A prospective study of Vulvar Dermatitis analysing clinical sub-types and distinguishing features

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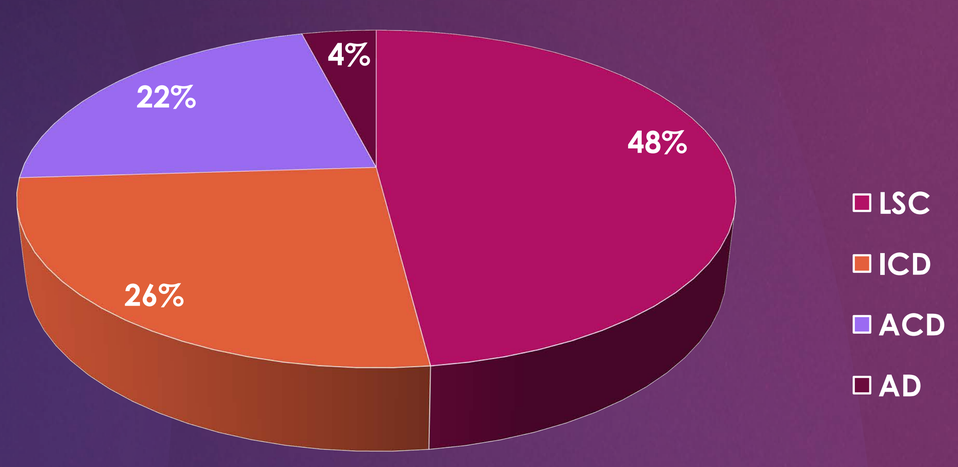
BSSVD The British Society for the Study of Vulval Disease

1. Introduction: Vulvar dermatitis is a relatively common condition with women presenting to variety of healthcare professionals including General Practitioners, Genito-urinary Medicine Physicians, Gynaecologists and Dermatologists. The aetiology is usually multifactorial and cases are often associated with considerable diagnostic delay(1). In this prospective study (REC: 17/EM/0308) we sought to identify the main clinical phenotypes and key diagnostic features for each subtype including Atopic Dermatitis (AD), Lichen Simplex Chronicus (LSC), Irritant Contact Dermatitis (ICD), Allergic Contact Dermatitis (ACD) and Seborrhoeic dermatitis (SD).

2. Methods: Of 25 patients screened from General Dermatology and Vulvar clinics between 2017-2019, 23 attended an initial assessment appointment which included a detailed history, full skin examination, psychological assessment (HADS/DLQI score), tissue biopsy, blood tests, vulvar and vaginal MCS swabs. Women attending clinic were offered treatment, referred for patch testing and invited to a 3-month follow-up.

Figure 1: Clinical subtypes of vulvar dermatitis



3. Results: The mean age of participants was 40.8 years (age range 23 - 62); of which 56.5% were pre-menopausal. The predominant complaint was vulvar itch (21/23) with symptom duration of 4 months - 30 years (mean 5.8 years, increasing to 13.7 years in those with a history of AD). The clinical subtypes of vulvar dermatitis identified are depicted in Figure 1. Clinical features were isolated to the vulva in 13/23 (56.5%) cases, whereas extra-genital manifestations of associated dermatitis were present in others (Figure 2). Erythema of the labia majora correlated with LSC, whereas AD and ICD were strongly associated with erythema of the labia minora and inter-labial folds.

Histopathology was consistent with dermatitis in all patients. Patch-testing revealed positive reactions in 15/18 (83.3%) cases; of which 55.6% were thought to be caused by clinically relevant allergens represented in Figure 3.

Vulval and high vaginal swabs detected candidal overgrowth in 5 patients, with all cases receiving treatment subsequently.

Several vitamin and mineral deficiencies were uncovered, most commonly ferritin (3/20 cases; ref <15 µg/L), Vitamin D (4/20; ref <25 nmol/L) and zinc (3/20; ref < 9.6umol/L).

Of note, depilation of pubic body hair was practiced by 21/23 (91.3%) of women and sanitary wear (panty liners, sanitary napkins and tampons) worn by 16/23 (69.6%); both strongly correlated a diagnosis of LSC and ICD.

The psychological sequelae of this condition are well documented (2). In our study the average DLQI improved from 9 to 6.1 after intervention, whereas the Hospital Anxiety and Depression score (HADS) remained static.

