Who are the hidradenitis suppurativa patients aged 50 and over?

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Background

Hidradenitis suppurativa (HS), is a chronic inflammatory skin disease characterized by recurrent abscesses and fistulas located in the major folds of the body[1]. It is often associated with comorbidities such as metabolic syndrome[1], depression[1], or inflammatory bowel disease (IBD)[2]. Diagnostic challenges are not uncommon, leading to delayed diagnosis and intervention. Typically, the disease onset occurs after puberty, around the age of 22, and is considered as "late" if it occurs after 28 years[4]. HS usually attenuates after the age of 50[1] and after menopause[3]. However, patients over 50 with an active disease are not uncommon, and available data outside the usual range of age, particularly for the elderly patient, are limited[4]. Moreover, after this age, cardiovascular diseases and other comorbidities become significantly more frequent than in the general population[5], complicating patient management and follow-up.

We aim to study a population of HS patients aged 50 and over to better characterize their comorbidities, associated pathologies, risk factors, and clinical phenotypes of their HS. The goal is to anticipate and better adapt their management.

Materials and methods

Data was extracted from the **European Registry for Hidradenis Suppuraiva (ERHS-Be)** completed by dermatologists during consultations with HS patents from *Erasme Hospital*. Our analysis focuses on HS patents that were registered in the ERHS after the age of 50.

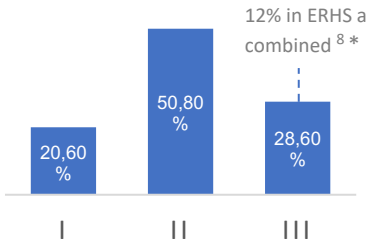
Results

Demographic datas	
Total of patients included	68 (of 700 patients)
Mean age	57.8 y
Mean age at onset	**30 y**
Mean diagnostic delay	**20 y**
Sex ratio	**42.6 %** Men **57.4 %** Women
BMI	29.1 kg/m^2
Family History of HS	35 %

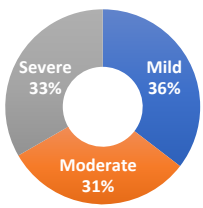
Others comorbidities	Yes	Total	%
Inflammatory bowel disease	6	60	**10 %**
History of depression	29	69	**45.3 %**
Other dermatoses : - Eczema - Psoriasis	 10 13	 68 64	 14.7 % 20.3 %
Arthritis / painful joints	32	64	**50 %**
Pilonidal cyst	16	64	**25 %**

Comorbidities and cardiovascular disease	Yes	Total	%
Diabetes	14	68	**20 %**
Dyslipidemia	17	68	**25 %**
Hypertension	22	68	**32.4 %**
Cardiac arrhythmia	8	68	**11.8 %**
Ischemic heart disease	4	68	**5.9 %**
Smoking status:			
Never smoking	6	65	**9.2%**
Quit smoking	13	65	**20 %**
Current smoker	46	65	**70.8 %**

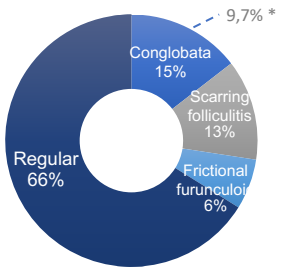
Treatments	Yes	Total	%
Systemics antibiotics	29	68	58.8%
Adalimumab	8	68	**11.8 %**
Wide excisions	12	68	**17.6 %**



Hurley score[7] – 66 patients



IHS4 score - 48 patients



Dudink et al. Phenotypes[9] – 62 patients

Discussion

The **age of HS-onset** is later, around **30 years**, with a significant **diagnostic delay** of **20 years**. Even though these data are self-reported by patients, this trend is observed in studies focusing on older HS-patients[6]. HS typically attenuates after the age of fifty[1], but 79.4% of the studied patients have a Hurley score[7] of II or III, and 2/3 are moderate to severe according to the IHS4 score[7], revealing a highly active disease. There are also more Hurley III than in our all-ages total cohort from this registry **(ERHS)** [8]. HS attenuates with menopause[3], which may explain the slight decrease in the female predominance. The **phenotypes** according to Dudink[9] are almost distributed as in literature, except the "**conglobata**" type which is more frequent[9], also compared with our all-ages HS-cohort[8]. A **family history** of HS is present in 35%, slightly higher than the standard HS population, and once again found in older HS-patients[6]. Contrary to our expectation, the frequency of **cardiovascular diseases** isn't particularly high compared to the general population in Belgium considering the middle age of our population[5]. These comorbidities are probably under-diagnosed in our patients. **Diabetes,** however, is slightly above the norm for age, also well above the 6% found in our all-ages registry[8]. There is also a very high prevalence of patients with a history of **depression** and/or **arthritis**.

The well-known association between HS and **inflammatory bowel disease (IBD)**[2] is more important here, with 10% of patients studied having IBD. Despite recruitment bias (our hospital is a reference center for IBD), the importance of this association would require regular screening for digestive symptoms, especially since anti-IL 17 drugs (contraindicated in IBD[10]) are increasingly prescribed for HS.

A longer exposure period to risk factors in older individuals can explain the frequency of comorbidities compared to younger ones. Moreover, like many other inflammatory dermatoses, inflammation is not confined to the skin and has a systemic impact[1].

Regarding **treatments**, only few patients have benefited of biological therapy (exclusively Adalimumab) and wide excision, which are nevertheless considered among the most effective long-term treatments.

Conclusion

HS patients aged 50 and over seem to differ by their **later age of onset**, the significant **delay in diagnosis**, their **comorbidities** and the **type of involvement**. Defining precisely this population requires a comparative study with a younger HS-cohort, which we are currently working on, thanks to the ERHS. This would allow us to detect comorbidities earlier and anticipate them through primary prevention. This would also help to design an appropriate and more specific care pathway.

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