#### 2011 SEC DERMATOLOGY POSTER ABSTRACTS

### **Abstract 1:**

# MYCOBACTERIUM ABSCESSUS INFECTION WITHIN A RECENTLY ACQUIRED TATTOO

Vivianne Beyer, MD (a), Marie Ventre, MD (b), and Rocky Bacelieri, MD (b) Medical University of South Carolina, Department of Dermatology, Charleston, SC (a) and WNC Dermatological Associates, Asheville, NC (b).

The rapidly growing mycobacteria (RGM) species, which include *M. abscessus*, *M. chelonae*, and *M. fortuitum*, can cause skin and soft tissue infections following trauma or procedures. We report a case of a 34-year-old previously healthy man who presented with a four week history of pruritic erythematous papules which developed within two weeks of acquiring a new tattoo on his left upper arm. Physical examination revealed multiple erythematous papules limited to the gray shaded areas of the tattoo on his left arm. A skin biopsy specimen was obtained, which revealed a granulomatous, nodular dermal infiltrate with numerous foreign body giant cells. A Fite-Faraco stain revealed an aggregate of bacilli consistent with mycobacteria, and an AFB culture grew *Mycobacterium abscessus* within three weeks. Testing revealed susceptibility to amikacin and clarithromycin, and treatment with 500 mg BID of clarithromycin was initiated. Confirmed infection with *M. abscessus* after tattooing has only been reported twice in the literature; both describe lesions arising in the gray portions of the tattoos and thus implicate the tap water used to dilute the black ink as the source of infection.

#### **Abstract 2:**

# SIROLIMUS-INDUCED UNILATERAL LYMPHEDEMA IN A LIVER TRANSPLANT PATIENT

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A 32 year-old woman with a history of liver transplantation presented with a one-year history of unilateral right leg edema. She underwent liver transplant five years previously secondary to cryptogenic liver cirrhosis, and has been on chronic immunosuppression since with sirolimus. Previous work-up with numerous imaging modalities did not reveal the etiology of her unilateral edema.

Physical exam demonstrated asymmetric edema with trace pitting of the right leg from the right inguinal fold to foot. There was a woody appearance to the edema, and hyperpigmented macules were present on the shin below the knee. The right leg is approximately 2-3x the size of the left leg. Her exam was clinically consistent with unilateral lymphedema.

Rare case reports have been published in oncology and transplant literature suggesting that sirolimus use is associated with unilateral and bilateral limb lymphedema. Data of all reported cases will be presented in a table outlining the relationship with development of lymphedema in relation to duration of sirolimus use, the unilateral or bilateral nature of the disease, and the result of cessation of sirolimus.

At 2-year follow-up after cessation of sirolimus the patient had stabilization of disease, with no resolution of the lymphedema.

#### **Abstract 3:**

# THE EFFECT OF OMEGA-3 FATTY ACIDS ON TRIGLYCERIDE LEVELS IN PATIENTS ON ISOTRETINOIN

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#### **BACKGROUND/HYPOTHESIS**

Omega-3 fatty acid (O3FA) is an essential fatty acid that decreases triglyceride levels. Elevated triglyceride levels are a common side effect of isotretinoin use. We hypothesize that O3FA could decrease triglyceride elevations developed during treatment with isotretinoin.

# **DESIGN**

Patients treated with isotretinoin completed surveys on O3FA intake. Serial isotretinoin doses and lipid levels were recorded for each visit.

# **RESULTS**

Longitudinal data were obtained for 39 patients with acne treated with isotretinoin. 19 patients reported consistent O3FA intake and 20 patients reported no use of O3FA. The average triglyceride level for patients taking O3FA was 150.84 mg/dL and 111.24 mg/dL in patients not taking O3FA. The average increase in triglyceride levels was 14.91% in patients taking O3FA and 20.74% in patients not taking O3FA (p=0.26). In patients with abnormal baseline triglyceride levels who developed further elevations during treatment, the average increase in triglyceride level was 13.91% in patients taking O3FA and 48.96% in patients not taking O3FA (p=0.045).

# **CONCLUSION**

O3FA supplementation during isotretinoin therapy may be a useful adjunct to the management of triglyceride levels during isotretinoin therapy, particularly in patients with elevated baseline triglyceride levels.