Figure 3: Positive patch tests and relevant allergens

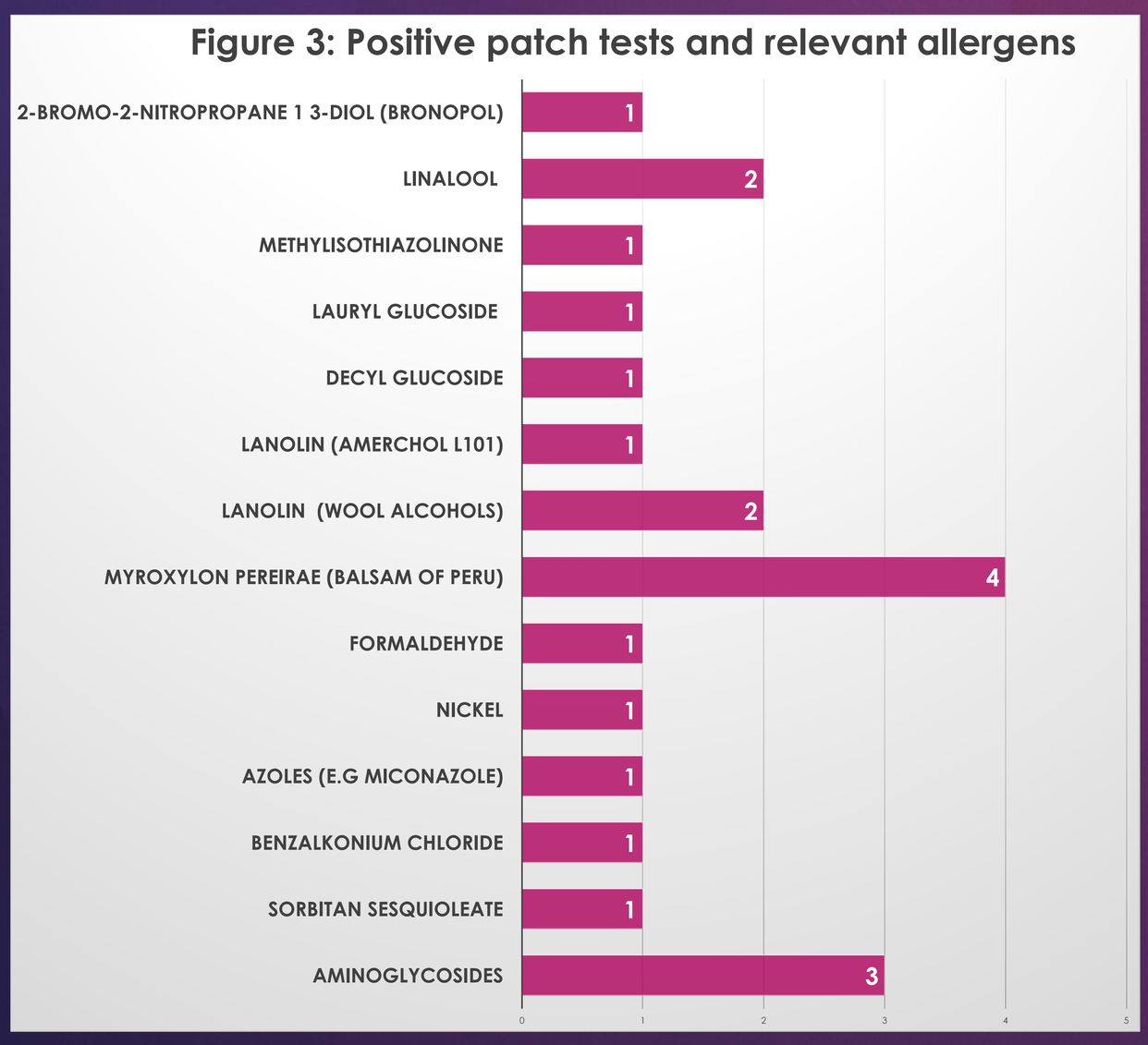
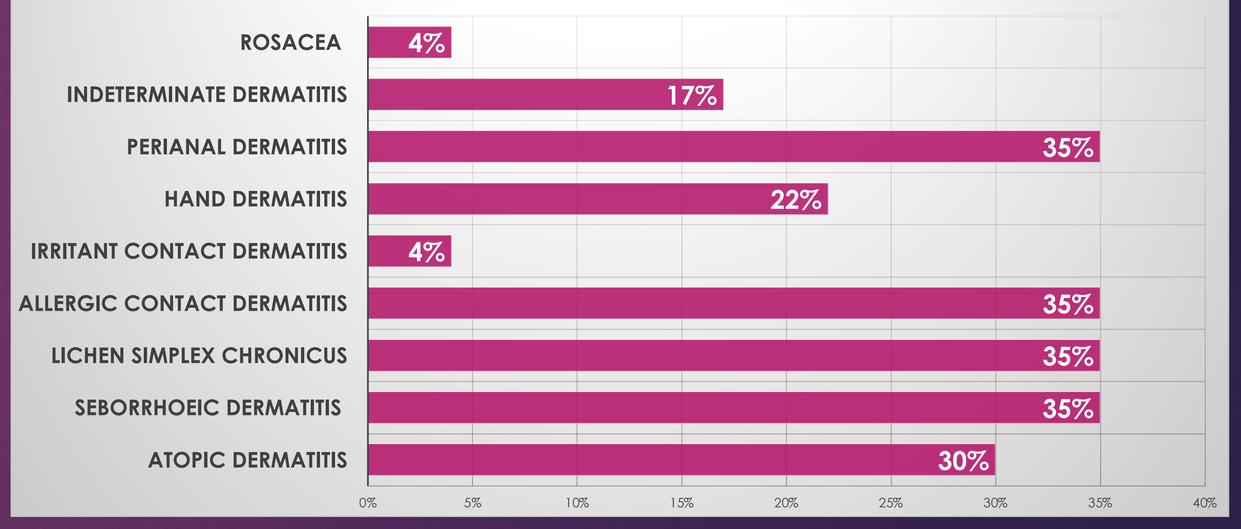


Figure 2: Concurrent extra-genital dermatitis



4. Conclusions: Our study identified the distinct clinical subgroups commonly presenting as vulvar dermatitis. Many cases demonstrated prolonged diagnostic delay, suggesting education of allied healthcare professionals and close collaboration in clinical settings is vital. Patch testing is recommended in all patients with vulvar dermatitis, as our data suggests allergens may be more relevant in the aetiology than previously cited in the literature.

References

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