Case 23
A 21-year-old Thai woman from Bangkok

Chief complaint: Multiple asymptomatic papules on perivulvar area for 2 months

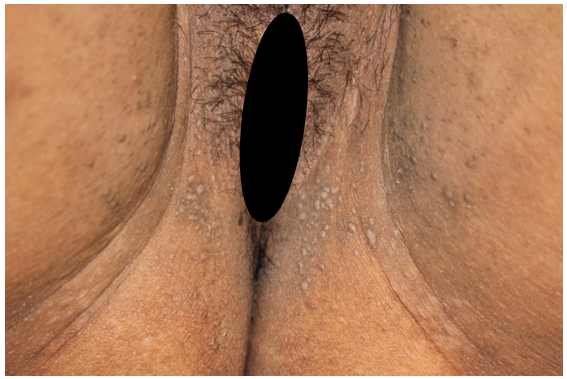

Fig 23.1

Present illness:
The patient presented with multiple asymptomatic papules, gradually increased in number, on perivulvar area and both inner thighs. There was no other cutaneous, mucosal or nail abnormality. She denied any previous treatment or trauma. There was no history of similar lesion in her family members.

Past history: Graves' disease currently on methimazole

Physical examination:

- HEENT: Anicteric sclera, no oral mucosal lesion
- Lymph node: Not palpable
- Lungs: Normal breath sound, no adventitious sound
- Abdomen: No hepatosplenomegaly

Dermatologic examination: (Fig 23.1**)**
Multiple hyperkeratotic, skin-colored, flat-topped papules on perivulvar area and both inner thighs

Histopathology (S18-19815A, skin, Lt. thigh) (Fig23.2)

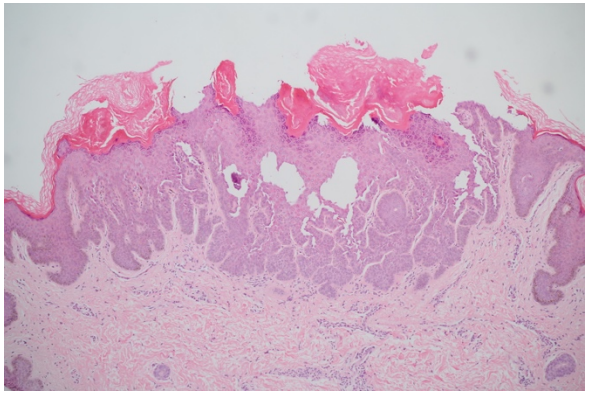

Fig23.2

- Hyperkeratosis, hypergranulosis and papillomatous epidermal hyperplasia with focal acantholytic dyskeratosis in the epidermis

Diagnosis: Papular acantholytic dyskeratosis of the vulva

Treatment:

- Reassure the patient of benign nature of the disease

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Discussion:

Papular acantholytic dyskerotosis of the vulva (PAD) [synonyms: genitoperineal papular acantholytic dyskeratosis, papular acantholytic dyskeratosis of the anogenital/genitocrural area, papular acantholytic dermatosis] is a rare sporadic benign condition. It was first described in 1984 by Chorzelski et al. To date, less than 50 cases have been reported in the literature.[1]

The pathogenesis is still unknown. A moist, high-friction environment has been suggested as a predisposing factor.[2] This condition appears to be sporadic, family history is negative in most cases. However, genetic mutation has been found in some PAD cases. Pernet et al.[3] reported case of familial PAD in a daughter and mother affected with pruritic genitoperineal PAD. They also found heterozygous *ATP2C1* mutation and considered this condition as being alleic to Hailey-Hailey disease. Later, Knopp et al.[2] reported a 62-year-old woman with 5-year history of itchy PAD on genital area, central chest and inframammary area. They found missense mutation of *ATP2A2* and proposed PAD as a somatic mosaicism of Darier disease.

PAD typically presents in second to fifth decades of life, with a mean age of 46.5 years. There is a female predilection with no ethnic preference.[1] Congenital and pediatric female cases have also been described.[4] Duration between the age of onset and diagnosis ranged from 2 months to 40 years.

The typical manifestation of PAD is hyperkeratotic white, skin-colored to erythematous papules, some lesions can coalescent into plaques. The size of the papules is typically approximately 3-5 mm. The lesions are most commonly found in the anogenital area and may extended to crural area. PAD patients usually have pruritus and/or burning sensation in the affected area, but up to one-third of patients can be asymptomatic.[5]

Histopathology shows suprabasal cleft and dyskeratotic cells, as seen in both Hailey-Hailey disease and Darier disease, but with varying degree of the acantholytic areas and the quantity of dyskeratotic cells. Other reported histopathological changes include hyperkeratosis, acanthosis, parakeratosis, superficial perivascular lymphocytic infiltrate, hypergranulosis and papillomatosis.[4],[6],[7]

The clinical differential diagnosis of PAD includes genital condyloma, bowenoid papulosis, fordyce spots, seborrheic keratosis, dermatosis papulosa nigra, lichen planus, lichen amyloidosis, milia and molluscum.[8] The pathological differential diagnosis include Darier disease, Hailey-Hailey disease, warty dyskeratoma and Grover's disease.

The diagnosis of PAD requires both clinical and histopathological correlation. Our patient has multiple asymptomatic hyperkeratotic skin-colored papules limited to perineal area. No similar skin lesion among her family members. The histopathology showed focal acantholytic dyskeratosis. The differential diagnosis are Hailey-Hailey disease and Darier disease, which typically present in adolescent with macerated or crusted erosions on intertriginous area and with confluent, keratotic, red or brown papules mainly on seborrheic area, respectively.[8] In the literature, there were two cases of localized Darier disease of the vulva,[9],[10] however Wong and Mihm[6] suggested that the commonly involved sites in localized or segmental variant of Darier disease are the trunk or extremities. So, those two cases may not actually be localized Darier disease. Thus, the diagnosis in our patient should be papular acantholytic dyskeratosis of the vulva.

Treatment of PAD may not be required because of the benign nature of disease. Asymptomatic patients are usually observed. Treatment of PAD is challenging and mostly limited to case reports. Topical and/or systemic corticosteroids are the common first-line therapy for symptomatic patients with varying outcomes. Topical retinoids and topical immunomodulators such as tacrolimus have been used with variable success. Oral retinoids showed a complete resolution in two cases.[11],[12] Excision, ablative laser and cryotherapy have also been used. Although this condition tends to be persistent, two cases of spontaneous resolution have been reported.[4],[13]

References

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