### **Abstract 4:**

### FRONTAL FIBROSING ALOPECIA—THE DUKE EXPERIENCE

Barry Ladizinski MD, Andrea Bazakas BS, and Elise A. Olsen MD Dermatopharmacology Study Center, Duke University Medical Center

Frontal fibrosing alopecia (FFA) is a form of cicatricial alopecia most commonly detected in postmenopausal women. FFA is characterized by frontotemporal hairline recession, perifollicular erythema, and loss of eyebrow hair. The etiology and prevalence of FFA remains unknown, although the number of women presenting with this condition has markedly increased in recent years. Furthermore, no effective treatment regimens for FFA have been established, although various reports have noted some improvement or stabilization with corticosteroids, antibiotics, 5-alpha reductase inhibitors, hydroxychloroquine andimmunomodulators.

From 1998–2011, 22 female patients (18 Caucasian, 1 African American, 1 Hispanic, 1 Asian) with FFA were seen at the Duke Hair Disorders Research and Treatment Center. The average age of onset was 53.3 years (86% were postmenopausal) and the average age of presentation was 63.3 years. No significant laboratory abnormalities were noted. Scalp biopsies were performed on 86% of patients. Overall, 14 patients were treated with dutasteride (50% stabilization), 4 with finasteride (25% stabilization), 8 withhydroxychloroquine (25% stabilization), 4 with methotrexate (25% stabilization), and 1 with pioglitazone (100% stabilization). No significant regrowth was noted, although 59% of patients experienced disease stabilization. Further studies are necessary to assess etiologic factors and optimal treatment modalities for FFA.

#### **Abstract 5:**

# METASTATIC SEROUS PERITONEAL CARCINOMA: A MIMIC OF INFLAMMATORY BREAST CANCER

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A seventy-eight year old Caucasian female with a history of metastatic primary peritoneal serous carcinoma was referred to our Dermatology clinic for evaluation of pruritic, erythematous, indurated plaques involving a large portion of her left breast and flank, originally treated as mastitis. Clinically this resembled a primary inflammatory breast cancer. The biopsy showed cutaneous lymphovascular metastases of the patient's peritoneal serous carcinoma. Subsequently three months later, the patient was also diagnosed with biopsy proven left breast glandular and axillary lymph node metastases.

It is rare for any malignancy to metastasize to the breast mimicking an inflammatory breast cancer, but has been reported with several cancers such as ovarian carcinoma, gastric carcinoma, and one other reported case of peritoneal carcinoma. Our case demonstrates that extra-ovarian tumors, including, as highlighted by this case, peritoneal carcinoma, may metastasize to both the glandular breast tissue and the overlying skin.

The differential diagnosis of breast erythema and edema is broad and includes non-neoplastic versus neoplastic causes, the most common of the latter being a primary inflammatory breast neoplasm. However, metastatic carcinoma must also be considered in this differential because if missed can lead to inaccurate prognosis and erroneous therapeutic approach.

#### Abstract 6:

#### MEDICATION DYES AS A SOURCE OF DRUG ALLERGY

Caren Campbell (a) and Robert A, Swerlick, MD (b) Jefferson University School of Medicine, Philadelphia, PA (a) and Department of Dermatology, Emory University, Atlanta, GA (b).

Excipients are defined as inert substances added to a drug or food to confer a suitable consistency, appearance, or form. They may be added for bulk, to change dissolution or the kinetics of absorption, to improve stability, to influence palatability, or to create a distinctive appearance. The last function may depend heavily on the use of coloring agents, especially when there are multiple dosages (such as with warfarin) and dose confusion may result in profound complications. While described as inert, excipients have been associated with triggering immunological reactions. Although, this is almost never considered in common practice when patients have reactions to medications, even when they appear to react to many different and distinct drugs. We have found a cohort of thirteen patients over the past 18 months with chronic, unexplained pruritic skin disorders that have responded to medication changes centered around avoidance of coloring agents, particularly FD&C Blue 1 (bright blue) and 2 (dark blue shade or indigo carmine). We believe that reactions to agents which color medications and foods may be more common than previously appreciated and recognition of this phenomenon may provide therapeutic alternatives to patients with intractable pruritic disorders.

