zoster rash. Patients who have herpes zoster lesions affecting the head and neck should be checked for external ear involvement and screening for symptoms of Ramsay Hunt syndrome should be done.

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Emotional Well-Being is Poor in Hidradenitis Suppurativa Patients

Sree S. Kolli BA, Aditi Senthilnathan, BS, Leah A. Cardwell, MD, Irma Richardson, Steven R. Feldman, MD, PhD, Rita O. Pichardo, MD
Wake Forest School of Medicine

Category: Clinical Research

Abstract: Background: Hidradenitis suppurativa (HS) can impair the emotional well-being. The purpose is to assess the mental wellbeing of HS patients. Methods: 150 HS patients were recruited. Patients completed a questionnaire adapted from Watson and Clark's "Development and Validation of Brief Measures of Positive and Negative Affect: the PANAS scales." Patients self-reported disease severity with a HS Self-Assessment tool. Patients completed the Dermatology Life Quality Index and Patient Health Questionnaire-9. Positive and Negative affect population norms of Southern Methodist University (SMU) undergraduates and employees and psychiatric inpatients were used to compare to HS population. Results: 61 patients completed the questionnaires. The mean positive affect for HS patients(29.4[9.8]) was 17.6%, 16.2% and 9.3% lower than SMU undergraduates, employees and psychiatric inpatients, respectively. The mean negative affect for HS patients(22.4[10.2]) was 14.9% and 18.5% higher than SMU undergraduates and employees, respectively and 12.2% lower than psychiatric inpatients. Negative affect was not correlated with disease severity but was correlated with worse quality of life($r=0.67$, $P<0.00001$) and depression ($r=0.72$, $P<0.00001$). Conclusions: Negative affect is higher and positive affect is lower in HS patients than SMU populations. Positive affect is lower in HS patients than psychiatric inpatients. Regardless of disease severity, HS contributes to negative affect.

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Fear of Negative Evaluation Correlates with Worse Quality of Life in Hidradenitis Suppurativa Patients

Sree S. Kolli BA, Aditi Senthilnathan, BS, Leah A. Cardwell, MD, Irma Richardson, Steven R. Feldman, MD, PhD, Rita O. Pichardo, MD
Wake Forest School of Medicine
Category: Clinical Research
Abstract: Background: Hidradenitis suppurativa (HS) can create anxiety from fear of negative evaluation by others. The purpose is to determine the impact of fear of negative evaluation on the quality of life and mental well-being of patients with HS. Methods: 150 HS patients were recruited. Fear of negative evaluation was assessed using a 12-item questionnaire and 5-item scale adapted from Leary's "A Brief Version of Fear of Negative Evaluation (BFNE) Scale." Patients completed the Dermatology Life Quality Index (DLQI) to assess quality of life and Patient Health Questionaire-9 (PHQ-9) to assess depressive symptoms. Results: 61 patients completed the questionnaire. The average age of participants was 40, 92% were female, and 56% identified as African-American. The mean score was 31.2 (9.6). Scores ranged from 11-56. The BFNE was moderately correlated with worse quality of life ($r=0.46$, $P<0.003$) and with depression ($r=0.42$, $P< 0.001$). Conclusions: Most HS patients had some level of fear of negative evaluation. Higher level of fear of negative evaluation is associated with greater impairment of quality of life and symptoms of depression. Research to assess whether offering psychosocial support through support groups, counseling and screening for depression and anxiety can help decrease incidence of psychiatric comorbidities of HS.
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Increased Stigmatization in Hidradenitis Suppurativa Patients

