HAIR DISORDERS

CAUCASIAN MALE HAIR AGEING: COMPARISON WITH ANDROGENETIC ALOPECIA

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Introduction: Ageing in scalp and hair can overly androgenetic alopecia (AGA) changes seen in advancing age, especially in men.

Objectives: We tried to discriminate age effects from those of AGA in a Caucasian male population, with clinical and instrumental descriptors.

Material & method: 87 non-alopecic Caucasian men divided in 3 age groups: 25-35, 60-70 and 70+ years old were enrolled. 18 men with androgenetic alopecia (AGA) and age 60-70 and 70+ years old served as comparison.
Clinical assessment included global description, standardized photographs, and self-assessment of Quality of Life (QoL)
Instrumental measurements were performed with phototrichogram (PTG) and laser micrometer on 2 areas.
Statistical comparison used the Kruskal-Wallis and Wilcoxon tests, and ANOVA depending on the data.

Results: In the non-alopecic groups, with age, we observed ($p<0.05$) a decrease in hair density (especially thin hair (<40µm)), thickness, regrowth and cross-sectional area, a low impact on QoL, an increase of white hair density, no significant difference for anagen to telogen ratio (A/T).
In the AGA group, compared to non-AGA, we observed ($p<0.05$) a lower hair density, thickness, regrowth and A/T ratio (worsening with age), a greater impact on QoL and thin hair density (increasing with age).

Conclusion: Ageing is characterized by a maintenance of homogeneous but reduced hair density over the scalp, a greying phenomenon, slower regrowth, decrease in cross sectional area, no significant changes in the A/T ratio, and QoL. The vertex zone seems more affected, suggesting early signs of AGA.

In the AGA groups, changes are amplified on the vertex zone and the thin hair density increases. There is no worsening with age after 70 on the vertex zone but on the occipital one.
Ageing is different from AGA but it can overly and amplify clinically apparent alopecia explaining the difficulty to exclusively evaluate ageing processes.