#### **Abstract 7:**

# SKIN CANCER PROFILE IN A COHORT OF KIDNEY TRANSPLANT RECIPIENTS ON BELATACEPT IMMUNOSUPPRESSION: PILOT STUDY

Sarah Skillman, BS (a), Rachel Patzer, PhD, MPH (b), Suephy C. Chen, MD, MS (a), Thomas C. Pearson, MD, DPhil (b), Fiona Zwald, MD (a)

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#### Introduction

Several factors contribute to the increased risk of aggressive skin malignancy in solid organ transplant recipients including duration of calcineurin-based immunosuppression, time post-transplant, and history of skin cancer pre-transplant. Belatacept is a non-calcineurin inhibitor immunosuppressive agent for renal transplantation. The objective of this study was to assess the incidence of skin cancer in patients receiving belatacept.

#### Methods

Survey and chart reviews were performed for all patients currently on belatacept (5mg/kg) at Emory University. **Results** 

Twenty-nine of 35 patients are included. Six patients were unable to be reached or declined to participate. Two of the 29 patients died while on belatacept, of which one died of metastatic squamous cell carcinoma, and questionnaires were not completed. The mean age at transplant was 46 (SD 12.5) years old. The mean duration of belatacept immunosuppression was 4 (SD 3.7) years. Fourteen patients (52%) had Fitzpatrick skin type I-IIII. Seven patients (26%) admit to 3 or more hours of daily sun exposure. Fourteen patients (52%) recall greater than 5 sunburns before the age of 20. Six patients (22%) used tanning beds frequently in the past. Seven patients (26%) admit to no sun protective measures. Two patients (7%) had documented skin cancer prior to transplantation and 5 patients (17%) had biopsy proven non-melanoma skin cancers post transplantation.

# **Conclusions**

We present preliminary data of a larger prospective study to compare the risk of skin cancer development in patients on belatacept compared to other immunosuppressive regimens.

# **Abstract 8:**

#### SYSTEMIC CANDIDIASIS IN A PATIENT WITH ACUTE LYMPHOBLASTIC LEUKEMIA

Lee M. Miller, MD, Matt Sagransky and Rita Pichardo, MD Department of Dermatology, Wake Forest Baptist Health, Winston Salem, NC.

Systemic candidiasis is a rare but life-threatening condition in immunocompromised patients. The use of antifungal drugs for the prophylaxis and treatment of Candida infections has lead to the emergence of resistant strains. Here we report a case of systemic C. krusei candidiasis with cutaneous involvement despite fluconazole prophylaxis in a patient with acute lymphoblastic leukemia (ALL). The patient later received treatment with micafungin and amphotericin B but ultimately died of mycotic sepsis-related complications 21 days after initial presentation. Previous cases of fluconazole resistant C. krusei have been reported, indicating the need for a reevaluation of anti-fungal prophylaxis protocols. In terms of treatment, voriconazole or caspofungin may be more effective alternatives to standard treatment with amphotericin B. Further research on the efficacy of monoand combination antifungal therapy is needed to decrease the incidence of systemic candidiasis and prevent morbidity and mortality.

#### **Abstract 9:**

#### ACITRETIN FOR THE TREATMENT OF CUTANEOUS T CELL LYMPHOMA

Justin Cheeley, MD (a), Rachel Sahn, MD (a), and Sareeta RS Parker (a,b) Department of Dermatology, Emory University (a) and Grady Health System (b), Atlanta, GA.

# **Background**

Bexarotene is the only FDA approved retinoid for the treatment of cutaneous T-cell lymphoma (CTCL). Acitretin has anecdotally been reported to be effective therapy for CTCL.

# **Objective**

To determine the effectiveness and tolerability of acitretin as primary or adjuvant therapy for cutaneous T cell lymphoma.

# **Design**

Retrospective chart review of CTCL patients at a single tertiary care center.

#### Results

32 CTCL patients who received acitretin for >1 month were identified. 91% of patients had mycosis fungoides. The median patient age was 59; 56% were male; 47% were white, 47% black, and 6% other. 3% were Stage IA, 69% Stage IB/IIA, 16% Stage IIB, 12% Stage III/IVA. Excluding topical corticosteroids as adjuvant therapy, 6 patients received acitretin alone and 26 received acitretin in addition to other therapy [nitrogen mustard (14), phototherapy (12), interferon (4), photopheresis (2)]. The overall RR was 59.4% (19) (CR=1, PR=18). Seven patients had stable disease. Median duration of response was 14 months (range 2 – 132 months). Median follow up was 2.8 years (range 56 days - 7 years). Six patients discontinued therapy due to adverse effects.

