

Materials and Methods

Study Population

A retrospective cohort review of HS management was performed on patients from the Department of Dermatology at Inselspital University Hospital in Bern. The study period ranged from July 2015 to March 2017. Patients without a definitive diagnosis of HS were excluded. This study was performed in accordance with the standards of the Ethical Committee of the Canton of Bern (KEK No.: 2016-01028) on human experimentation and with the Helsinki Declaration of 1975, as revised in 1983.

Procedures

Collected data can be classified in 4 main categories, as follows: (1) general information about the patient (age, gender, body mass index, tobacco smoking, family history, and comorbidities); (2) disease characteristics like the age at onset, the date of the first medical diagnosis of HS, localization, and disease severity (Hurley stages); (3) previous treatments (surgical management, topical nonantibiotic treatment, topical antibiotic treatment, the most frequent systemic antibiotics prescribed for HS, systemic and intralesional corticosteroids, and several biologics); (4) current treatments or, alternatively, the most recent ones. In addition, the duration and therapeutic efficacy of treatments, categorized as clear, partial or nonresponse, were collected.

Special attention was given to the psychosocial condition of patients. Therefore, every patient was allocated to one of the following employment categories: professionally active, seeking work or out of the labor market (disability insurance, social welfare, housewives, asylum seekers, or retired people). Past work disabilities due to HS were recorded as well.

Statistical Analysis

Data were presented as medians with interquartile ranges or numbers with percentages for continuous and categorical variables, respectively. For analysis purposes, continuous variables were categorized by using clinically meaningful values as cutoff points. Mann-Whitney U and Pearson χ^2 tests, or the Fisher exact test where required, were used to compare continuous and nominal variables, respectively, in univariate analyses.

Age- and gender-standardized prevalence rates were computed according to the direct standardization method [17], by using the 2016 Swiss census data as the reference population. The frequency distribution of selected variables within the study sample was compared with the distribution in the general population by using standardized prevalence ratios along with their 95% confidence intervals (CI) and *p* values.

Baseline variables with *p* values <0.10 in the univariate analysis were then evaluated in 2-stage hierarchical multiple logistic regression models with a forward stepwise selection algorithm to assess which factors were independently associated with HS severity and therapy response. In the first stage of the model, demographics and general variables were considered for inclusion, while in the second stage clinical characteristics, comorbidities as well as recent treatments for HS were evaluated. The effects of selected factors were expressed in terms of odds ratios along with their 95% CI and *p* values. All tests were considered significant at *p* < 0.05. The analysis was carried out using SPSS software, version 20.0 (IBM, Armonk, NY, USA).