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on behalf the GEM ResoVerneuil

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INTRODUCTION

Hidradenitis suppurativa (HS) affects 3 women for 1 men; however, impact of hormonal factors on HS has infrequently been evaluated.

MATERIAL AND METHODS

A prospective multicentre cohort study conducted by 150 physicians involved in HS management, included all consecutive patients with HS seen in consultations. Anonymously recorded clinical examination data was collected using standardized case report forms. We performed an analysis including all women, to evaluate the impact of hormonal factors on HS and to describe the use of contraception and the number of live births.

RESULTS

Characteristics of the 884 women are detailed in Table 1. 63% of women reported no impact of menstrual cycle on HS activity, 0.4% an improvement and 36.5% a worsening, mostly in second part of the menstrual cycle. There was a statistical association between the use of oral contraception (OC) and premenstrual HS flareup (27.8% vs 21.6% in women without OC, p=0.047). 452 women have had at least one living birth. Considering the women of childbearing age, the mean number of living birth per women was 1.0+/-1.2. Among theses, 61.4% reported no impact of pregnancy on HS activity, 23.3% 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. A higher proportion of women with pre-menstrual HS flareup (20,7%) had a worsening of HS during pregnancy. Among the menopausal women, 72.1% reported no impact of menopause on HS activity, 19.7% a worsening and 8.2% an improvement.

	n= 884
Mean age (years)	33 ± 11.1
Repartition according to the age (n,%)	
- < 18 years	47 (5,3)
- 18 to 45 years	690 (78)
- > 45 years	146 (16,5)
- MD	1
Mean age of HS onset (years)	20.9±8.5
Hurley stage (n,%)	
- I	421 (47,6)
- II	352 (39,8)
- III	111(12,6)
Type of contraception (n,%)	
- None	353 (39,9)
- Oral contraception	286 (32,3)
- Intrauterine device	104 (11,8)
- Implant	35 (3,9)
- Physical contraception	18 (2)
- MD	8 (0,9)
- Menopausal women	80 (9)

Table 1: Characteristics of the 884 women in the Epiver study

MD: missing data

CONCLUSION

6 out of 10 women reported no impact of physiological hormonal variations on HS activity. Only 36.5% of women reported HS flare-up related to menstrual cycle, contrary to recent smaller studies with web-based questionnaires in which 62.4 to 76.7% of women reported HS worsening with menses. Use of OC was associated in our study with a higher rate of premenstrual flareup of HS, suggesting an impact of hormonal treatment. Pregnancy was more likely to cause no change in HS activity. Available data on pregnancy influence on HS activity are contradictory: 2 studies reporting no effect in 53.1 and 72% of women, 2 reporting an improvement in 36.6 and 45%, and 1 reporting a worsening for 61.9%. Less women in our study had worsening of HS in post-partum than previously described (66.1-69%). Improvement of HS after menopause, which has been previously described is questioned by our results and the low rate of improvement (16.5%) in a recent study. However, we can't rule out highly improved post-menopausal women no longer consult and were not captured in our study.

We found an overrepresentation of oral contraception compare to French general population (64.4% vs 36.5%).

The number of live births per women in our study was much lower than in French general population (1.87). Several reasons can ben hypothesized: more HS women being single, sexual dysfunction, impact on fertility, higher rate of spontaneous abortion, worries about being pregnant, incompatibility of HS treatments with pregnancy....

Limitations of our survey include recollection bias given the nature of the study, the absence of detail about the type of oral contraception. Evaluation of fertility in HS women was not possible.

However, the strengths of this study are its large sample size and the collection of the data by a physician.

Our study illustrate the limited impact of physiological hormonal variations on HS activity. It underlines a much lower fecundity rate compared to general population.