#### **Conclusions**

Acitretin is a safe and well-tolerated therapy for early stage CTCL.

# **Abstract 10:**

# APREPITANT EFFECTIVELY CONTROLS BOTH CUTANEOUS T-CELL LYMPHOMA-ASSOCIATED PRURITUS AND ALPHA INTERFERON-ASSOCIATED NAUSEA AND EMESIS

Barry Ladizinski MD, Andrea Bazakas BS, and Elise A. Olsen MD Dermatopharmacology Study Center, Duke University Medical Center

Cutaneous T-cell lymphoma (CTCL) is an extranodal non-Hodgkin's lymphoma characterized by migration of malignant T lymphocytes to the skin. Mycosis fungoides (MF) is the most common subtype of CTCL and typically presents with patches and/or plaques accompanied by severe pruritus. Alpha interferon is an antiviral and immunomodulatory agent used as monotherapy for aggressive CTCL and in combination with cytotoxic, external or other immunomodulatory agents for CTCL not responsive to monotherapy. While proven to be remarkably effective and relatively nontoxic, alpha interferon is rarely associated with nausea and vomiting. Aprepitant is a novel neurokinin-1 (NK-1)/substance p (SP) antagonist with established efficacy in preventing chemotherapy-induced nausea and vomiting, although its use with alpha interferon has not been previously documented. Recently, aprepitant has also been described as an effective antipruritic agent in patients with erythrodermic CTCL. The authors present the first report to support the use of aprepitant as an effective and safe agent to treat both CTCL-associated pruritus and interferon-associated nausea and emesis.

### **Abstract 11:**

# LINEAR IGA BULLOUS DERMATOSIS AND HIV INFECTION: EXAMINING THE COEXISTENCE OF AUTOIMMUNITY AND IMMUNODEFICIENCY

Rachel Ellis, BS and Asmaa Chaudhry, MD East Virginia Medical School, Norfolk, VA

A 50-year-old man presented with a widespread bullous eruption seven months after being diagnosed with HIV infection. He was noted to have numerous tense bullae on the trunk and extremities. Histopathology revealed an intraepidermal vesicle with neutrophils; direct immunofluorescence displayed linear IgA deposition along the basement membrane. A diagnosis of linear IgA bullous dermatosis was made, and the patient was disease free after 10 months of dapsone therapy.

The coexistence in the same patient of autoimmunity and immunodeficiency is intriguing. Autoimmune bullous dermatoses (AIBD) have rarely been reported in the setting of HIV, and there have been no reported cases of linear IgA dermatosis with HIV. A proposed mechanism of antibody mediated AIBD is increased production of IL-1 and IL-6 by HIV-infected macrophages, causing nonspecific B cell stimulation and autoantibody formation. Further, loss of T suppressor cell regulation may permit expansion of the B cell clone responsible for the autoantibody. Molecular mimicry between HIV antigens and human proteins may further contribute to autoantibody production.

Several proposed mechanisms of antibody mediated AIBD will be discussed as well as a proposed four-stage scheme of coexisting HIV and autoimmunity.

#### **Abstract 12:**

# AN UNUSUAL CASE OF PHOTOSENSITIVITY IN MICRODUPLICATION 7q11.23

Joseph Myers, MD (a), James Biota, BS (b), Tara Buehler, BS (b), and Bette Potter, MD (c) Georgia Health Sciences University (a), Georgia Health Sciences University School of Medicine (b), and Georgia Health Sciences University, Division of Dermatology (c), Augusta, GA.

T.C is a 6 year old male who presented to dermatology for photosensitivity. The parents report he has an unusual reaction to the sunlight in which he turns yellow and his ears turn red, which subsequently fades after removal from sunlight. His medical history is pertinent for developmental delays his entire life, speech problems, and carotenemia. He had a high resolution karyotype performed in 2006 which was normal. On physical exam, he demonstrated mild dolichocephaly, hypertelorism, a shortened philtrum and a prominent glabella. On exposure to sunlight, he develops mild erythema bilaterally over his external ears. A chromosome microarray was performed and showed a microduplication of 7q11.23 – the same region that is deleted in Williams-Beuren Syndrome. This microduplication has been documented previously, and predominant findings include craniofacial abnormalities and language deficits particularly with expressive speech. However, cutaneous findings have not been described in past cases. Nevertheless, our patient's cutaneous findings may or may not be photoreactive changes associated with his genetic condition.

