The Dermatologic Society of Greater New York—October 6th, 2016

1) Yevgeniy Balagula, MD
Assistant Professor, Medicine (Dermatology)
Department of Medicine (Dermatology), Montefiore Medical Center
Mycosis Fungoides in African American Patients

Dr. Balagula reviewed the epidemiology of mycosis fungoides (MF) in African Americans (AA), highlighting the distinguishing factors in this patient population.

Key points:
- Analyses of databases (notably the SEER database) have demonstrated that risks factors for MF include AA race, advanced age, and male gender.
- MF poses a diagnostic challenge in AA patients, with differing pigmentation relative to Caucasian patients.
- Recent epidemiological studies have shown that AA patients tend to present at a younger age and with more severe disease.
- There appears to be geographic clustering of MF, which may indicate an environmental influence.
- Overall, MF in AA patients is associated with a worse prognosis/more aggressive course, and AA females are affected at higher rates than previously thought.

2) George Han, MD, PhD
Assistant Professor, Dermatology
Department of Dermatology, Icahn School of Medicine at Mount Sinai
The Role of Neutrophils in Psoriasis

Dr. Han discussed how neutrophils impact the pathogenesis of psoriasis, focusing on his research into the neutrophil-to-lymphocyte ratio.

Key points:
- Laboratory studies and case reports have indicated that neutrophils play an important role in psoriasis.
- Dr. Han has investigated the neutrophil-to-lymphocyte ratio (NLR), which has been recognized as a non-specific inflammatory marker.
- Tracking the NLR in psoriasis patients over 12 weeks, his group found that NLR significantly decreased with biologic therapy, but no differences were seen with placebo.
- NLR may therefore be considered as a candidate biomarker for effective treatment.
- Future studies will examine an imiquimod-derived mouse model of psoriasis, assessing how a monoclonal antibody against neutrophils may affect the psoriasis phenotype.

3) Roger S. Ho, MD, MS, MPH
Assistant Professor, Dermatology
The Ronald O. Perelman Department of Dermatology, NYU School of Medicine
Psoriasis and Depression: Beyond the Obvious

Dr. Ho reviewed the association between psoriasis and major depressive disorder, highlighting his research in this field.

Key points:
- Studies have shown a significant association between psoriasis and depression, but more investigation is needed into how comorbidities may be confounding this relationship.
- Using the NHANES survey, Dr. Ho examined comorbidities and disease severity.
- When controlling for known confounders (e.g., cardiovascular disease, BMI, diabetes), there was no significant association between the severity of psoriasis and the risk of depression.
- Therefore, depression screening should not be solely limited to patients on the severe spectrum of disease.
- Future studies will evaluate the temporal relationship between depression and psoriasis.

4) Michael Marchetti, MD
Assistant Attending and Clinical Director, Dermatology Service, Memorial Sloan Kettering Cancer Center
Instructor, Department of Dermatology, Weill Cornell Medical College
Automated disease classification of melanocytic skin lesions using dermatoscopic images: results from the 2016 International Symposium on Biomedical Imaging

Dr. Marchetti spoke on the current state of computer-assisted diagnosis of melanoma.

Key points:
- Melanoma mortality continues to rise, and non-physicians are commonly responsible for discovering abnormal skin lesions.
- Smartphone applications have gained popularity in recent years, although these programs are limited by their accuracy.
- Dr. Marchetti has examined the role of computer-aided classification using dermatoscopic images to increase melanoma detection.
- Working with the International Skin Imaging Collaboration (ISIC), his group is creating a public archive of melanoma images.
- Their research indicates that computer-assisted diagnosis may be able to provide sensitivity and specificity comparable to top performing humans, creating a promising diagnostic tool for melanoma.

5) Kira Minkis, MD, PhD
Assistant Professor, Dermatology
Department of Dermatology, Weill Cornell Medical College
The utility of the keystone flap for reconstruction of difficult surgical defects

Dr. Minkis discussed her experiences using the keystone flap for challenging Mohs reconstructions.

Key points:

- First described by Behan in 2003, the keystone flap is an island perforator flap that can be used on the extremities, trunk, and head/neck region.
- Dr. Minkis employs the flap for Mohs reconstruction in areas of reduced skin laxity or poor wound healing.
- The keystone flap can be combined with an unna boot for lower extremity reconstructions
- A review of 22 such cases demonstrated only 2 instances of focal superficial necrosis, with no infections or flap failures.
- Overall, the keystone flap is versatile, reliable, and can be adjusted according to tissue laxity/location.