

COMMENTARY

Incidence of self-reported hidradenitis suppurativa – a commentary

Hidradenitis suppurativa (HS) is a disabling disease that in the last 10 years has attracted a significant interest in the scientific community. The initial drive was mostly based on the paucity of epidemiological data, the wide spectrum of disease severity and the poorly defined pathogenesis.¹ With time, HS incidence and prevalence data have emerged, with new cases registered worldwide (likely related to more disease awareness), and significant improvement has been reached on the pathogenesis, diagnosis and treatment.

HS epidemiology remains a very active area of interest, and numerous papers have been published from different countries including Europe, Africa and the United States.^{2–4} A recent Danish study has shown a HS prevalence of 1.8% in 27765 blood donors,⁵ and many of the authors have also participated in the article ‘Incidence and remission rates of self-reported hidradenitis suppurativa - a prospective cohort study conducted in Danish blood donors’⁶ object of the present commentary.

In general, self-reported prevalence in population studies is higher compared to physician-diagnosed registry, but this study is well-designed as the questionnaire is constructed to match specific clinical features. A total of 23930 blood donors were screened in 2015 and in 2018 using a questionnaire designed to cover the HS major diagnostic criteria and to identify the remission rate during the interval period.

To be considered screen-positive, interviewed subjects had to positively report: boil formation in intertriginous skin areas (clearly specifying which one) and at least 2 boils in the previous 6 months. Localization was used to stratify participants according to the number of affected areas (1, 2 or ≥ 3). This prescreening selection was important to exclude any false-positive HS case.

The results obtained from the two screenings, that underwent an accurate statistical analysis, were interesting.

The study showed an incidence rate of self-reported HS of 10.8/1000 person-years (95% CI: 9.9–11.7), that is nearly 100 times higher than the incidence rate previously of 11.4/100 000 person-years (95% CI: 11.1–11.8) reported in a US study.⁴

The reasons for such discrepancy may be due to different data sources (health case records of insured or self-paying patients in the United States vs self-reported cases in Denmark). However, when data were stratified, considering patients with ≥ 3 areas

affected, the incidence rate dropped to 1.3/1000 person-year, only 10 times higher than those from the United States,⁴ in line with the known levels of underdiagnosis.

As regards self-reported HS remission, the study depicts the natural progression of HS symptoms over a course of up to 4.4 years and shows an annual remission rate of symptoms of 25.7%, but only 15.6% for those with self-reported HS from ≥ 3 areas. Smoking reduced the likelihood of remission, whereas female patients’ weight loss increased the likelihood of remission.

In conclusion, the study shows that remission is something that clinicians should take into consideration even in patients with 3 or more disease localization. These data likely reflect those from real world in which many patients report wax and wane or long remittance periods. Interestingly, the high incidence and remission rates in self-reported HS subjects indicate that most of them are likely going to be undiagnosed. This study also suggests that self-reported assessment, if well-designed and conducted, may provide interesting data that may match, with accurate interpretation, those from conventional studies thus having the advantage of being cost-effective, less time-consuming and able to reach a large number of subjects.

Finally, whether the participants who reported clinical remission in the second questionnaire underwent any type of treatment is not known, and the study was designed for healthy blood donors only, thus creating a possible bias. These 2 issues likely need to be considered in designing future epidemiologic studies.

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Conflict of interest

None to declare.

Data availability statement

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

G. Micali* 

Dermatology Clinic, University of Catania, Catania, Italy
*Correspondence: G. Micali. E-mail: gimicali1@hotmail.it

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References

- 1 Micali G. Hidradenitis suppurativa: the Italian experience. *J Eur Acad Dermatol Venereol* 2019; **33**(Suppl 6): 3.
- 2 Ingram JR. The epidemiology of hidradenitis suppurativa. *Br J Dermatol* 2020; **183**: 990–998.
- 3 Jfri A, Nassim D, O'Brien E, Gulliver W, Nikolakis G, Zouboulis CC. Prevalence of hidradenitis suppurativa: a systematic review and meta-regression analysis. *JAMA Dermatol* 2021; **157**: 924–931.
- 4 Garg A, Lavian J, Lin G, Strunk A, Alloo A. Incidence of hidradenitis suppurativa in the United States: A sex- and age-adjusted population analysis. *J Am Acad Dermatol* 2017; **77**: 118–122.
- 5 Theut Riis P, Pedersen OB, Sigsgaard V *et al.* Prevalence of patients with self-reported hidradenitis suppurativa in a cohort of Danish blood donors: a cross-sectional study. *Br J Dermatol* 2019; **180**: 774–781.
- 6 Kjaersgaard Andersen R, Loft IC, Hansen T *et al.* Incidence and remission rates of self-reported hidradenitis suppurativa - A prospective cohort study conducted in Danish blood donors. *J Eur Acad Dermatol Venereol* 2022; **36**: 717–725.

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