Foundation for Osteopathic Dermatology
Osteopathic Research Update

Eugene T. Conte ,DO,FAOCD,FAAD
Disclosure

Speaker Faculty

- Abbvie
- Lilly
- Janssen Biotech
- Celgene
Learning Objectives

- To understand how The Foundation for Osteopathic Dermatology supports research.
- Learn about the multiple grants available to a Dermatologist who wants to pursue a research project.
- Present “Abstracts” from ongoing research projects that the Foundation is supporting.
History

- The Foundation for Osteopathic Dermatology was founded in 2002 by 10 members of the AOCD as a unique extension of the Osteopathic Dermatology community.
Mission Statement

To improve the standards of the practice of Osteopathic Dermatology by raising awareness and supporting research through grants and awards given to those promising applicants who are devoted to research in all areas of Dermatology under the jurisdiction of an Osteopathic Dermatologist including providing public health information and charitable events.
The Foundation for Osteopathic Dermatology Research Grants
What are the Research Grants Available by Category
The Foundation for Osteopathic Dermatology Resident Research Grant

- This grant is awarded to a Dermatology “RESIDENT” in an AOA/ACGME accredited Dermatology program.
- The purpose of this grant is to foster research in dermatology conducted by residents at a graduate level and supervised by an attending dermatologist.
The Foundation for Osteopathic Dermatology Young Investigator Grant

- This grant is awarded to an Osteopathic dermatologist who is a “GRADUATE” of an AOA/ACGME program and is practicing in a clinical and/or research setting.
- The purpose of this grant is to foster research among young dermatologists and is awarded to promising physicians researchers meeting this criteria.
The Foundation for Osteopathic Dermatology Physician Investigator Grant

- This grant is awarded to an established osteopathic dermatologist who is certified in dermatology and conducting research in a clinical setting at an accredited institution. The purpose of this grant is to sponsor or co-sponsor research in any area of dermatology.
The “FOD” Institutional Grant

- This grant is awarded to the “INSTITUTION” where an Osteopathic Dermatologist is currently conducting their clinical or bench research. The research may be clinical, diagnostic and or therapeutic as it relates to the specialty of Dermatology.
Foundation Grants Awarded
2015 - 2016
Karthik Krishnamurthy, D.O., FAOCD, FAAD

- Genomic Characterization of Melanomas in the Hispanic Population by Single Nucleotide Polymorphism (SNP) Analysis

- The FOD Physician Investigator Grant
Alexis Stephens, D.O.

- Dermoscopy Research “To establish unique dermoscopic features in patients of Skin of Color”

- The FOD Resident Research Grant
Huyenlan Dinh, D.O

- Frontal Fibrosing Alopecia: A Cross-Sectional Survey

- The FOD Resident Research Grant
Frontal Fibrosing Alopecia: A Cross Sectional Survey

Lanny Dinh, D.O.
Lehigh Valley Health Network/PCOM
Department of Dermatology
AOCD
Investigators

- **Principal Investigator:** Tanya Ermolovich, DO
- **Sub-Investigators:** Nektarios Lountzis, MD, Lanny Dinh, DO, and Veronica Rutt, DO
- **Biostatistician:** Jennifer Macfarlan, MPH
Background

• Frontal Fibrosing Alopecia (FFA)
  – Scarring alopecia that is a clinical variant of lichen planopilaris
  – 1994
    • Incidence on the rise
  – Seen more in postmenopausal females
    • Premenopausal females
    • Men
Background

http://www.dermnetnz.org/assets/Uploads/hair-nails-sweat/ffa3.jpg
Background

• Etiology
  – Unknown
  – Hormonal
  – 2016: Leave on facial products
    • Sunscreen use
Background

- Treatment
  - Symptomatic
    - Topical/Intralesional corticosteroids
    - Oral anti-inflammatories
    - Finasteride
    - Pioglitazone
Study Objective

- Hypothesis generated, exploratory study
- Cross-sectional survey
  - 40-50 patients from the Lehigh Valley area
  - Characterize the disease
Study Criteria

