CHARACTERISTICS OF PATIENTS WITH PEDIATRIC ONSET HIDRADENITIS SUPPURATIVA

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INTRODUCTION

Pediatric onset of hidradenitis suppurativa HS occurs in 2.2 to 38.3% of cases. Differentiation with adult-onset HS is controversial with recent data suggesting a clinical spectrum comparable in the two populations in studies with small number of pediatric onset HS, and a high frequency of comorbidities in a retrospective study of 481 patients with pediatric onset HS.

MATERIAL AND METHODS

Epiver was a prospective multicentric cohort study including 1428 HS patients, objective of which was to describe the epidemiology of HS. In this ancillary study we compared the demographic and clinical characteristics of HS patients according to the age of onset (pediatric : <18 years, or adult).

RESULTS

Among the 1428 patients included in the Epiver study (3), age of onset of HS was available for 1384, with 528 patients with pediatric onset (mean age at inclusion 28.7+-10 years) and 856 patients with adult onset of HS (mean age at inclusion 36.5+-10.5 years, p<0.001). Mean age of onset of HS symptoms was 14.5+-2.1 years in pediatric onset group, and 25.7+- 7.7 years in adult onset group. Mean age of diagnosis was 24.1+-8.9 years in pediatric onset group, and 31.9+- 9.3 years in adult onset group.

Pediatric onset group comprised more women (70.3%) compared to adult onset group (56.1%, p<0.001). More patients in the pediatric onset group had familial history of HS (28.2% versus 22.8%, p=0.024) or familial history of pilonidal cyst (14.6% versus 10.1%, p= 0.011). More patients in the adult onset group were smokers (82.1 versus 67.8%, p<0.001). No significant difference in cannabis use was identified between the two groups, with 20.5% of cannabis users in the pediatric onset group and 19% in the adult onset group. Numerically more patients in the adult onset group had familial history of chronic inflammatory rheumatism (6.2% versus 3.8%, p=0.051).

There was no difference according to BMI between the two groups (mean BMI 27.45+-8.26 in pediatric onset group, 27.82+-8.27 in adult onset group, p=0.122). Repartition according to Hurley stage was similar between the two groups (with respectively 46.7 and 42.8% Hurley I stages, 39.4 and 40.5% Hurley II and 14 and 16.7% Hurley III in pediatric onset and adult onset HS groups).

Patients with pediatric onset HS had more frequently HS lesions in inguinal folds (76.7 versus 71.4%, p=0.029), mammary region (6.1 versus 3.3%, p=0.013), face (29.5 versus 22.9%, p=0.006), trunk (18.6 versus 13.7%, p=0.015) and legs (5.9 versus 3.3%, p=0.020). Patients with adult onset HS had more frequently HS lesions in genital area (36.1 versus 28.6%, p=0.004) and scalp (4.4 versus 2.3%, p=0.036). Pain (evaluated by visual analogic scale from 0-10) was more important in the pediatric onset group (5.7+-3.3) than in the adult onset group (5.3+-3.3, p= 0.047). Impact on quality of life (evaluated with Dermatology Life Quality Index) was important but comparable between the two groups (12.7+-7.3 in pediatric onset group versus 12.4 +-7.3 in the adult onset group, p= 0.450).

More patients in the adult onset group had associated inflammatory bowel disease (4.7% versus 1.7%, p=0.004), dyslipidaemia (8.4 versus 3.2%, p<0.001) and diabetes mellitus (5 versus 1.1%, p<0.001). Frequency of associated diseases as pilonidal cyst (33.3% in pediatric onset group, 30.5% in adult onset group), acne (respectively 36.9 and 33.6%), chronic inflammatory rheumatism (respectively 5.5 and 4.9%), hypertension (respectively 5.1 and 7.6% were comparable between the two groups.

CONCLUSION

Our study confirms the feminine predominance and the frequency of familial HS history in pediatric onset HS. Contrary to the large retrospective study with a predominance of North America centers, we did not show a high prevalence of comorbidities in patients with pediatric onset HS. In our study the mean diagnostic delay was 9.6 years in the pediatric onset group, much longer than in the study of Liy-Wong et al. (2 years) and closer to the average diagnostic delay in France (8.4 years). No difference of severity (evaluated by Hurley staging or DLQI) was identified according to the age of onset of HS. In our study, localization of HS lesions differs according to the age of onset with more patients with follicular lesions (face, trunk, legs) and lesions of the inguinal folds or mammary area in the pediatric onset group.

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 and the examination by physicians implicated in HS management.