

## STEROID INDUCED-PERIVENOUS DEPIGMENTED ATROPHY OF SKIN

R. C. SHARMA \* N. L. SHARMA † AND NEELAM GUPTA ‡

### Summary

Three patients who developed depigmentation and atrophy along veins following intralesional triamcinolone injections are reported.

KEY WORDS: Perivenous atrophy, Telangiectases, Perilymphatic atrophy, Depigmentation, Triamcinolone.

### Introduction

Intralesional injection of corticosteroid is the treatment of choice in some dermatological and orthopaedic conditions. With the increasing use of intralesional corticosteroid therapy more and more side effects from this are being recognised. Some of these are skin atrophy, telangiectases and hypopigmentation at or near the sites of injection<sup>1</sup>. Depigmentation with atrophy along lymphatics<sup>2,3</sup>, though rare, may cause serious cosmetic disability.

Here we report three patients who developed atrophy and telangiectases with depigmentation along veins.

### Case Reports

#### Case 1

A 53 year old male developed pain in left heel eight months prior to his hospital visit. He consulted an orthopaedic surgeon and was diagnosed as a case of fibrofasciitis. He was prescribed some anti-inflammatory drugs

which he took for a period of 6 weeks without any relief. He was then given triamcinolone injections intralesionally. One ml of 10 mgs/ml of drug was given at weekly intervals for 7 weeks. With this the patient had some relief of pain. About six months later while taking bath patient noticed a white patch on the medial aspect of the left heel. The lesion was asymptomatic.

On examination an irregular 2 cms. wide band-like area of depigmentation was seen extending from the left medial malleolus to the medial aspect of the heel. The involved skin was thin and shiny and multiple telangiectatic vessels could be seen through it. A 2-3 mm wide vertical line of depigmentation and atrophy was present on the skin overlying a vein adjacent to the main patch. In addition, two more similar lines of perivenous depigmentation were seen just above and posterior to the medial malleolus (Fig. 1). Follow-up examination of the patient six months later revealed repigmentation of the lesion. The atrophy and telangiectasia were also less prominent than before.

#### Case 2

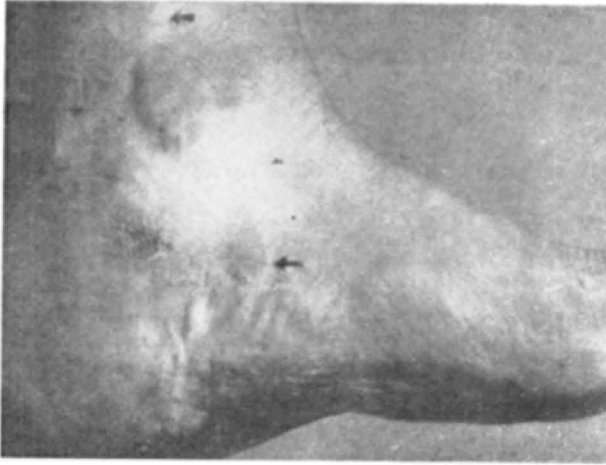
A 15 years old male was diagnosed as a case of Osgood Schlatter's disease of left knee. He was put on intralesional

\* Associate Professor and Head

† Assistant Professor

‡ Registrar in Dermato-Venereology  
Department of Dermato-Venereology  
H. P. Medical College  
Simla-171001, India.

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**Fig. 1**

Arrows pointing to linear depigmentation along veins.

injections of triamcinolone (40 mgs/ml) at weekly intervals. A total of three injections were given. One month after the last injection the overlying skin became dry and depigmented. On examination there was an irregular patch of about 8 x 6 cms. size over the left knee joint. The overlying skin was ichthyotic with areas of depigmentation and atrophy which was particularly marked along veins on the lateral aspect of the knee (Fig. 2). Telangiectatic vessels could be visualised in the involved area.

*Case 3*

A 28 year old female patient came with the complaint of depigmented patch over front of the wrist. She was

suffering from sclerosing tenosynovitis for which she had been treated with intralesional triamcinolone (10 mgs/ml) injections at weekly intervals for 4 weeks. Depigmentation of the overlying skin appeared about one month after the last injection. On examination there was a circular depigmented patch of about 4 cms. diameter. The skin was atrophic and telangiectatic vessels were visible through it. A linear extension of this patch ran along a vein proximally.

**Discussion**

The phenomenon of perivenous depigmentation following intralesional corticosteroid injections caught our attention and prompted this documentation.

**Fig. 2**

Showing marked atrophy and depigmentation along veins.



Literature review revealed allied reports of depigmentation along lymphatics<sup>2</sup> and atrophy along lymphatics<sup>3</sup>. Ayres<sup>4</sup> in the discussion of a case of subcutaneous atrophy suggested that the corticosteroid injected at an adjacent site was transmitted along the lymphatic system resulting in atrophy in a non injected area. In our cases the cutaneous atrophy and depigmentation was seen along the veins near the site of corticosteroid injection. The possible explanation is either diffusion of the injected drug from draining veins to their perivascular space or along the draining perivascular lymphatics.

The cutaneous changes following intralesional triamcinolone can cause serious cosmetic concern to patients.

Though the side effects may be reversible as seen in one of our patients it is recommended that injudicious use and high dosage of this drug should be avoided.

#### References

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#### ERRATUM

Volume 48 No. 3, 1982, page 145-150 article entitled 'A Clinico-Mycolological Study of Onychomycosis (Last para).

Please read as follows :

On the whole, it may be concluded that when many nails are involved, or when nails are involved in association with mycotic skin lesions, the likely etiologic agent is a dermatophyte (commonly *T. rubrum*). In cases where only a few nails are affected in the absence of mycotic skin lesions it is reasonable to suspect a mould. When the nail lesions are seen in the presence of paronychia, it is likely to be due to *Candida albicans*.