#### Abstract 13:

#### CASE OF LANGERHANS CELL HISTIOCYTOSIS IN AN INFANT

Emily Burgin, MS4 (a) and Nicholas Papajohn, MD (b) LSU Health Sciences Center, New Orleans, LA (a) and Medical University of South Carolina, Charleston, SC (b).

Langerhans Cell Histiocytosis (LCH) comprises a spectrum of disorders characterized by a proliferation of langerhans cells in a variety of organs. The presentation and course of disease ranges from limited, self-healing unifocal lesions to progressive, multisystem involvement. Herein, we report the case of a neonate who initially presented at birth with disseminated, yellow and erythematous crusted papules. A punch biopsy revealed a proliferation of langerhans cells in the dermis that stained positive with CD1a. After a negative workup for systemic disease, he was thought to have Hashimoto-Pritzker type, or congenital self-healing congenital reticulohistiocytosis. Several months later, his skin lesions continued to progress, and he subsequently developed pulmonary involvement. This led to a modified diagnosis of Letterer-Siwe, or multisystem LCH. This case highlights the importance of continued follow-up of patients initially diagnosed with Hashimoto-Pritzker disease as skin lesions may be the first sign of multisystem LCH.

#### **Abstract 14:**

#### LINEAR ATROPHODERMA OF MOULIN: A DISTINCT ENTITY?

Henna Pearl, MD (a), Kathryn Echols, BSA (b) and Loretta Davis, MD (a) Medical College of Georgia, Department of Dermatology (a) and Medical College of Georgia School of Medicine (b), Augusta, GA.

A16-year-old Caucasian male presented with a six year history of asymptomatic, multiple brown areas located predominately on his left side. Physical examination revealed linear, hyperpigmented, depressed plaques following the lines of Blaschko along the left upper and lower extremity, left side of the trunk, and right Posteriorior shoulder. The presentation was consistent with a clinical diagnosis of linear atrophoderma of Moulin (LAM). Histology showed alterations more consistent with morphea due to the presence of thickened collagen bundles. However, many case reports of LAM have described thickened collagen bundles present on histological examination. LAM is a rare, acquired linear atrophoderma that typically manifests in childhood or adolescence. In general, there is no preceding inflammation, induration, or resultant sclerosis. The depressed nature of the lesions is speculated to be due to a reduction in subcutaneous adipose. The clinical presentation and histological findings are similar to linear atrophoderma of Pasini and Pierini (APP). Differentiation is made clinically by APP's lack of distribution along Blaschko's lines. APP is considered to be a type of superficial, abortive morphea in which sclerosis fails to develop. The similar clinical and histological presentations of APP and LAM, including histological findings of thickened collagen bundles in multiple APP and LAM lesions, raises the possibility that these diseases represent a spectrum of superficial morphea rather than distinct entities.

#### **Abstract 15:**

### A 61-YEAR-OLD MAN WITH ATYPICAL CUTANEOUS MYELOID SARCOMA

Melanie R. Clemenz, MS 4, Jing Zhang MD, PhD, and Annette Lynn, MD. University of South Carolina School of Medicine, Columbia, SC

This case reports atypical metastatic cutaneous myeloid sarcoma in a 61-year-old male patient. This lesion was originally diagnosed as atypical fibroxanthoma, but the aggressive nature of the tumor and subsequent biopsies eventually lead to the diagnosis of cutaneous myeloperoxidase negative myeloidsarcoma. This case report provides a detailed literature review comparing the pathogenesis and presentations of atypical fibroxanthoma versus cutaneous myeloid sarcoma. The definitive diagnosis of cutaneous myeloid sarcoma requires extensive immunohistochemical stains, and without proper treatment myeloid sarcoma may progress to acute myelogenous leukemia or develop distant metastasis. This case is an example of the importance of establishing a wide-ranging initial differential diagnosis for poorly differentiated tumors in order to provide the best care for patients.