• Inclusion criteria
  – 18 years or older
  – Physical exam findings consistent with scarring alopecia on the scalp in a band-like frontal or frontal temporal distribution

• Exclusion criteria
  – History of chemotherapy or radiation therapy to the scalp or body
Survey

- Duration of the disease
- History of lichen planus on the skin or mucosal surfaces
- History of hair loss in other areas
- History of shingles or trauma to the scalp and/or face
- History of hormonal imbalance
- History of surgery to the scalp and/or face
- All past medical and surgical history
- Current medications
Survey

- History of hypothyroidism/hyperthyroidism
- History of smoking
- History of an autoimmune disease
- Family history of hair loss
- Race/Ethnicity
- Current or history of hair care products
- Hair care grooming practices (dyes, straighteners, curlers, perms)
- Facial leave on products
Progress

- Network Office of Research and Innovation (NORI)
- IRB expedited process
- Update at the next AOCD
Thank you

- Tanya Ermolovich, DO
- Nektarios Lountzis, MD
- Veronica Rutt, DO
- Jennifer Macfarlan, MPH
- AOCD Foundation Grant
- Lehigh Valley Health Network
Matthew Zarrago, D.O.

- “A Randomized, Double-blind, Multicenter Study of the Efficacy and Safety of AbobotulinumtoxinA Reconstituted up to 10 Weeks Prior to Injection.”

The FOD Resident Research Grant
Gregory R. Delost, D.O.

- “Autoimmunity in Primary Cutaneous Lymphoma and Pseudolymphoma”

- The FOD Resident Research Grant
Adolescent and young adult cutaneous lymphomas: Clinical spectrum and autoimmunity

Foundation for Osteopathic Dermatology
Gregory R. Delost, DO
University Hospitals Cleveland Medical Center
Department of Dermatology
Background: AYA and Autoimmunity

- Adolescent and young adult (AYA) cancer may behave differently.
- Many autoimmune diseases share similar clinical, histological, and pathophysiological features with cutaneous lymphomas.

Previous research:
- Young patients (<30) with MF/SS in general have a favorable outcome\(^1\)
- Many autoimmune diseases especially when diagnosed at younger ages, were associated with higher risk of NHL\(^2\)
- Subcutaneous panniculitis-like T-cell lymphoma has upregulation of autoimmunity-associated genes\(^3\)

Objectives

- To validate the University Hospitals Multidisciplinary Cutaneous Lymphoma Program cohort against the national Surveillance, Epidemiology, and End Results (SEER)-18 database
- Characterize pediatric, AYA, and adult population distributions of subtypes of lymphoma at a level of specificity not recorded by SEER
- Determine if the incidence of concomitant autoimmunity differs between healthy and cutaneous lymphoma AYA and adult populations
Methods

- Retrospective chart review
- Validate with the SEER-18 database
- Compare our ANA positivity rate ($\geq 1:80$) with that of the National Health and Nutrition Examination Survey (NHANES)
<table>
<thead>
<tr>
<th>Category</th>
<th>UH</th>
<th>SEER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pediatrics (1-14)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AYA (15-39)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults (40-64)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Older Adults (65+)</td>
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<td></td>
</tr>
</tbody>
</table>