Sree S. Kolli BA, Aditi Senthilnathan, BS, Leah A. Cardwell, MD, Irma Richardson, Steven R. Feldman, MD, PhD, Rita O. Pichardo, MD
Wake Forest School of Medicine
Category: Clinical Research
Abstract: Background: Hidradenitis suppurativa (HS) may have immense stigma associated with it. The primary purpose of the study is to assess the level of stigma in a population of patients with HS. Methods: 150 HS patients were recruited. Feelings of stigmatization was assessed using a 31-item questionnaire adapted from Ginsburg and Link's "Feelings of Stigmatization Questionnaire." Patients self-reported disease severity with the HS Self-Assessment tool (0 corresponding to no disease, 1-3 corresponding to Hurley stages 1-3). Patients completed the Dermatology Life Quality Index (DLQI) to assess for quality of life and Patient Health Questionnaire-9(PHQ-9) to assess for depression. Level of stigma of psoriasis patients was obtained from a previous study to compare to the level in HS population. Results: 61 patients completed the questionnaires. Overall, the mean stigma score was 74.5 (23.6). Stigma was correlated with worse quality of life ($r=0.68$, $P<0.00001$) and with depression ($r=0.45$, $P<0.001$). There was no significant relationship between disease severity and stigma. The level of stigma was similar to that seen in psoriasis patients (76.3[19.2]). Conclusions: Higher stigma in HS patients correlated with worse quality of life and symptoms of depression. The level of stigmatization is comparable to psoriasis. HS causes stigmatization regardless of disease severity.
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A Unique Case of Concomitant Lupus Erythematosus Tumidus and Varicella Zoster Infection

Merrick Kozak MD, Richard H. Flowers, MD
University of Virginia
Category: Clinical
Abstract: We present a case of concomitant varicella zoster virus (VZV) infection and lupus erythematous tumidus (tumid lupus) in a 44 year-old female. The patient presented with 10 days of a burning erythematous rash on the temple. Exam revealed several grouped, erythematous, smooth, edematous papules coalescing into a tender plaque. No vesicles or erosions were seen. Histology showed findings consistent with VZV infection and concomitant tumid lupus. Systemic lupus erythematosus (SLE) notably increases risk for varicella infection, but this patient did not meet SLE criteria and ANA was negative. Wolf's isotopic response is a phenomenon in which an unrelated dermatosis occurs at the site of a previously healed dermatosis; most frequently this is described with HSV or VZV infections. To date, there are no reported cases of co-occurring VZV infection and tumid lupus. Although this patient does not meet the requirement for an isotopic response due to the presence of active, co-occurring pathology, it seems unlikely that she developed both tumid lupus and VZV infection in the same location by completely unrelated processes. It is suspected that similar to Wolf's isotopic response, the localized damage caused by either the VZV infection or tumid lupus led to the development of the other.
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ERYTHEMA MULTIFORME LIKE COCCIDIOIDOMYCOSIS EXANTHEM: EARLY DIAGNOSTIC PITFALLS

Michael Lehrer MD, Yul Yang, MD, Carlos Hartman, MD, Steven Nelson, MD, David J DiCaudo, MD,
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Category: Clinical
Abstract: Introduction: Coccidioidomycosis is a fungal infection caused by the Coccidioides genus of dimorphic fungi endemic to the Southwestern United States, Central America, and South America. Cutaneous manifestations of coccidioidomycosis are variable and include a generalized exanthem, erythema nodosum, interstitial granulomatous dermatitis, Sweet syndrome, and disseminated infection. Although the exanthem of coccidioidomycosis can clinically resembles erythema multiforme (EM), it differs histopathologically. Case Description: A 16-year old boy presented with generalized malaise, cough, and fever with rapidly expanding asymptomatic 2-5mm erythematous papules with a targetoid appearance and dusky center. There was involvement of the palms and soles as well as the vermillion of the lips but no significant mucosal involvement. A chest radiograph demonstrated left upper lobe consolidation. Initial serologies were negative for coccidioidomycosis. A punch biopsy demonstrated marked spongiosis with neutrophils and occasional eosinophils, but only rare apoptotic keratinocytes. Two weeks later, the patient's lesions had resolved. Repeat serologies were positive for coccidioidomycosis. Discussion: Coccidioidomycosis may be difficult to diagnose due to initially negative serologies and highly variable cutaneous manifestations. In patients from endemic areas, an eruption that clinically resembles erythema multiforme, but has nonspecific histopathology should raise suspicion for the exanthem of coccidioidomycosis.
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Access to Dermatology Services at Free Medical Clinics, A National Survey