#### **Abstract 16:**

#### TWO CASES OF BIOPSY-PROVEN SCURVY

Lindsay Strowd, MD, Saba Ali, MD, Ashley Feneran, BS and Rita Pichardo, MD Wake Forest University, Winston-Salem, NC.

Scurvy is a deficiency in ascorbic acid (Vitamin C) which is a crucial component of collagen synthesis. Here we present two different patients seen at Wake Forest University Baptist Medical Center by the dermatology inpatient consult service who were both diagnosed with scurvy. Both patients underwent skin biopsy which showed perifollicular hemorrhage and corkscrew hairs on routine histology. Both patients were treated with Vitamin C supplementation and their cutaneous symptoms improved. This presentation reviews the clinical presentation and histopathological features of scurvy. Scurvy is usually considered to be a disease seen in developing nations where access to fresh fruit and other sources of Vitamin C are scarce, however it should remain on the differential diagnosis for a petechial eruption.

#### Abstract 17:

# COMPARISON OF ELLIPTICAL EXCISION VERSUS PUNCH INCISION FOR THE TREATMENT OF EPIDERMAL INCLUSION CYSTS: A PROSPECTIVE, RANDOMIZED STUDY

Justin T. Cheeley, MD (a), Laura K. DeLong, MD, MPH (a), and Suephy C. Chen, MD, MS (a,b) Emory University, Department of Dermatology (a) and Atlanta VAMC (b), Atlanta, GA

**Background:** Two common methods for epidermal inclusion cyst (EIC) extirpation are elliptical excision (EE) and punch incision (PI) with removal of cyst contents. However, data are sparse in comparing short- and long-term outcomes of these techniques.

**Objective:** To longitudinally compare EE and PI on the basis of procedure time, scar length, post-operative complications (dehiscence, infection, and hematoma), recurrence, patient satisfaction, and quality of life (QOL). **Methods:** Forty subjects >18 years of age at the Veterans Affairs Medical Center with truncal, non-inflamed, 1-3 cm EICs were randomized to either PI or EE. Operative and patient-reported outcomes were recorded at two and four weeks, as well as one, four, ten, and 16 month follow-up. Our primary outcome was EIC recurrence. **Results:** Difference in operative duration was not significant (12.5 minutes for PI, 13.8 minutes for EE). Scar length at 2 weeks follow-up was statistically significant (10.7 mm for PI, 17.7 mm for EE; p<0.001). Complications, recurrence rate (16% PI vs. 10% EE), and patient-reported outcomes were not significantly different.

**Conclusions:** PI with cyst content removal appears to be an effective means to extirpate truncal EICs <3cm in diameter while significantly reducing scar length. Further investigation powered for our secondary endpoints is warranted.

#### **Abstract 18:**

# BIOPSY PERFORMANCE OF AN ADJUVANT DIAGNOSTIC TOOL FOR MELANOMA COMPARED TO PHYSICIANS

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**Introduction:** Early detection is crucial for the management of melanoma. An automatic, objective, non-invasive, multi-spectral computer vision system (MSCVS) has been designed to aid in the diagnosis of atypical pigmented skin lesions. We compared the biopsy performance (sensitivity and specificity) of the MSCVS to that of general dermatologists (GDs), pigmented skin lesion experts (PSLEs), and primary care physicians (PCPs) in a reader study.

**Methods:** Randomly selected physician readers evaluated 130 online cases (65 melanomas and 65 non-melanomas), including photographs and clinical history. Biopsy recommendation made by readers and the MSCVS were compared against a histologic reference standard to estimate sensitivity and specificity. Comparison between the MSCVS and physician groups was based on ANOVA.

**Results:** 155 physician readers (46 GDs, 64 PSLEs, and 45 PCPs) participated. Sensitivity of the MSCVS was significantly higher than GDs ( $0.73\pm0.03$ ; 95% CI 0.67-0.80), PSLEs ( $0.71\pm0.03$ ; 95% CI 0.65-0.77), and PCPs ( $0.71\pm0.03$ ; 95% CI 0.64-0.78), p<0.0001. Specificity of the MSCVS ( $0.09\pm0.04$ ; 95% CI 0.04-0.19) was lower than GDs ( $0.51\pm0.04$ ; 95% CI 0.43-0.60), PSLEs ( $0.50\pm0.04$ ; 95% CI 0.42-0.58), and PCPs ( $0.45\pm0.04$ ; 95% CI 0.37-0.53), but was consistent with that of the most sensitive physicians.

