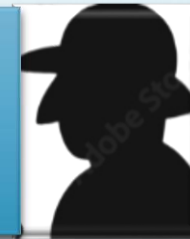




PSORIASIS AND ATOPIC DERMATITIS OVERLAP: ANOTHER INCIDENTAL CASE?



Onivola RAHAROLAHY, MD¹

Malalaniaina

ANDRIANARISON, MD¹

Fandresena Arilala

SENDRASOA, MD¹

Irina Mamisoa RANAIVO, Prof,
MD²

Lala Soavina

RAMAROZATOVO, Prof, MD¹

Fahafahantsoa RAPELANORO

RABENJA, Prof, MD¹

*(1)Dermatology Dept,
University Hospital
Befelatanana,
Antananarivo, Madagascar*

*(2)Dermatology and
Infectious Diseases Dept,
University Hospital Place
Kabary, Antsiranana,
Madagascar*

CONFLICT OF INTEREST :
none



Learning Objective

PSO and AD overlap : clinical and histological, molecular features



Take home messages

- ✓ PSO and AD : a disease spectrum rather than distinct entities?
- ✓ Challenging management in resource-limited settings, in particular in the case of failure of first-line therapies



- Male Malagasy patient
- 52-year-old
- Personal history : asthma, atopic rhinoconjunctivitis
- Family history : psoriasis
- For 3 years : **chronic pruritus, oozing, scaling** of scalp, facial seborrheic areas, major skin folds, genitals, no response to antifungals / sulfur shampoo
- Flare-ups : cold weather, stress
- Lichenification, prurigo-like eruption, post-inflammatory dyschromia
- Xerosis, Dennie-Morgan sign

CASE REPORT



Written consent from the patient to the publication of photos

CASE REPORT



**Atopic dermatitis and
psoriasis overlap
(sebopsoriasis /
inverted psoriasis)**

PASI	10,5/72
SCORAD	48,9/103
DLQI	18/30

Topical corticosteroid
calcipotriol



**Atopic dermatitis
(AD) and psoriasis
(PSO) overlap**

CASE REPORT

(A): elongation of epidermal ridges, psoriasiform appearance, hyperplasia of skin appendages (HE x100)

(B): hyperkeratosis and slight spongiosis (HE x400)

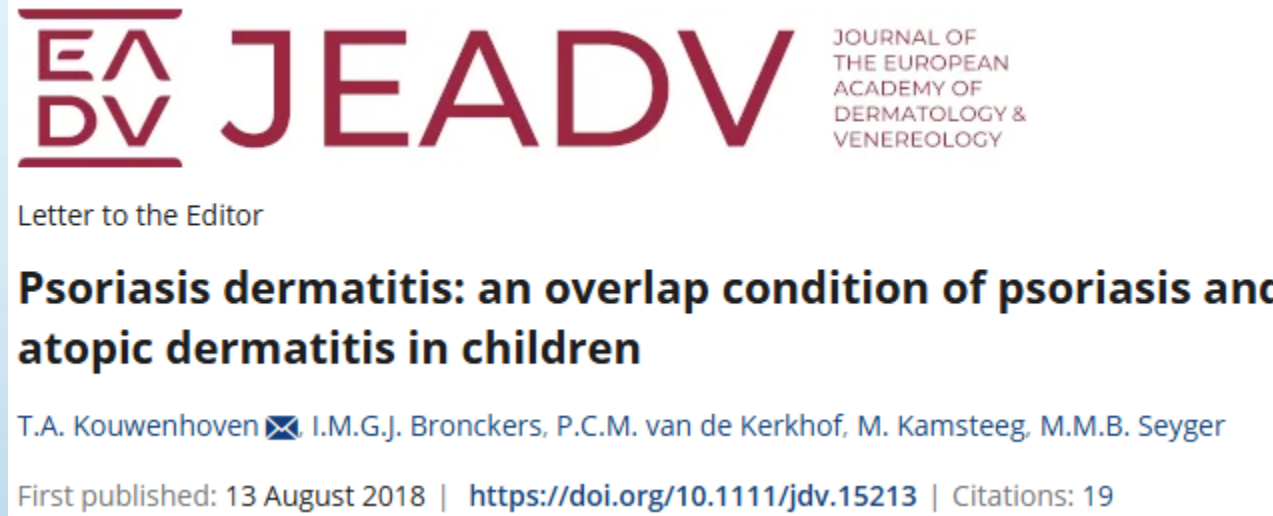
(C): lymphocytic inflammatory infiltrate with some neutrophils and eosinophils (HE x400)

(D):

- Spongiotic epidermis with a few vacuolized cells in the basal layer
- Superficial and perivascular dermal inflammatory infiltrate (HE x400)

