HAIR DISORDERS

PREMATURE ANDROGENETIC ALOPECIA AS THE PHENOTYPIC EQUIVALENT OF PCOS

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Introduction: Early AGA in men is frequently reported as the phenotypic equivalent of polycystic ovarian syndrome (PCOS) in women.

Objective: To study the hormonal profile of men with premature AGA and to compare it with the profile of women with PCOS.

Materials and Method: Seventy men aged 19 to 30 years presenting with patterned hair loss were recruited as cases and 50 age-matched men with no evidence of hair loss were recruited as controls. The serum concentrations of total testosterone, sex hormone–binding globulin (SHBG), dehydroepiandrosterone sulfate (DHEAS), LH, FSH, prolactin, fasting plasma glucose, insulin levels, insulin resistance (IR) and free androgen index (FAI) were calculated and compared with age- and sex-matched controls.

Results: Compared with the 50 controls, the 70 participants with AGA showed significantly increased mean levels of testosterone (25.34 vs 21.28 nmol/L; P = .03), DHEAS (4.43 vs 1.62 µg/mL; P = .04), LH (6.84 vs 3.67 mIU/mL; P < .001), and prolactin (12.23 vs 8.34 ng/mL; P = .02) and decreased mean levels of FSH (5.06 vs 7.02 mIU/mL) and SHBG (31.21 vs 42.37 nmol/L; P < .001). The mean FAI and LH/FSH ratio were was also increased in the AGA group.
These hormonal parameters resemble the well-known profile of women with PCOS. The mean insulin levels were also increased in cases as compared to controls (7.54 vs 4.34 µIU/mL; P = .04). There was no statistically significant association between hormone levels and AGA or IR grade severity.

Conclusion: Men with early AGA could be considered as male phenotypic equivalents of women with PCOS. They can be at risk of developing the same complications associated with PCOS, including obesity, insulin resistance, metabolic syndrome.