**Conclusions:** The MSCVS holds promise as a highly sensitive adjuvant tool for the early detection of melanoma.

#### Abstract 19:

# ADDRESSING THE MELANOMA PRACTICE GAP: INTERVIEWS OF THE STATE CANCER REGISTRIES

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#### Introduction

Melanoma is unique in that many cases are strictly treated in outpatient setting, and thus allows for the potential to not be reported to the proper state registry. This study attempted to characterize the various methods in which melanoma can be reported to each of the 50 state cancer registries.

#### Methods

We administered a 3-question survey regarding reporting methods: electronic, downloadable forms, and alternative methods for hospitals, pathology labs, and individual physicians.

#### **Results**

Of the 49 states that responded, over half employ electronic reporting for hospitals (45) and pathology labs (39); whereas only 23 states allow physicians to send melanoma reports electronically. Most states allow alternative methods, ranging from paper form completed by the physician to hard copy pathology reports. Three states do not allow any type of reporting other than electronically.

#### Conclusion

While the majority of states do allow electronic reporting of melanoma by many hospitals and pathology labs, the large reliance on paper reporting by physicians allows for the potential for thin melanoma cases to go underreported to the registries. This could potentially lead to underestimation of national melanoma incidence and affect future melanoma education and research funding.

#### **Abstract 20:**

# WHAT DO PATIENTS THINK ABOUT DERMATOLOGY RESIDENTS? A QUALITATIVE ANALYSIS OF

#### **PATIENTS' OPEN COMMENTS**

Candace Glenn, BS (a), Steven R. Feldman, MD, PhD (a,b,c), Amy McMichael, MD (a,b,c), Monica Huynh, BA (a), Sarah Fenerty, BS (a), and Andrew D. Lee, MD (a,b,c)

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# **Background**

Residency represents the period when students transition into independent physicians. In order to assess and develop patient-centered care skills, feedback from patients is valuable.

# **Purpose**

To characterize the quality of care provided by residents as perceived by patients and to identify ways to enhance that care.

#### **Methods**

Patients were asked by dermatology residents to complete an online survey about the patients' visit experience. The surveys queried patients for open comments about the patients' overall experience and any problem areas. Ouantitative data were also collected but are not reported here.

#### **Results**

Of the 180 surveys received, 136 contained open comments. An overwhelming majority shared positive thoughts about the residents. Resonant themes included communication, professionalism, time, care and compassion, medical knowledge and procedural skill, attentiveness, patience and willingness to answer questions. Negative comments were few and addressed other aspects of the clinic experience.

#### Limitation

The limited sample may not be representative of patients who were not surveyed, including non-dermatological patients or those who choose not to go to teaching hospital clinics.

# **Conclusions**

Patients think highly of dermatology residents and enjoy being seen by them. The survey responses suggest that patient-centered outcomes were important to patients and deserve focus in residency training.

### **Abstract 21:**

# WHAT PATIENTS THINK ABOUT DERMATOLOGY RESIDENT PHYSICIANS: A QUANTITIVE ANALYSIS OF PATIENT SURVEYS

Cheryl J. Gustafson, MD (a), Monica Huynh, BA (b), Scott A. Davis, MS (b), Steven R. Feldman, MD, PhD (b), and Amy McMicheal, MD (b)

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### **Background**

In addition to acquiring important medical training in the diagnosis and management of diseases, residency serves as an invaluable period for physicians to develop patient-centered care skills. Feedback from patients regarding their perception of patient care can be useful.

### **Purpose**

To quantitatively assess patients' satisfaction with the care provided by dermatology residents and to identify specific areas of patient care needing improvement.

#### **Methods**

Dermatology residents asked patients to complete an online survey regarding their visit experience. Patients were asked to quantitatively rank different areas of patient care. Qualitative data were also collected but are reported in a separate study.

# **Results**

The average patient satisfaction score amongst the 6 residents evaluated was 9.7 out of 10. Areas of improvement were indicated in 35% [52/148] surveys. These areas included: staff's attitude, waiting time, waiting area issues, parking, and delivery of information.