Victoria Madray BS, Sarvani Ginjupalli*, Osama Hashmi MPH, Benjamin Stoff MD MA, Richard Sams MD MA, Aaron Johnson PhD
Medical College of Georgia
Category: Clinical Research
Abstract: Introduction: Underprivileged patients face great barriers when seeking care for skin cancers. This study aims to assess availability of board-certified dermatologists and dermatology services required to diagnose and treat skin cancers at free clinics for underserved populations. Methods: A random sample (n=357) of clinics listed by the National Association of Free and Charitable Clinics homepage were called and asked for survey participation. The information was recorded, and sums were calculated for responses to survey questions. Results: 104 (29%) clinics participated in the survey, 137 (38%) clinics did not answer the phone after three attempts, 62 (17%) clinics were closed or were not medical, and 54 (15%) declined to participate. Of the participating clinics (n=104), 29 (28%) clinics did not offer dermatology services or referrals, 58 (56%) clinics did not offer dermatology services but referred, and 17 (16%) clinics staffed board-certified dermatologist. Discussion: The results suggest free clinics are an inadequate source for dermatological care due to difficulty of access and their significant reliance on outside referrals. Hence, there is a crucial need to identify a more appropriate path for low-income, underserved populations to receive follow-up dermatological care. * These authors contributed equally to this work.
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Life's a Beach

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Category: Clinical
Abstract: Aquarium granuloma is a cutaneous infection caused by the non-tuberculous mycobacterium, Mycobacterium Marinum. This opportunistic infection is characterized by a solitary, red-to-violaceous plaque or nodule with an overlying crust. Diagnosis of this unusual infection is often delayed due to a lack of suspicion. A previously healthy 7 y/o female presented to clinic for evaluation of a skin lesion that began three years ago shortly after she sustained a scrape to her leg while at the beach. The lesion did not change in size or appearance since onset. During that interval biopsies and cultures were obtained with no significant findings. On physical exam, a 2 cm x 1.5cm well circumscribed, erythematous plaque with surrounding hyperpigmentation and excoriations was noted. Repeat biopsy with cultures obtained showed suppurative granulomatous dermatitis. GMS/AFB stains were negative for microorganisms, but culture was positive for Mycobacterium Marinum. Treatment was initiated with rifampin and ethambutol. This case illustrates the value of a complete history and that biopsy results can often have false-negatives. Mycobacterium Marinum is rarely visualized on routine tissue staining and suspicion for this infection should be increased when aquatics are involved.
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A Middle-aged Female with Generalized Erythematous Papules and Vesicles

Nwanneka Okwundu DO, Jessica Mercer, MD
Hackensack Meridian Health-Pallisades Medical Center
Category: Clinical
Abstract: Pantoea agglomerans is an interesting ubiquitous gram-negative aerobic bacilli. It is not an obligate infectious agent of human diseases, but rather it causes opportunistic infections. It can infect any organ system in the body, and the severity of infection ranges from non-life threatening skin infection to fatal multi-organ system disorders. Cutaneous infection by this organism can occur as a wound superinfection, or the organism may enter the skin with other organic materials when penetrating trauma occurs to the skin. Risk factors that may be clues to this infection include the occupation of farming, recent hospitalization, immunosuppression, and skin compromise in the form of open wounds. Treatment is with antibiotics. Bacterial culture and sensitivity determines the choice of antibiotics for treatment. This case report is of a 62-year-old Caucasian woman with a recent history of herpes simplex virus who presented with a 3-week history of erythematous papules and vesicles distributed across her face, arms, legs, and hands associated with joint pain, and fever. This case illustrates a rare cutaneous eruption diagnosed via blood cultures as histopathology is non-specific. Recognizing the classic skin findings allows the clinician to choose the right test which will subsequently lead to a quicker diagnosis.
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A young woman with Transluscent White Papules and Plaques on her palms

