

16907

**Central centrifugal cicatricial alopecia: Histologic progression, inflammatory infiltrates and aging**



Fritzlaine Roche, MS, University of Rochester School of Medicine and Dentistry; Susan C. Taylor, MD, Perelman School of Medicine, University of Pennsylvania; John Seykora, MD, PhD, Dermatology, Perelman School of Medicine, University of Pennsylvania

Central centrifugal cicatricial alopecia (CCCA) is a scarring alopecia, characterized by perifollicular lymphocytic inflammation, perifollicular fibrosis and premature desquamation of the inner root sheath, that predominately affects women of African descent. Significant knowledge gaps exist in our understanding of what causes CCCA and its progression. To begin addressing these questions, we performed a retrospective review of 1153 biopsy specimens of CCCA to: 1) understand the histologic features of progression in CCCA with aging; and 2) determine the levels of active inflammation in CCCA pathology specimens with advancing age. Hair follicles were counted and categorized based on size and phase of the hair cycle. Subjects were stratified by age and total number of hair follicles was counted in a 4-mm horizontal biopsy section. The data showed more patients ages 43 to 60 had CCCA than patients ages 18-30. Analysis of hair follicle number revealed that there were fewer follicles in the older and middle age patients compared with the younger patients. Overall, there were 2 fewer follicles present in the older age group ( $P < .05$ ) and 1 fewer follicle in the middle-age group. The degree of inflammation per biopsy does not appear to be an association between the age and the degree of severity of the inflammation at the time of biopsy. Our data supports the article by McMichael et al that demonstrated an association of advanced CCCA in older age groups.

*Commercial disclosure: None identified.*

16935

**Fractional CO<sub>2</sub> laser therapy as a treatment for radiation-induced fibrosis: A pilot study**



Elizabeth Morehouse Pearce, Wellman Center for Photomedicine, Massachusetts General Hospital; Dr. R. Rox Anderson, Dr. Yen-Lin Chen, Dr. Thanh-Nga Tran

Radiation therapy is an effective cancer treatment; however, significant cutaneous adverse events can occur from the skin's exposure to ionizing radiation. Chronic radiation dermatitis (CRD) can be a debilitating, disfiguring, and painful condition. Currently there are limited treatment options for CRD, and no criterion standard of care exists. In our clinical study we examine fibrosis, a manifestation of CRD, which can cause pain, functional impairment and decrease patients' quality of life. Fractional laser therapy (FLT) has been shown to treat fibrosis associated with hypertrophic scars, leading to tissue repair. We hypothesized that FLT can also be used in the treatment of CRD to normalize the fibrotic process and induce normal skin remodeling. In this prospective pilot study ( $n = 22$ ), each treatment site undergoes CO<sub>2</sub> fractionated laser therapy and has an internal control not receiving the intervention. Subjects have a total of 3 laser treatments, and 3 follow-up visits 3-12 months after the last treatment. The SF-36 Health Survey and Skindex16 scales are subjective measures used to assess the impact of CRD on quality of life. Objective measurements include skin compliance, skin thickness, and erythema and pigmentation measured by the Derma Torque Meter, ultrasound, and DermaSpectrometer respectively. Currently, 10 subjects have enrolled in this study. Preliminary results show improved cosmesis, patient satisfaction and skin elasticity. While initial analysis indicates enhanced outcomes, we are conducting further research to determine the utility of fractional laser therapy in the treatment of chronic radiation dermatitis.

*Commercial disclosure: None identified.*

16933

**Association of depressive disorders and dermatologic diseases using PHQ-2 as a screening tool in a dermatologic center in Bogota, Colombia**



David Castillo Molina, Fundacion para la Investigación en Dermatología; Marcela Duran Torres, MD, Universidad del Rosario; María José Giraldo Parra, MD, Fundacion para la Investigación en Dermatología; Julian Sucerquia, MD, MEd, Clínica de la Mujer; Yensi Lorena Romero Díaz, MD, Gabriela Bula, MD, Jesus Daniel Fierro Lozada, Yinna Katherine Sanchez Sánchez, Leidy Daniela Zarta Cortés, Fundacion para la Investigación en Dermatología; Leidy Daniela Zarta Córtes, MD, David Ernesto Castillo Saavedra, MD

**Background:** The concept "brain-skin connection" has regained strength in dermatology, and it means that the common ectodermic origin of the skin and the central nervous system let it react jointly. Approximately 30%-60% of patients with dermatologic diseases have a psychiatric disease and the most documented are depressive disorders, which can induce a pro-inflammatory state that can trigger worsening of the dermatoses. For that reason, we implemented the Patient Health Questionnaire (PHQ-2).

**Methods:** 624 patients were examined in a dermatologic center in Bogota, Colombia from September 2018 to June 2019. Data were obtained from medical records and PHQ-2 results and collected manually using Excel (Microsoft Office, Windows XP). Descriptive statistical analysis was conducted applying for the same program. Besides, we analyzed questionnaires' results following these variables: gender, age, PHQ-2 score, and diagnosis. This study does not represent a risk for patients according to Resolution No. 8430 of 1993, Ministry of Health of Colombia.

**Results:** Patients with a positive screening were 102 (16%), 72 (70.59%) were females and 30 (29.41%) males and the most common age range was 30-75 years old. In the documented diagnoses in patients with a positive test, the most significant was rosacea (13.73%), psoriasis (10.78%), actinic keratosis (7.84%), acne (6.84%), seborrheic dermatitis (6.84%), and dermatitis atopica (5.88%).

**Conclusions:** The PHQ-2 is considered to be an effective tool, and the concept of brain-skin connection studies are lacking.

*Commercial disclosure: None identified.*

16958

**Frequent symptomatic and emotional struggles impact all aspects of quality of life in patients with psoriasis: A qualitative study**



Vanina Taliercio, Department of Dermatology, University of Utah, Salt Lake City; Lisa Webber, Adelheid Langner, BS, BA, University of Utah School of Medicine; Bianca E. Rich, Abram Beshay, MD, Dominik Ose, Rachel Hess, Jamie L.W. Rhoads, MD, MS, University of Utah; Aaron Secrest, MD, PhD, University of Utah Dermatology

Psoriasis can have significant impact on several aspects of patients' lives. It causes tremendous quality of life consequences in addition to treatments causing significant financial burden. Dermatologists often focus on achieving minimal disease activity based on their assessment. Dermatologists must understand the disease's enormous impact on daily routines and quality of life to grasp the unique value of capturing patient-reported outcomes. We conducted five mixed focus groups and ten semistructured interviews with psoriasis patients ( $n = 25$ ) and their family members ( $n = 11$ ) seeking to understand their daily struggles with this chronic skin condition. All groups were moderated by a trained facilitator using a semi-structured interview guide. Two researchers independently coded narratives and identified major themes using NVivo 12. Our narrative analysis produced three overarching themes: 1) "Symptoms": the demanding continuous state of itchiness and the presence of intermittent, but often severe, pain; 2) "Social consequences": psoriasis negatively impacts patients' and family members' emotions, social and sexual relationships, and daily activities (including and not limited to working, leisure, and sleep); 3) "Hurdles to effective treatment": high out-of-pocket costs of medication, difficulties with insurance coverage, side effects, and loss of efficacy. We encourage dermatologists to inquire into how psoriasis impacts their patient's quality of life. Validated dermatology-specific quality of life assessments, such as Skindex-16 can be used to better understand at each visit whether the patient's psoriasis is bothering them most symptomatically, emotionally, or functionally over the treatment course. These rapid assessments help patients open up about what matters most to them.

*Commercial disclosure: None identified.*