### Limitations

Finding may not be representative of patients not surveyed, including non-dermatology patients and/or patients who seek care at private clinics rather than clinics affiliated with academic centers.

### **Abstract 22:**

# FEASIBILITY AND RELIABILITY OF INTERNET CROWDSOURCING DATA COLLECTION WITH DERMATOLOGIC QUALITY OF LIFE ASSESSMENT TOOLS

Andrew Ostrowski (a), Adam Sperduto, MD (b), Suephy C, Chen, MD, MS (b), and Robert Swerlick, MD (b) Medical College of Georgia at Georgia Health Sciences University, Augusta, GA (a) and Department of Dermatology, Emory University, Atlanta, GA (b).

Crowdsourcing is a popular method for accelerating information exchange across vast populations using the Internet. Health-care themed websites, such as CureTogether, have tapped into this idea to become sources of medical information for lay-populations. We sought to determine the feasibility of crowdsourcing websites for dermatology research. 160 subjects from Emory Dermatology Clinic and 211 subjects from CureTogether completed a demographic survey, as well as Skindex and ItchyQoL, two quality-of-life measures. Responses were analyzed for completion timeliness, completeness, reliability, and reproducibility. CureTogether subjects were younger, more educated, less likely to speak primarily English, subscribed more to online social networking sites, and consisted of more Caucasians and fewer subjects that required systemic medication for their condition. Emory required less time to collect the target 160 surveys (70 vs. 296 days), however CureTogether showed the fastest rate of collection (36 vs. 90 surveys) during the best seven-day period. Both groups had similar levels of missing data (6% vs. 8%) for baseline Skindex. Both groups also showed high internal reliability and reproducibility with >0.8 Cronbach  $\alpha$  and intraclass correlation coefficients for both Skindex and ItchyQoL. This study demonstrates the potential for crowdsourcing as a feasible method for collecting dermatology patient-reported data.

#### Abstract 23:

#### COMPARISON OF PHYSICIAN AND PATIENT OBJECTIVES OF AN OFFICE VISIT

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Central to addressing patient needs and wants is effective doctor-patient communication. There have been relatively few studies evaluating how well physicians specifically ascertained patient goals and whether their visit priorities are well-aligned with the expectations and goals of their patients. Our investigation aimed to assess physicians' awareness of patients' goals of a particular encounter. Patient and physician participants completed a post-encounter questionnaire assessing their perception of the patient's primary concerns and ultimate goals. The primary outcome was level of concordance between patient and physician responses.

Our data indicate that 87.2% of the time physicians correctly identified the reason why the patient scheduled the appointment; 79% of the time they correctly identified whether the patient was concerned about a present problem or potential future problem (seeking reassurance). Less than half of the time (45.9%) the physician and patient were in complete concordance regarding the aspects that were most bothersome to the patient if the patient presented for a current problem. However, 66.7% of the time physicians correctly identified the primary concern of patients who presented for evaluation of a potential future problem. These data suggest that additional physician training and systems changes may be warranted to facilitate improved physician-patient communication.

#### Abstract 24:

# AN EXAMINATION OF THE ROLE OF FEMALE AUTHORS IN US DERMATOLOGIC PUBLICATIONS

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To examine the role of US women in scholarly dermatologic endeavors, we reviewed 12 issues each (August 2009 – July 2010) of two high impact scientific journals in dermatology, Journal of Investigative Dermatology and Archives of Dermatology, and extracted data characterizing the authors and articles. Of 730 peer-reviewed articles, 303 were US articles with  $\geq$  2 authors. The senior author was male 62.0% of the time. Female senior authors were more likely to author observational study articles than were male senior authors (59.1% vs. 42.6%, P = .007) but less likely to author basic or translational science research articles (20.0% vs. 36.7%, P = .003). The first author was female about half of the time (51.0%). Female first authors were more likely than male first authors to author observational study articles (56.5% vs. 41.2%, P = .01) but less likely to author basic or translational science research articles (23.4% vs. 37.2%, P = .01). Based on our data, it appears that women are first authoring at rates comparable to men but may lag behind men in terms of senior authorship, especially in basic and translational science research. Such trends may change as junior, predominantly female, dermatologists advance in their careers.