% Total CTCL

- Pediatrics (1-14): p=.902186
- AYA (15-39): p=.768544
- Adults (40-64): p=.934149
- Older Adults (65+): p=.120703
<table>
<thead>
<tr>
<th>CTCL Subtype</th>
<th>Pediatric</th>
<th>AYA</th>
<th>Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mycosis Fungoides (MF)</td>
<td>9 (56.3%)</td>
<td>45 (70.3%)</td>
<td>280 (69.3%)</td>
</tr>
<tr>
<td>MF Stage IA</td>
<td>7</td>
<td>31</td>
<td>166</td>
</tr>
<tr>
<td>MF Stage IB</td>
<td>6</td>
<td>16</td>
<td>72</td>
</tr>
<tr>
<td>MF Stage II</td>
<td>0</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td>MF Stage III</td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>MF Stage IV</td>
<td>0</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Anaplastic Large Cell Lymphoma CD30+</td>
<td>2 (12.5%)</td>
<td>2 (3.1%)</td>
<td>38 (9.4%)</td>
</tr>
<tr>
<td>Sézary syndrome</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>28 (9.9%)</td>
</tr>
<tr>
<td>Primary CD4+ Small/Med Pleomorphic</td>
<td>0 (0.0%)</td>
<td>3 (4.7%)</td>
<td>19 (4.7%)</td>
</tr>
<tr>
<td>Primary CD8+ Aggressive</td>
<td>0 (0.0%)</td>
<td>6 (9.4%)</td>
<td>17 (4.2%)</td>
</tr>
<tr>
<td>Woringer Kolopp</td>
<td>0 (0.0%)</td>
<td>2 (3.1%)</td>
<td>2 (0.5%)</td>
</tr>
<tr>
<td>Granulomatous Slack Skin</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>5 (1.2%)</td>
</tr>
<tr>
<td>Null (CD4/CD8 Negative)</td>
<td>1 (6.3%)</td>
<td>1 (1.6%)</td>
<td>5 (1.2%)</td>
</tr>
<tr>
<td>Hypopigmented MF</td>
<td>4 (25.0%)</td>
<td>4 (6.3%)</td>
<td>1 (0.2%)</td>
</tr>
<tr>
<td>Anaplastic Large Cell Lymphoma CD30-</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>4 (1.0%)</td>
</tr>
<tr>
<td>Adult T-cell Leukemia/Lymphoma</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>3 (0.7%)</td>
</tr>
<tr>
<td>Subcutaneous Panniculitis-like T-cell Lymphoma</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>1 (0.2%)</td>
</tr>
<tr>
<td>Primary Cutaneous γ/δ lymphoma</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>1 (0.2%)</td>
</tr>
<tr>
<td>Extranodal NK/T-cell lymphoma</td>
<td>0 (0.0%)</td>
<td>1 (1.6%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>CBCL Subtype</td>
<td>Pediatric</td>
<td>AYA</td>
<td>Adult</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
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</tr>
<tr>
<td>Germinal Center</td>
<td>0 (0.0%)</td>
<td>5 (45.5%)</td>
<td>65 (55.6%)</td>
</tr>
<tr>
<td>Marginal Zone</td>
<td>0 (0.0%)</td>
<td>5 (45.5%)</td>
<td>26 (22.2%)</td>
</tr>
<tr>
<td>Diffuse Large B-Cell Lymphoma Leg Type</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>12 (10.3%)</td>
</tr>
<tr>
<td>Diffuse Large B-Cell Lymphoma Other</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>10 (8.5%)</td>
</tr>
<tr>
<td>Blastic Plamacytoid Dendritic Cell</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>1 (0.9%)</td>
</tr>
<tr>
<td>Other/NOS</td>
<td>0 (0.0%)</td>
<td>1 (9.1%)</td>
<td>3 (2.6%)</td>
</tr>
<tr>
<td>TOTAL CBCL</td>
<td>0</td>
<td>11</td>
<td>117</td>
</tr>
<tr>
<td>Autoimmunity (ANA ≥ 1:80)</td>
<td>AYA</td>
<td>ADULT</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>CTCL</td>
<td>24.0% (6/25)</td>
<td>25.6% (34/133)</td>
<td></td>
</tr>
<tr>
<td>CBCL</td>
<td>42.9% (3/7)</td>
<td>34.7% (17/49)</td>
<td></td>
</tr>
<tr>
<td>PL/CLH</td>
<td>36.8% (7/19)</td>
<td>20.0% (17/85)</td>
<td></td>
</tr>
<tr>
<td>General Population*</td>
<td>13.1% (329/2518)</td>
<td>15.3% (341/2236)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Autoimmunity (ANA ≥ 1:80)</th>
<th>AYA</th>
<th>ADULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTCL Males</td>
<td>0.0% (0/16)</td>
<td>22.4% (15/67)</td>
</tr>
<tr>
<td>CTCL Females</td>
<td>66.7% (6/9)</td>
<td>28.8% (19/66)</td>
</tr>
<tr>
<td>CBCL Males</td>
<td>100% (3/3)</td>
<td>33.3% (7/21)</td>
</tr>
<tr>
<td>CBCL Females</td>
<td>0.0% (0/4)</td>
<td>35.7% (10/28)</td>
</tr>
<tr>
<td>PL/CLH Males</td>
<td>40.0% (4/10)</td>
<td>16.7% (8/48)</td>
</tr>
<tr>
<td>PL/CLH Females</td>
<td>33.3% (3/9)</td>
<td>24.3% (9/37)</td>
</tr>
</tbody>
</table>
Conclusions

