INFLUENCE OF HORMONAL FACTORS ON WOMEN WITH HIDRADENITIS SUPPURATIVA

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INTRODUCTION:

Hidradenitis suppurativa (HS) affects 3 women for 1 men, but contrary to other chronic inflammatory skin diseases such as psoriasis, impact of homonal factor on HS has poorly been evaluated.

MATERIAL AND METHODS

Epiver was a prospective multicenter cohort study including 1428 HS patients, objective of which was to describe the epidemiology of HS (1). We performed a subanalysis, inlcuding all women (n=884) to evaluate the impact of hormonal factors (pregnancy, post partum, menopause, menstrual cycle) on HS and to describe the use of contraception and number of pregnancies in women with HS.

RESULTS

Among the 884 women in the Epiver study, the mean age was 33.1 +- 11.1 years, with 690 women of childbearing age (18-45 years), 47 women under 18 years. Mean age of onset of HS was 20.9+-8.5 and mean age of diagnosis was 28.6+-10 years. 452 (51.1%) women have been pregnant at least once with a mean of 2.0+-1.0 pregnacies per women. For the entire population (n=884) the mean number of pregnancy per women was 1 +-1.2. 446 women had a contraception: oral n=286 (64.4%) of which cyproterone acetate n= 31, physical contraception (condom, diaphragm) n= 18 (4.1%), intrauterine device n= 104 (23.4%) (of which 33 hormonal IUD), implant n= 35 (7.9%). Eighty women were menopausal. Among the 452 women with history of pregnancy, 61.4% reported no impact of pregnacy on HS activity, 23.3% reported an improvement and 15.3% a worsening ; 57.6% reported no impact of post partum on HS activity, 40.3% a worsening and 2.1% an improvement. Among the 80 menopausal women, 72.1% reported no impact of menopause on HS activity, 19.7% a worsening and 8.2% an improvement. 63.1% of women reported no impact of menstrual cycle on HS activity, 0.4% an improvement and 36.5% a worsening, mostly (68.5%) in second part of the menstrual cycle.

CONCLUSION:

In our study, 6 out of 10 women reported no impact of hormonal factors on HS activity. For women with modification of HS activity correlated to hormonal factors, 60% presented an amelioration during pregnancy, 95% a worsening during post partum and 70% a worsening after menopause (but the number of post menopausal women was limited). Contraceptives methods used by women in our study were not comparable of theses of French general population with an overrepresentation of oral contraception (64.4% versus 36.5% in general population). This could be explained by the favourable impact of antiandrogens and oestrogens on HS. Number of pregnancy per women in our study was much lower than in French general population (mean number of child per women in France : 1.87). Several reasons can ben hypothesized : worries about carrying a baby because of HS or its treatments, more HS women beeing single compared to general population, impact of HS on fertility (directly or due to comorbidties as polycystic ovary syndrome)….

Limitations of our survey include recollection bias given the nature of the study, and the lack of a control group. However, the strength of this study is its large sample size.
Our study brings more informations about the impact of hormonal factors on women with HS. It underlines a much lower fertility rate compared to general population. Deeper investigations are needed to understand the reasons.

References:
[1] Perrot JL, Maccari F, Guillem P, Fougerousse AC, Nassif A, Beneton N, et al.. How to Define Mild to Severe Hidradenitis Suppurativa? A Simple New Tool Based on Latent Class Analysis of EPIVER Data Study. Clin Cosmet Investig Dermatol. 2022 Jun 16;15:1091-1103.