Image courtesy of Prof F. Tsitohery Andriamampionona and Dr Joelle Razafimahefa, Dept. of Anatomic-pathology, University Hospital of Andrainjato, University of Fianarantsoa, Madagascar

DISCUSSION



- More frequent in **pediatric population** (and more studied in Asian descent)
- Scarce epidemiological data in adult population
- No diagnostic criteria so far !
- **About 4% pediatric psoriasis outpatients : clinical features of both PSO and AD**, even after a longer follow –up (1.2 years)
- Might need other therapeutic interventions compared to pediatric PSO patients

DISCUSSION



- Six Inflammatory Skin Diseases patterns :
 - lichenoid pattern (Th1/ innate lymphoid cell [ILC]1 pattern)
 - **eczematous** and bullous **patterns** (Th2/ILC2 pattern)
 - **psoriatic pattern** (Th17/ILC3/Th22 pattern)
 - fibrogenic and granulomatous patterns (regulatory T cell pattern)
- AD and PSO overlap : **sharing Th17 and Th22**
- Immunological patterns might vary across different ethnicities

DISCUSSION

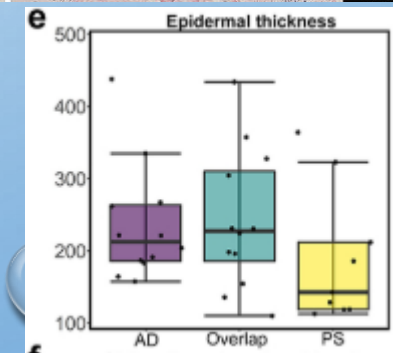
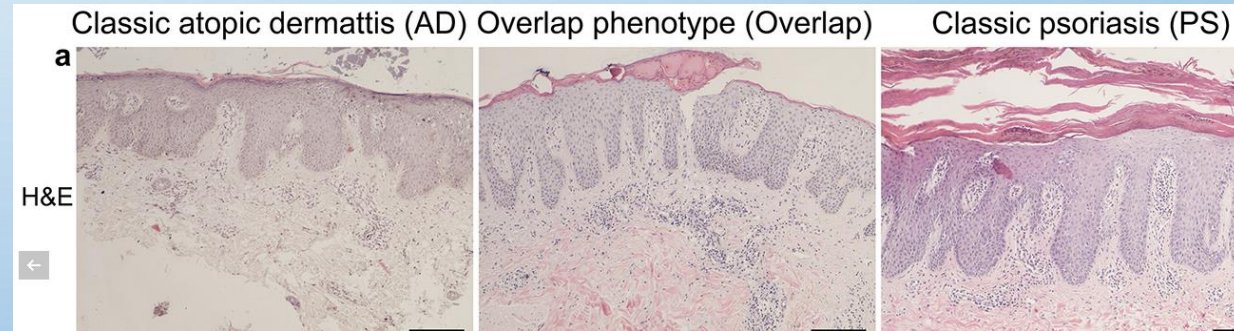


Genomic profiling of the overlap phenotype between psoriasis and atopic dermatitis

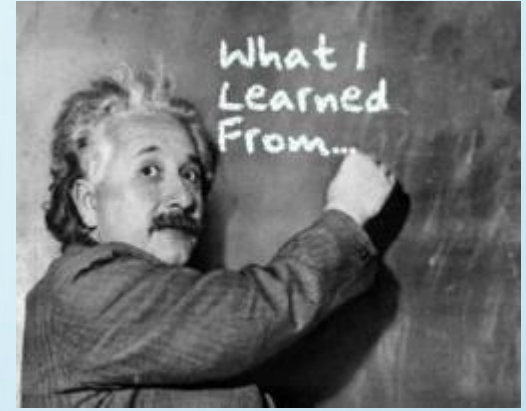
Jeong Eun Kim^{1,2}, Jongmi Lee, MD, PhD³, Yun Jung Huh, MD¹, Katherine Kim³, Vasuma Chaparala³, James G. Krueger, MD, PhD⁴, Jaehwan Kim, MD, PhD^{3,4,5,*}

Clinical overlap phenotype between PSO and AD:

- SCORAD and EASI lower than in classic AD
 - Histopathological features : **no statistically significant hallmark** (epidermal thickness, keratinocyte hyperproliferation)
 - **long-standing lichenified lesions of AD : psoriasiform epidermal hyperplasia with little or no spongiosis**
 - **Dominant molecular features of PSO** : NOS2, IL36G
- personalized treatment choice



TAKE HOME MESSAGES



PSO and AD overlap

- neither clinical nor histological hallmarks, molecular features closer to PSO
- PSO and AD : a disease spectrum rather than distinct entities?
- Challenging management in resource-limited settings :
failure of first-line therapies → targeted therapies

Acknowledgement