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Hackensack Meridian Health-Pallisades Medical Center
Category: Clinical
Abstract: Aquagenic syringeal acrokeratoderma (ASA) is a rare acquired condition. Although the exact etiology is unknown, ASA has many proposed causes. It has been reported to be induced by cyclooxygenase-2 inhibitors (COX-2), such as rofecoxib and celecoxib and other drugs including aspirin, acetominophen, ascorbic acid, and clarithromycin ASA usually presents clinically as translucent white papules and plaques appear 2 to10 minutes on the palms or, less often, the soles, after exposure to water. It causes a burning, painful, and tightening sensation that may lead to a considerably impaired quality of life. Treatment modalities include aluminum chloride hexahydrate, urea with salicylic acid, formalin in alcohol, or botulinum toxin when accompanied by hyperhydrosis. Endoscopic thoracic sympathectomy has been effectively used for ASA associated with severe palmar hyperhidrosis. This case report is of a 22 year old Caucasian female with no known inherited disorders or medication who presented with ASA in form of white rugated plaques of the bilateral palms exarcebated by hand washing or wetness. This case illustrates an idiopathic cutaneous manifestation of a rare disorder of the acral skin. Recognizing these classic findings will allow clinicians to diagnose and treat the condition. There is also need for further research about its etiology.
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Breakthrough Urticarial Vasculitis despite multiple maintenance therapies

James Petit MD, Christine Gross, Loretta Davis
Medical College of Georgia at Augusta University
Category: Clinical
Abstract: Urticarial vasculitis is a variant of cutaneous small vessel vasculitis which peaks in the fourth decade of life. Treatment can vary from supportive therapy to systemic corticosteroids and immunosuppressive agents. We report a case of normocomplementemic urticarial vasculitis in a 19-year-old African-American female with a 2-year history of systemic lupus erythematosus and Class III focal sclerosing lupus nephritis despite being maintained on chronic prednisone, Cellcept, and plaquenil as well as recent rituximab infusions. She was referred to dermatology following admission for multiple, painful wheals on her arms, thighs, and knees initially thought to represent erythema multiforme. The wheals had been present for 18 days and first appeared two weeks after the onset of an upper respiratory infection with Enterovirus. Individual lesions would persist for more than 24 hours and resolve with hyperpigmentation concentrated on bilateral thighs, hips, and elbows. Skin biopsy of active lesions on the thigh revealed the presence of leukocytoclastic vasculitis. Concurrent laboratory studies showed elevated ESR and CRP but normal C3 and C4 levels. She was continued on her oral regimen and topical Clobetasol ointment was added. Two weeks later hyperpigmentation remained but overall pain and discomfort had significantly improved with no new lesions present.
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Madelung's Disease and the Role of Deoxycholic Acid

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Sampson Regional Medical Center

Category: Clinical

Abstract: Madelung's Disease, also known as Benign symmetric Lipomatosis, is a rare disorder that presents with subcutaneous fatty overgrowths of the head and neck. Madelung's disease is strongly associated with alcoholism and is most commonly seen in male alcoholics of Mediterranean descent. Other associations include metabolic disturbances such as diabetes mellitus type II, hypertriglyceridemia and obesity. Although Madelung's disease represents a benign overgrowth of unencapsulated fat cells there can be significant morbidity associated with a mass effect of the fatty tumors. These space occupying tumors can compromise vital structures in the neck and mediastinum leading to an impaired airway and decreased neck mobility. We present a patient with a history of Madelung's disease treated with both Liposuction and dermolipectomy of the neck with subsequent recurrence of his fatty tumors. Surgical treatment, either liposuction or dermolipectomy is the mainstay of therapy for Madelung's disease, but recurrence of the fatty tumors is possible because it is difficult to completely remove all the fat cells related to the disease. Deoxycholic acid is a type of Mesotherapy that has been approved for submental fat deposits and the use of Deoxycholic acid in Madelung's disease may represent an additional therapeutic tool.

