

Dermatology and trisomy 21 : introduction

- Dermatological conditions are frequent throughout the life of non-selected individuals with T21, with approximately 25% prevalence in children and adolescents and 50-60% in adults.
- Dermatological conditions in T21 include common skin conditions, conditions less frequently associated with T21, and conditions occurring sporadically.
- The skin phenotype in T21 includes xerosis, single transverse palmar crease, fissured tongue, and premature skin aging.
- The triplication of certain Hsa21 genes (AIRE, 4 of the 6 interferon receptor subunits, SOD1, APP, MX1, COL6A1) plays a significant role in the pathogenesis of certain dermatological conditions.
- Immune dysregulation, particularly autoimmunity and increased susceptibility to bacterial, fungal, and parasitic infections, contributes to the frequency and severity of several dermatological conditions associated with T21.
- Certain common comorbidities in T21, such as obesity, are associated with specific dermatological conditions like hidradenitis suppurativa, acanthosis nigricans, and psoriasis; hypothyroidism is often associated with Alopecia Areata.
- A thorough and systematic skin examination is essential, with the patient completely undressed, paying particular attention to "hidden areas" such as the scalp, armpits, groin, thighs, buttocks, and feet.

- Significant dermatological conditions should be referred to a dermatologist who can tailor the examination and treatment to the cognitive and behavioral challenges of individuals with t21.
- Recommendations for screening and follow-up of dermatological conditions in patients with T21 are rare for children and almost nonexistent for adults and should be the subject of further research.
- Comply with the current recommendations from the American Academy of Pediatrics for children (2022), and the French PNDS for Trisomy 21 (2020) for both children and adults, for the prevention and specialized management of dermatological conditions in individuals with t21.
- Recognize and address the impact of dermatological conditions like psoriasis, hidradenitis suppurativa, and Alopecia Areata on the quality of life and self-esteem of individuals with t21.