

Case Report

Folliculitis decalvans responding to isotretinoin therapy 異維甲酸治療脫發性毛囊炎有效

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A 17-year-old Chinese male student presented with red papular and pustular lesions over scalp with secondary scarring alopecia. The diagnosis of folliculitis decalvans was made based on clinical histological findings. Treatment with isotretinoin therapy resulted in satisfactory improvement.

患者為 17 歲男學生，起始病徵為頭皮上有紅色丘疹與膿瘡及繼發性疤痕性脫髮。經臨床及組織學檢查診斷為脫髮性毛囊炎。以異維甲酸治療效果滿意。

Keywords: Chinese, folliculitis decalvans, isotretinoin

關鍵詞：中國人，脫髮性毛囊炎，異維甲酸

Introduction

Folliculitis decalvans (FD) is a rare chronic progressive purulent folliculitis that causes follicular atrophy and subsequent hair loss. Histological findings depend on the stages of the disease. Early findings include lymphohistiocytic, plasma cell and neutrophilic infiltrates around hair follicles. This

may be followed by granuloma formation and finally fibrosis and scarring. We reported a 17-year-old Chinese student with FD who responded to isotretinoin therapy.

Case report

A 17-year-old student presented with multiple erythematous papules and pustules over his scalp for two years. There was subsequent scarring alopecia in the affected areas. His past health was unremarkable.

On examination, there were multiple red papules and pustules over the left parietal and occipital region of his scalp. Patchy hair loss with scar formation was seen. Mild acneiform papules were also noted over his forehead. No anomaly was found over his axillae and groins. The differential

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diagnoses include folliculitis decalvans, tufted folliculitis, dissecting cellulitis, folliculitis keloidalis nuchae and erosive pustular dermatitis of scalp.

An incisional biopsy of the scalp was performed which showed neutrophilic infiltration in the follicular lumina, ruptured follicles and mild degree of dermal fibrosis (Figures 1 & 2). The overall clinical and histological features were compatible with FD. The patient was treated with multiple topical antiseptics and systemic antibiotics such as tetracycline, doxycycline and erythromycin



Figure 1. Scalp biopsy showed follicular and perifollicular inflammation with early perifollicular dermal fibrosis, but no significant loss of hair follicles. (H&E x 25 original magnification)

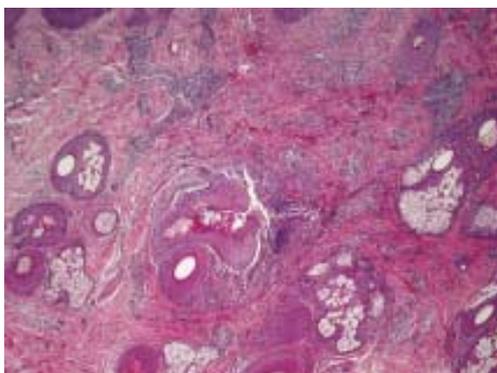


Figure 2. Focal disruption of inflamed hair follicle at the level of the follicular isthmus with perifollicular abscess formation and early dermal fibrosis. (H&E x 100 original magnification)

without satisfactory improvement. Finally, isotretinoin was prescribed at the initial dose of 20 mg per day, which was later increased to 30 mg per day. His scalp improved with marked decrease in erythematous papules and pustules with remaining atrophic bald areas.

Discussion

FD was first described by Brocq in 1905.¹ It was defined as circumscribed coalescing inflammation of hair follicles with pustulation leading to crusting, atrophy and scarring alopecia. It affects both sexes equally from young adulthood to middle age.

The exact aetiology of FD is unknown but many believed that staphylococci act as a cofactor in the pathogenesis in this disorder. Some suggested FD may be the result of an abnormal host response to toxins released from *S. aureus* but no concrete evidence was available so far.² FD does not have specific histological finding. Early lesions are characterised by neutrophilic infiltration forming follicular abscesses with necrotic changes. As the disease progresses, there will be plasma-lymphocytic infiltrate with granuloma formation around the deeper parts of follicles. In advanced lesions, scarring and fibrosis with destruction of hair follicles are left.³ There was no histological difference between FD and tufted folliculitis and Annessi advocated that tufted folliculitis is a distinctive clinicohistological variant of FD.⁴

FD usually presents as recurrent follicular pustules with subsequent irregular areas of patchy scarring alopecia on any part of the scalp although other hair bearing regions may be affected. Possible complications include scarring alopecia, abscess, and cellulitis.

Treatment of FD is difficult. Multiple combination of topical and systemic antibiotics such as fusidic acid, rifampicin and clindamycin were reported

to be useful in isolated cases.⁵⁻⁷ Zinc⁸ and dapson⁹ had been used with some success. In 2000, Douwes et al. reported successful treatment of FD with oral isotretinoin.¹⁰ Since then, no further report was published on such treatment option. Theoretically, isotretinoin modulates chemotaxis of leucocytes, has a direct effect on gene expression and RNA synthesis, and exerts anti-seborrhoeic, anti-keratogenic and anti-inflammatory effects.¹⁰ Our patient failed to respond to topical and systemic antibiotics plus topical antiseptics but responded markedly to isotretinoin therapy at the dose of 30 mg per day. To the best of our knowledge, this is the first report of successful treatment of FD in Chinese with isotretinoin.

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