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Trigeminal trophic syndrome: an uncommon dysesthesia and the behavior it fuels

Tova Rogers MD, Emily Fahrig Cole, Brian Pollack
Emory University

Category: Clinical

Abstract: Trigeminal trophic syndrome (TTS) is an uncommon disease process that results from trigeminal nerve injury, most commonly after cerebrovascular accident or herpes zoster infection. It is characterized by cutaneous paresthesia or dysesthesia and a non-healing ulcer confined to the trigeminal dermatome. The ulcer, which usually involves the alar rim and cheek, primarily occurs due to auto-manipulation. TTS is a neuropathic disorder with behavioral manifestations. Its pathophysiology differs from excoriation disorders such as dermatillomania, in which skin manipulation occurs in the absence of an underlying cutaneous pathology. This distinction can impact treatment success—TTS patients appear to benefit most from behavioral interventions and pharmacologic agents used to treat neuropathic pain. Nonetheless, TTS remains difficult to treat like other dysesthesias. Here we report a case of TTS after thalamic stroke resulting in severe facial ulceration. The patient, whose diagnosis was initially confounded by a history of depression with anxiety, marginally improved on gabapentin with recommendation for behavioral modifications. The persistence of her facial ulcer despite good disease insight reflects the difficulty in preventing behaviors in the absence of symptom control. Better understanding of the biology of dysesthesia is imperative for improving the quality of life of these patients.

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A case of herpetic sycosis: a rare manifestation of a common pathogen

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Campbell University School of Osteopathic Medicine/Sampson Regional Medical Center

Category: Clinical

Abstract: There are few reported cases of herpetic folliculitis in the literature. Herpetic folliculitis represents a rare manifestation of a common pathogen; either varicella zoster virus (VZV) or herpes simplex virus (HSV). When affecting the beard area specifically, it is termed herpetic sycosis. Herein, we present a case of a 3 week long, pruritic and burning pink to red papulovesicular eruption with secondary erosions on the face, neck, and trunk of an elderly male with a history of cold sores. The rash was initially mistaken for an allergic or irritant contact dermatitis and was treated with low and medium potency topical corticosteroids with no improvement. Eventually, a punch biopsy was performed and upon visualizing classic histopathologic findings of a herpes virus infection the patient was diagnosed with herpetic sycosis. While this eruption commonly self-resolves, this patient experienced full recovery following treatment with oral antiviral therapy.

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Erythema Ab Igne in patients with Sickle Cell Disease

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Geisinger Commonwealth School of Medicine

Category: Clinical

Abstract: Erythema ab igne (EAI) is an asymptomatic dermatosis caused by prolonged exposure to localized heat that is rarely reported in literature. The net-like hyperpigmentation or bullae of EAI may resemble more serious conditions such as livedo racemosa or vasculitis. We report 3 cases of EAI in pediatric sickle cell disease (SCD) patients who were initially

suspected of having a more severe, life-threatening disorder before Dermatology was consulted. All three patients were found to have a recent history of using heating pads daily for pain relief due to vaso-occlusive crisis (VOC). The patients' examination and history of prolonged exposure to localized heat pointed to the diagnosis of EAI. Diagnosis of EAI can be made based on the physical examination finding of well-demarcated, net-like patches (with or without superimposed bullae) and a history of chronic heat exposure at the same location. Eliminating the cause should be the first step in treatment. The dyspigmentation can become permanent and there is an increased risk of malignant transformation into SCC. The pediatric SCD population is often exposed to prolonged heat through the use of heating pads to treat chronic pain. Therefore, clinicians should consider EAI in the differential diagnosis of large areas of net-like hyperpigmentation.

