Fox-Fordyce disease: A report of 2 cases responding to topical clindamycin

Sir,

A 15-year-old girl presented with a history of severely itchy persistent lesions under the arms and on the breasts for 2 years; and over the pubic region for 3 months. She was found to have faint erythematous to skin-colored, 2-3 mm sized, firm, smooth, dome-shaped, grouped, yet equidistant papules over the axillae, areolae [Figure 1] and mons pubis. She also had decreased hair growth over the axillae and mons pubis. The surrounding skin was normal. A clinical diagnosis of Fox-Fordyce disease was made, and she was given topical clindamycin to be applied twice a day, with which, within 2 months she had remarkable improvement.

The second patient was a 22-year-old lady, who presented with itchy lesions over the skin of the axilla for 6 years. Itching was worse in summers. She had no family history of similar disease. Cutaneous examination revealed skin-colored papules throughout the axillae with no terminal hair growth [Figure 2]. She was initially treated with topical tretinoin, with no response; after which topical clindamycin twice daily was given, with which the lesions reduced.

Fox-Fordyce disease, also known as apocrine miliaria, is a rare condition seen in adolescent women, over the apocrine gland-bearing areas like the axillae, groin, areolae and inframammary creases in decreasing order of frequency. It is a chronic, treatment-resistant disorder with characteristic clinical features and non-specific histopathological features. The pathogenesis of this condition, initially thought to be due to hyperkeratosis, was subsequently shown to be caused by detached apo-eccrine secretory cells obstructing the intraepidermal apo-eccrine sweat ducts.[1] The only diagnostic feature, i.e., the "intraepidermal sweat retention vesicle"[2] is rarely seen. Clinical and differential diagnoses which can be considered include Graham-Little-Picardi-Lasseur syndrome and trichostasis spinulosa; however, our patients did not have cicatricial alopecia or lesions elsewhere on the body or mucosa. The lesions in trichostasis spinulosa are usually non-pruritic. Medical therapies reported to have been used in Fox- Fordyce disease are listed in the table [Table 1]. The mechanism of action of clindamycin in this disease is unknown.

Lasers, including fractional CO2 laser,[13] have been used for recalcitrant lesions with a remarkable response in 3 months. However, lasers for axillary

Figure 1: Skin colored papules over the left areola

Table 1: Medical treatment in published reports

Medical treatment	Results	Number treated	Reference
Topical steroids	Temporary relief	1 patient	Ozcan *et al.*, 2003[3]
Adapalene	Mild to some improvement	1 patient 1 patient	Kassuga *et al.*, 2012, Sandhu *et al.*, 2005[4,5]
Tretinoin	Symptomatic improvement only	1 patient	Patrizi *et al.*, 1999[6]
Benzoyl peroxide	Complete resolution	1 patient	Ozcan *et al.*, 2003[3]
Pimecrolimus	Moderate improvement to clearance	3 patients 1 patient	Pock *et al.*, 2006, Milcic *et al.*, 2012[7,8]
Topical clindamycin	Complete resolution	1 patient 1 patient	Feldmann *et al.*, 1992, Miller *et al.*, 1995[9,10]
Oral retinoids	Temporary relief	1 patient 1 patient	Ozcan *et al.*, 2003, Effendy *et al.*, 1994[3,11]
Oral contraceptives	Complete resolution	2 patients	Kronthal *et al.*, 1965[12]

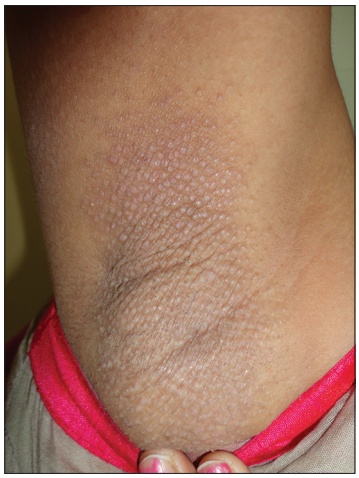

Figure 2: Monomorphic papules over the right axilla with no terminal hair growth

hair removal have been shown to induce Fox-Fordyce disease.[14] Surgical intervention is a definitive treatment and includes areolar dermal detachment safeguarding the nipple, apocrine sweat gland excision and fixation of the areola like a flap.[15]

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