Demodicidosis

Demodicidosis may present as pityriasis folliculitis, papulopustular lesions, rosacea-like eruptions, and granulomatous rosacea-like eruptions. The diagnosis of demodicidosis made by finding extrafollicular mites in the perifollicular inflammatory infiltrate. The papules resolved after 3 weeks of systemic and topical metronidazole, and low-dose oral prednisolone therapy. In summary, demodex granuloma may be mistaken for granulomatous rosacea-like papules. Correct diagnosis can be facilitated by finding extrafollicular demodex mites in skin biopsy specimens.

Demodex folliculorum is commonly found in the pilosebaceous unit and is the most common ectoparasite in humans. *Demodex* mites are usually harmless but may induce local inflammation in some individuals when mites are present in excessive numbers or penetrate into the dermis. The role of *D emodex folliculorum* in various skin disorders has been a subject of many reports for more than half a century and

has been reviewed more recently by Baima and Sticherling [1]. Demodicidosis has been classified into pityriasis folliculitis [2], rosacea-like demodicidosis [3] and granulomatous rosacea-like demodiciosis gravis [4]. The clinical manifestation varies from pustular folliculitis [5], papulopustular scalp eruptions [6], blepharitis [7], abscesses [8], and granuloma [9, 10].

Pityriasis folliculorum primarily affects women and manifests a diffuse, faint facial erythema with itching and burning sensations as well as fine follicular plugs and scales imparting a nutmeg-grater, sandpaper-like or frosted appearance. A history of infrequent washing and application of heavy creams and make-up helps to confirm the diagnosis. Rosacea-like demodicidosis manifests erythema, scaling, and papulopustules mimicking common rosacea. However, the scaling in demodicidosis is follicular and the lesions are superficial with small papulovesicles or vesiculopustules. In demodicidosis gravis, the clinical features are similar to granulomatous rosacea with dermal granulomas containing mite remnants phagocytized by foreign-body giant cells and showing central necrosis.

We report a case of demodex granuloma presenting with granulomatous rosacea-like papules on the face, but the diagnosis of demodicidosis was made by finding extrafollicular mites in the perifollicular inflammatory infiltrate.

It is suggested that the diagnosis of demodicidosis could be made by finding five or more of *De modex*
mites in a single low-power field in a potassium hydroxide preparation [11], or more than 5/cm² in a standardized skin surface biopsy [12].
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mites are more frequently found in rosacea (51%) compared to 28 percent in eczema and 31 percent in discoid lupus erythematosus [13]. Differentiation from rosacea may be difficult when high densities of
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mites are present [12, 14]. However, the differential diagnosis will not pose a problem if
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mites could be detected in the perifollicular infiltrate, as illustrated in the present case. Hoekzema et al. reported a case of fulminant rosacea-like eruption and reviewed 22 other reported cases of rosacea-like demodicidosis [15]. Intradermal mites have been documented in 15 out of these 23 cases.

Various treatments have been used in demodicidosis with variable effects, including topical salicylic acid, metronidazole, crotamiton, lindane, and sublimed sulphur, oral metronidazole, oral ivermectin together with topical permethrin, and oral or topical retinoids [1]. In a patient with demodex abscesses, the infestation was refractory to topical lindane, permthrin, benzoyl benzoate, and oral ivermectin, but resolved rapidly after oral metronidazole 250mg 3 times a day for 2 weeks [8]. In our patient, the facial papules resolved after 3 weeks of systemic and topical metronidazole, and low-dose of oral prednisolone therapy. Metronidazole treatment was also effective in treating three other cases