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Squamous Cell Carcinoma in Long-Standing Hidradenitis Suppurativa

Aditi Senthilnathan BS, Erin L. Hodges, MD, Rita O. Pichardo, MD
Wake Forest School of Medicine

Category: Clinical

Abstract: Introduction: Hidradenitis suppurativa (HS) is a debilitating dermatologic condition presenting with recurrent abscesses and interconnected sinus tracts. Squamous cell carcinoma (SCC) is a rare complication of HS. Case Description: We present a 53-year old male with a 30-year history of HS who initially presented to the ED at the age of 50 with perianal pain and draining boils. After being lost to follow-up for three years, he presented with a painful non-healing sacral ulcer, and was treated for a stage 4 decubitus ulcer. Two months later, he presented to the ED with a rapidly growing abscess. The dermatology team performed a punch biopsy due to concern for SCC; the biopsy was not conclusive. A subsequent incisional biopsy performed by plastic surgery was consistent with invasive SCC. The patient underwent surgery and initially recovered well, but presented 6 months later with worsening pain, and was found to have SCC recurrence. Discussion: This case illustrates a classic presentation of a rare, severe complication of HS. In patients with long-standing HS and these risk factors who present with non-healing wounds, high clinical suspicion for SCC should be maintained, and multiple or deeper biopsies may be considered if a superficial biopsy is inconclusive.

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Terbinafine-induced Relapse of Bullous Lupus Erythematosus

Mariah Shaw BA, Anna C. Tappel, BS, Nitin Tiwari, MD, Arturo Saavedra, MD PhD MBA
University of Virginia

Category: Clinical

Abstract: Bullous lupus erythematosus (BLE) is a rare, autoimmune, subepidermal blistering disease that occurs in 1- 5% of patients with systemic lupus erythematosus (SLE). Rarely, medications have been implicated in the relapse of BLE. Herein, we present, to our knowledge, the first reported case of a terbinafine-induced relapse of BLE. A 32-year-old female with a history of BLE presented with diffuse, vesicobullous eruptions after taking oral terbinafine for suspected onychomycosis. Despite treatment with prednisone and discontinuation of terbinafine, the patient's course was complicated by multiple admissions for reoccurring bullous eruptions and steroid-induced psychosis. Complete remission was achieved 3 months after her initial presentation. Our findings suggest that a diagnosis of BLE should be considered when bullous eruptions develop in a patient taking oral terbinafine.

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Topiramate-Induced Granuloma Annulare- A Rare Adverse Effect

Alan Snyder BS, Blake Helget M.D. PGY4, Laura Winterfield M.D
Medical University of South Carolina

Category: Clinical

Abstract: A 32-year-old female with past medical history of hypothyroidism presented to our clinic with multiple erythematous papules in annular configurations on the bilateral lower extremities and dorsal feet. The patient reported she had started topiramate for headaches one month prior to onset of eruption. She denied any other new exposures or systemic symptoms. A clinical diagnosis of granuloma annulare (GA) was made with no biopsy required. She was given clobetasol-0.05% ointment to apply twice daily and discontinued topiramate. The patient reported no new lesions and improvement of existing lesions after discontinuation of the drug. GA is a benign, noninfectious cutaneous disease characterized by erythematous nonscaly papules in annular configuration, thought to be a manifestation of cell-mediated responses to drugs or other unknown antigens. There have been 4 other reported cases of GA believed to be caused by topiramate given the temporal relationship of the eruption appearing after starting the drug and resolving after the drug was discontinued, as in our case. Similarly, three out of four cases involved the lower extremity (2). This case highlights that GA can have a drug trigger, including topiramate, and it is important to obtain a medication history

to help aid in diagnosis and management. 1. English III, Joseph; Thiers, Bruce et al. “Granuloma Annulare.” Granulomatous Disorders of Adult Skin, an Issue of Dermatologic Clinics 33-3, 3rd ed., vol. 33, Mosby, 2015, pp. 315–329. 2. Heras-González S, Piqueres-Zubiaurre T, Salinas-Quintana AMd, González-Pérez R. Granuloma anular posiblemente secundario a la ingesta de topiramato. Actas Dermosifiliogr. 2017;108:952–954.

