



## Case Report

# Multiple cystic swellings of the scalp: A complication of intralesional steroid therapy

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### ABSTRACT

An unusual complication, multiple cystic swelling of scalp, arising due to intralesional steroid injections given for alopecia areata using a Dermajet is being reported.

**KEY WORDS:** Scalp cyst, Dermajet, Foreign body granuloma

### INTRODUCTION

High pressure jet therapy using a Dermajet delivers medications into the upper dermis without significant damage and generally without pain, except over the scalp and finger tips, by means of propulsion.<sup>1,2</sup> It is used to inject steroids intralesionally in patients with alopecia areata, keloid, cystic acne or lichen planus.<sup>3</sup> A Dermajet must be meticulously cleaned after use to avoid blocking as well as introducing infections. If it is not well maintained, there is a risk of implanting nickel and rubber into the skin. Implantation dermoids can also occur.

### CASE REPORT

A 36-year-old lady presented with multiple swellings over the scalp since three months. They had grown gradually to attain the present size. She gave a history of patchy hair loss over the scalp for 6 months for which 6-7 intralesional steroid injections had been given in one sitting using a Dermajet 2-3 months ago.

On examination, five hairless, skin-colored, cystic lesions of variable size were seen over the vertex of the scalp (Figure 1). There were no signs of



Figure 1: Cystic nodules over scalp

inflammation and no bruit on auscultation.

A provisional diagnosis of implantation dermoid was made. Fine needle aspiration cytology showed a straw colored fluid. A smear made from the sediment of the fluid showed a few chronic inflammatory cells and a few epithelioid cells. The smallest cyst was excised; histopathology showed fragmented pieces of granulation tissue with occasional non-caseating granulomas. The granuloma showed epithelioid cells, fibroblasts, lymphocytes, plasma cells and foreign body





giant cells. Intense chronic inflammatory cells and new vessel formation were seen. The epidermis showed hyperplastic changes. Thus the cystic swellings were caused by foreign body granulomatous reaction around repeated intralesional injections of the steroid.

### DISCUSSION

High pressure jet therapy is commonly used in dermatological practice. Complications of intralesional steroid injections include local atrophy, hypopigmentation, connective tissue damage and granuloma formation due to foreign body reaction.<sup>1,2</sup>

This case illustrates a rare complication of Dermajet therapy.

### REFERENCES

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