PSORIASIS

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PSORIASIS

• “Educational course on psoriasis” (chair: Estaban Dauden y Luigi Naldi)
  • Genetics/Pathogenesis (Paola Di Meglio)
  • Comorbidities (Tiago Torres)
  • Topical therapy (Rolland Gyulai)
  • Non-biological systemic therapy (Paola Cardenas)
  • Biologic systemic therapy (David Moreno)

• Discussed E-Posters:
  • Parkinson’s disease and psoriasis
  • Alzheimer’s disease and psoriasis
"GENETICS/PATHOGENESIS (PAOLA DI MEGLIO)"

• Genetics of Psoriasis pre-GWAS:
  • Psoriasis heredability: 66%
  • Gene/loci: 10 (PSORS1, 6p21, HLA-C9)

• The 21st century genoma revolution:
  • GWAS / Disease-associated SNPs.
  • Genetics of Psoriasis in 2019: 63 susceptibility loci in Europeans.
GENETICS OF PSORIASIS IN 2019:

Cargill et al. 2007; Liu et al., 2008; Capon et al 2008; Nair et al., 2009; Zhang et al., 2009; Ellinghaus et al., 2010, Huffmeir et al., 2010; Strange et al., 2010; Stuárt et al., 2010; Sun et al., 2010; Ellinghaus et al., 2012; Tsol et al., 2012; Tsol et al., 2015; Zuo et al., 2015; Yin et al., 2015; Tsol et al., 2017; Dand et al 2017
GENETICS OF PSORIASIS IN 2019:

• New challenges -> Biomarkers.
• One size DOES NOT fit all.
• Personalized medicine.
• Genetics of response to biologics: 21 studies.
GENETICS OF PSORIASIS IN 2019:

HLA-Cw06:02* is a predictive biomarker of biologic treatment response in psoriasis

Dand et al 2018
TOPICAL THERAPY (ROLLAND GYULAI)

• Few promising new developments.
• Topical tofacitinib (JAK inhibitor) – modest efficacy.
• Roflumilast and TAK-084 (topical PDE4 inhibitors) -> reduce skin infiltrate thickness in psoriasis.
• Tapinarof cream-promising phase 2 results.
TAPINAROF CREAM—PROMISING PHASE 2 RESULTS.

- Tapinarof is a bacteria-derived polyphenol that has affinity for the aryl hydrocarbon receptor (AhR).
- Activation of AhR leads to decreased expression of Th17 cytokines in inflammatory models.

THE RISK OF PARKINSON'S DISEASE IN PATIENTS WITH PSORIASIS: A NATIONWIDE POPULATION-BASED COHORT STUDY
J.H. Lee, K. Han, H.Y. Gee

• **Background:** The association between psoriasis and Parkinson's disease is still not established.

• **Objectives:** The aim of this study was to determine the incidence rates and risk factors of Parkinson's disease in patients with psoriasis.
THE RISK OF PARKINSON'S DISEASE IN PATIENTS WITH PSORIASIS: A NATIONWIDE POPULATION-BASED COHORT STUDY
J.H. Lee, K. Han, H.Y. Gee

• **Methods:** This was a nationwide population-based cohort study. The data from patients with psoriasis (N = 548,327; age ≥ 20 years; males, 53.32%; females, 46.68%) and age- and sex-matched control subjects (N = 2,741,635) without psoriasis were analyzed in this study.
In conclusion, we observed a significant increase in the incidence of PD in patients with psoriasis compared with that in patients without psoriasis and a reduction in the risk of PD in patients receiving systemic treatment for psoriasis.
ALZHEIMER'S DISEASE RISK IN PATIENTS WITH PSORIASIS: A NATIONWIDE POPULATION-BASED COHORT STUDY
J.H. Lee, S.-H. Lee, K. Han, M. Kim

• **Background:** Alzheimer's disease (AD), the most common cause of dementia, is a chronic neurodegenerative disease. Although some studies have reported an association between inflammatory skin conditions such as rosacea and seborrheic dermatitis and neurodegenerative disease, no large-scale studies have explored the possible relationship between AD and psoriasis.

• **Objectives:** We investigate to determine the risk of AD in patients with psoriasis.
ALZHEIMER'S DISEASE RISK IN PATIENTS WITH PSORIASIS:
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Discussion

Psoriasis was associated with an increased risk of AD, with stronger associations observed in middle-aged than in elderly patients. Patients receiving systemic treatment had a significantly lower risk of AD than the control group or patients not receiving systemic treatment. These findings provide a better understanding of the role of inflammation in the pathogenesis of AD, suggesting a potential target for systemic anti-inflammatory drugs for the treatment of AD.
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