Androgen excess in women: Not just a cosmetic problem

Hyperandrogénie féminine : pas seulement un problème esthétique

At the 2008 meeting of the French Society of Endocrinology (SFE), a consensus conference has addressed the issue of Androgen Excess (AE), a very common situation in women of reproductive age and sometimes later. Beyond the symptoms (acne, hirsutism, alopecia) that could be viewed as benign, AE carries more threatening risks such as infertility, cardiovascular and metabolic diseases and cancer, depending on the aetiologies.

The hormonal investigation of AE was the first topic addressed at the conference. It was considered that it should not aim at confirming the clinical symptoms. Conversely, it must be used for detecting AE when it is clinically absent in some situations such as infertility due to ovulation disorder. It is mainly useful for the differential diagnosis of Polycystic Ovary Syndrome (PCOS) diagnosis criteria of which (see below) should be applied only after exclusion of more threatening diseases such as androgen-secreting tumors or Cushing’s syndrome. Therefore, a gradual and cost-effective strategy must be followed, as proposed in the following review by Michel Pugeat and colleagues.

PCOS is by far the most frequent cause of AE (80–90% of all cases). Its definition remains conflicting but in Europe, the so-called Rotterdam definition prevails. Five years after its founding in 2003, this definition has been recognized to be still valid by the consensus conference at the SFE meeting. Beyond the diagnosis issue, PCOS also raises concerns about metabolic (mainly type 2 diabetes) and cardiovascular risks, through insulin resistance that should be detected as early as possible. However, this detection should lie on simple and inexpensive means, as developed by myself and colleagues in a following review.

The clinical presentation of the non-classical adrenal hyperplasia (NCAH) due to 21-Hydroxylase deficiency often mimics PCOS. However, it is crucial to recognize this diagnosis that carries genetic and endocrine concerns, as described in the review by Jacques Young and colleagues. They propose a wise strategy for an optimal compromise between an exhaustive but costly screening and a cost-less but occulting attitude.

Beside specific treatments depending on the aetiology, anti-androgens are the corner stone of the treatment of AE. Cyproterone acetate is the most commonly used molecule and the expert group led by Anne Bachelot gives here some recommendations about its use, although few evidence-based data is available in the literature. Other drugs are available, to be used with caution in France since they are not marketed for the treatment of AE.

Lastly, the use of metformin, an insulin-sensitiser, for improving the symptoms and the infertility of PCOS still raises many controversies. The expert panel piloted by Sophie Christin-Maître has, however, proposed some recommendations that were derived from the few evidence-based data available so far. Obviously, we still lack large-scale prospective studies to definitively conclude about this difficult issue.

All the recommendations concerning the five topics developed during this conference were discussed by the whole group and thereafter publicly approved at the meeting. On behalf of all the experts participating to this conference, I would like to thank the SFE and the editorial board of the Annales d’Endocrinologie for giving us the opportunity to present our collective work about this difficult but exciting issue of AE. We hope that these recommendations will be proven useful for all the practitioners that take care of women with AE.

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