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Consumer Teledermatology Venture Capital Funding: A Descriptive Analysis

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Grand Strand Medical Center

Category: Clinical

Abstract: BACKGROUND Consumer-facing apps for dermatology services have become increasingly common. Understanding the economic aspects is paramount for organizations utilizing teledermatology. We sought to characterize the venture capital landscape shaping consumer-facing teledermatology apps. METHODS We used the Apple-App-store and Google to search “dermatologist,” and “online dermatologist” respectively. The relevant results were entered into CrunchBase, a database about organizations. We ascertained “funds raised” by companies and/or consultation cost. Recent teledermatology venture funding news articles were also reviewed. RESULTS Over 20 apps/companies offered teledermatology services. The largest funding was raised by companies offering broad medical services (HealthTap and MDLIVE) with >$70 million raised. Dermatology-specific apps (e.g. YoDerm and MDacne) had lower funding [mean=$1.94 million (n=6)]; 15 companies did not publish funding details. Both global and local venture capital investment firms were primary funders in various stages (seed, early, late, and/or agnostic). Initial consultations had an average consumer cost of $52.08 (n=17). CONCLUSIONS The market to enter consumer-facing apps and online dermatology is feasible. Only selected apps mentioned adherence to Health Insurance Portability and Accountability Act (HIPAA). Creating a user-friendly app, obeying regional laws, compliance with HIPAA, and engaging dermatologists are critical steps to cultivating a sustainable model for an online teledermatology presence.

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A Clinical Case of Reed's Syndrome

Frances Walocko MD, Carl Washington, MD, Jamie MacKelfresh, MD
Emory University

Category: Clinical

Abstract: Reed’s syndrome is a rare genodermatosis defined by benign, cutaneous, smooth muscle tumors (leiomyomas). The cutaneous tumors typically range in size from 0.2 – 2cm in diameter and average 26 in number. A subset of patients with hereditary leiomyomas and a germline heterozygous mutation in the fumarate hydratase gene are also at risk for developing renal cell carcinoma. This association has led Reed’s syndrome to also be called hereditary leiomyomas and renal cell carcinoma (HLRCC). We present a case of a 42-year-old man who presented to an outside dermatology clinic for evaluation of large skin tumors that had been growing for 20 years. The lesions were concentrated on his right chest/back and were very painful. Family history was notable for a brother with similar, smaller lesions on his chest. Physical exam was significant for numerous, firm, pink-colored nodules and papules, some coalescing in a dermatomal distribution on the right chest/flank/back and scattered pink papules/plaques present on the extremities. Three biopsies were performed and were significant for leiomyoma with occasional atypia. Genetic workup and imaging studies are pending. Recognizing this disease is important because of the association with renal cell carcinoma. Management requires a multidisciplinary approach.

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Newly Diagnosed Malignant Melanoma While on Ipilimumab/Nivolumab for the Treatment of Renal Cell Carcinoma

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Category: Clinical

Abstract: A 71-year-old male with a history of basal cell carcinoma and renal cell carcinoma, currently undergoing treatment with Ipilimumab and Nivolumab for renal cell carcinoma, presented with lesions of concern on his scalp and for a skin examination. The lesions of concern were identified as seborrheic keratoses on the scalp; however, the patient also had an asymptomatic, irregularly pigmented, thin and waxy plaque measuring 1.3 x 1.0 cm on the right temporal scalp. A biopsy of this lesion was performed, which showed melanoma in situ with a seborrheic keratosis. This case is particularly interesting as Ipilimumab and Nivolumab are indicated in the treatment of unresectable or metastatic melanoma; however, this patient either already had this melanoma prior to starting cancer treatment or developed a melanoma while on therapy for his renal cell carcinoma. For dermatologists, it is important to remember that not all

melanomas will respond to chemotherapeutics, and that these therapies are meant for the treatment of melanoma, rather than chemoprevention. Continuing to perform full body skin examinations is imperative for patients with melanoma, whether or not they are on systemic treatment for melanoma.
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