Alternative Therapeutic Approach in the Treatment of Warner and Wilson-Jones Syndrome of the Scalp in Pediatric Patient

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Abstract

Warner and Wilson-Jones syndrome (WWS), is a rare entity. We report a pediatric case of 6-year-old patient, referred to our department for recurrent nodules of the scalp following removal of capillary hemangioma. Intralesional corticosteroids infiltration was decided without recurrence until today.

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Sir,

Warner and Wilson-Jones syndrome (WWS), is a rare entity, described since 1968 (1). Usually involves patients aged 13 to 20 years mostly on the back or in the scapular area. This report describes an unusual case of WWS in pediatric patient successfully treated with a series of intralesional corticosteroid injections.

A 6-year-old lady, was referred to our department for multiple recurrent, violaceous nodules of the scalp. The first lesion appeared at the age of 6 months, as a reddish lesion. The diagnosis of capillary hemangioma was made. Six months later, the excised nodule recurred with multiple satellite violaceous papules. Brain magnetic resonance imaging was performed to rule out a vascular malformation. The patient was treated by systemic beta-blockers without efficacy. On examination, there were multiple angiomatous, dome shaped and firm papules (**Figure1a).** No history of trauma was reported. Dermoscopic examination showed a red

homogeneous background, white areas and white rail lines that intersected the lesion, with white peripheral collarette**(Figure1b)** . Histopathological examination showed a nodular mass of fibrous connective tissue with dilated capillaries, chronic inflammatory cells and fibroblasts dispersed within the reactive granulation tissue, revealing a pyogenic granuloma (PG)**(Figure2)** . Combining clinical, dermoscopic and microscopic features, WWS was made. Treatment with CO2 laser ablation and surgical excision were associated with rapid recurrence. As an alternative, intralesional steroid injection was performed. We diluted 0.1 ml of triamcinolone acetonide at the concentration of 40mg/ml with 0.5 ml of 0.5% Xylocaine. A total of 0.1 ml of the mixture was injected per lesion. The first and second injections were given 1 week apart, and the remaining four injections were given bi-weekly over a period of 9 weeks. During a follow up visit at 3 months, the lesions were 90% resolved**(Figure 3a),** with residual fibrosis **(Figure 3b)** , without recurrence until today.

PG is a common, benign vascular proliferation **(1)** . It can occur spontaneously or triggered by several factors. It appears as a rapidly growing, erythematous nodule with tendency for bleeding **(2)** . The lesion is often solitary with high rate of local recurrence after excision **(3)** . The occurrence of multiple satellite lesions of PGs after complete removal is an extremely rare entity **(2,4)** , known as WWS. It mostly affects patients under the age of 25 and is located on the back, scapular area, upper limb and oral cavity**(2,4)** . Scalp location, like our patient, is uncommon, described in only one adult patient **(3)** . The pathogenesis of this syndrome is still unclear. It may be explained by an aggressive immune response. Different therapeutic modalities can be used, including surgical excision, cauterization, cryotherapy and CO2 laser therapy**(2)** , but their therapeutic effects are limited. Intralesional corticosteroid injection, has been reported in only one case**(5)** . Because its' anti-inflammatory and vasoconstrictive actions, corticosteroid infiltration can be an alternative to conventional methods, especially in pediatric population. To our knowledge, this is the first case of WWS located on the scalp in a pediatric patient, treated by intralesional corticosteroid injections, with successful results.

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Figure 1a: multiple angiomatous, well demarcated, dome shaped and firm papules measuring 5 to 7 mm in diameter.

Figure 1b: Dermoscopic abnormalities: red homogeneous background with white areas and white rail lines that intersected the lesion, with white peripheral collarette.

Figure 2: Fibrous connective tissue with dilated capillaries, chronic inflammatory cells and fibroblasts dispersed within the reactive granulation tissue. (HE X 40)

Figure 3a: Clinic appearance after 3 months of follow up (The lesions were 90% resolved).

Figure 3b: Dermoscopic appearance after 3 months of follow up (Residual fibrosis).

Figure 1a

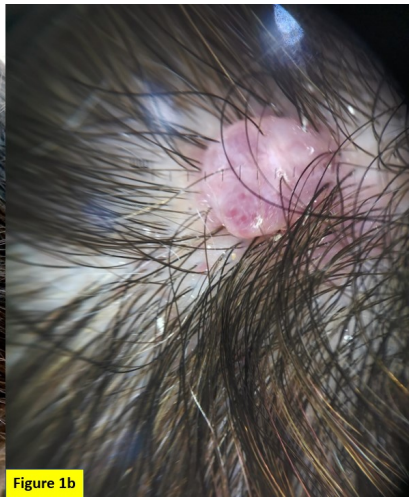

Figure 1b

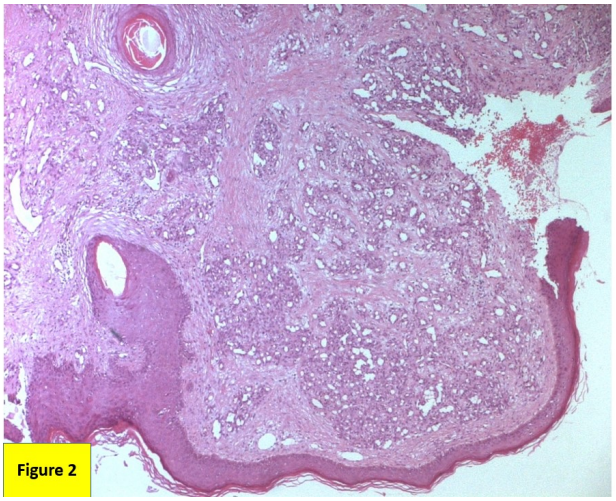

Figure 2

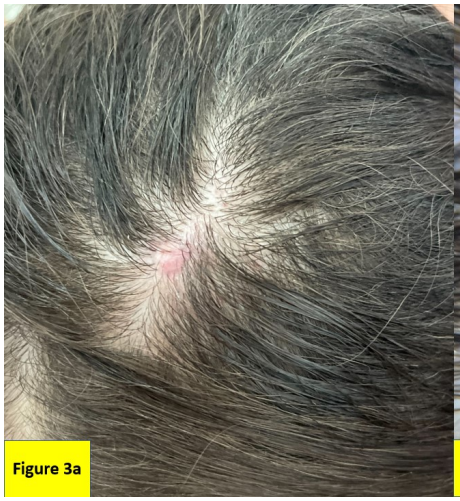

Figure 3a

Figure 3b