- UH cohort closely reflected SEER
- Female CTCL peak of incidence occurred 1-2 decades before males
- Male CBCL peak of incidence occurred 1-2 decades before females
- Autoimmunity may be a driver in cutaneous lymphoma
- Future direction: For the pediatric and AYA patients, do certain genes confer a risk for developing cutaneous lymphoma?
Acknowledgements

- Foundation for Osteopathic Dermatology
- Dr. Kevin Cooper: PI
- Dr. Jeffrey Scott: SEER
- Dr. Gene Conte
Frontal Fibrosing Alopecia: A Cross-Sectional Survey

- Principal Investigator: Tanya Ermolovich, DO
  *Sub Investigator's: Nektarios Lountzis, MD, Huyenlan Dinh, DO, Veronica Rutt, DO, Jennifer Macfarlan, MPH

The FOD Young Investigator Research Grant/
The FOD Resident Research Grant
How Are The Foundation for Osteopathic Dermatology Research Grants Supported “Pledges and Gifts to the Foundation” from

- AOCD Members
- AAD Members
- Business and Industry
- General Public
- Osteopathic Medical Schools
- Planned Giving
- Silent Auctions (Donations to the Auction)
The Future : My Opinion

- Let me start by “stating that what I am about to say is “My Opinion”.
- Some of the Foundation Officers may not agree with me regarding the issue I am going to discuss.
- However with the changes that are taking place in our Osteopathic Profession and the future ACGME collaboration I feel that all involved need to be informed.
On or about December 15, 2016 as an AAD member I received a “Dear Colleague” letter from Michael D. Tharp, M.D. the President of The Dermatology Foundation. This letter included a “Pledge Response” urging me to become a DF member or to consider pledging to the “Leaders Society” of the DF. After considering his request regarding a donation I decided to write him a letter and ask one simple question.
A SIMPLE QUESTION

Dear Dr. Tharp;

Before I make my decision regarding a donation to The Dermatology Foundation can you please tell me in the last 20 years or even the last 10 years how many Osteopathic Dermatology Residents and or Researchers have ever received a Grant from The Dermatology Foundation?
“THERE WAS”
“NO”
“RESPONSE”
“TO MY LETTER”
DID I MAKE A DONATION

“NO”
THE FUTURE

For those who wish to support Osteopathic Dermatology Research in The Future Consider The Foundation for Osteopathic Dermatology
<table>
<thead>
<tr>
<th>Levels of Support</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pinnacle Table</td>
<td>$25,000</td>
</tr>
<tr>
<td>Ulbrich Circle</td>
<td>$10,000</td>
</tr>
<tr>
<td>Kop prince Society</td>
<td>$1,000</td>
</tr>
<tr>
<td>Leaders of Osteopathic Dermatology</td>
<td>$500</td>
</tr>
<tr>
<td>Scholars Circle</td>
<td>$250</td>
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<tr>
<td>Residents Forum</td>
<td>$100</td>
</tr>
</tbody>
</table>
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Foundation Officers

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Bryan Sands, D.O., FAOCD, FAAD
Marsha A. Wise, BS, Executive Director, Sec-Treasurer
Foundation for Osteopathic Dermatology

Grant Information and Application can be obtained by writing:

Foundation for Osteopathic Dermatology
P.O. Box 7525
Kirksville, Missouri 63501-7525
Thank You