

**ADDRESSING TREATMENT COMPLEXITY: A CASE REPORT ON INTRALESIONAL  
CORTICOSTEROID THERAPY FOR UNCONVENTIONAL MULTIPLE KELOIDS****Dr. Ananya Thakur<sup>1\*</sup> and Dr. Prajul Mehta**<sup>1</sup>Medical Officer, CH Chopal, Shimla, H.P. India.<sup>2</sup>MD Dermatology, IGMC, Shimla, H.P. India.**\*Corresponding Author: Dr. Ananya Thakur**

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Article Received on 09/04/2024

Article Revised on 29/04/2024

Article Accepted on 19/05/2024

**ABSTRACT**

The following case report encompasses the peculiar presentation of multiple keloids in a 38 year old woman, who initially sought medical attention due to a large, erythematous, firm, noduloplaque like lesion on the plantar aspect of her right foot. Upon further evaluation it was established that since the last 15 years, she had been developing multiple keloids in unusual sites across her body without any obvious history of trauma, which prompted further investigations and management. The patient was treated with emollients and a single course of intralesional corticosteroids was administered, as the patient refused further injections due to unbearable pain. This clinical article reflects on the challenges encountered while administering Intralesional Triamcinolone Acetonide in a patient with multiple, dense, unyielding keloids.

**INTRODUCTION**

Keloid is a dermal benign fibro-proliferative growth that extends outside the original wound and invades adjacent dermal tissue due to extensive production of extracellular matrix, especially collagen. The exact pathogenesis for keloid formation and definite treatment modalities have not yet been established. Amongst the possible therapeutic approaches, Intralesional corticosteroids remain the most favourable however, a significant obstacle that often arises due to the considerable pain associated with the injection, is that patients discontinue treatment before achieving optimal results.<sup>[1]</sup>

Another dilemma faced by the treating physician is to choose between the plethora of postulated solutions to this problem, while some advocate adding an anaesthetic agent to the injection to reduce the pain, others argue that this further aggravates discomfort due to an overall increase in the volume of the drug and affects treatment outcome due to relative dilution of the therapeutic agent.

**CASE PRESENTATION**

A middle aged woman in her late thirties presented at the outpatient department of a Primary Health Care Hospital in a peripheral setting, with complaints of an itchy, erythematous, nodulopapular growth on the plantar surface of her right foot. It had developed insidiously and progressively worsened over the last 15 years after an initial injury to her foot. In this period she also noticed that she developed similar lesions on her abdomen after

undergoing a laparoscopic sterilization 10 years ago and in the last 6 months she had been observing new lesions arise on her breast, thighs and legs without any preceding injury. (Figure 1-4)

The patient complained of significant itching in these areas and expressed worries about the possibility of transmitting the condition to others. She harboured feelings of self-consciousness and embarrassment about the presence of these lesions and believed that it is going to continue to spread throughout her body.

Her observations were normal skin examination revealed, multiple keloids of varying shapes, sizes and consistencies were found on her right breast, periumbilical region, left buttock, thigh, bilateral shins and plantar surface of right foot. Laboratory values were unremarkable, with the exception her ESR, which was significantly elevated at 60 mm/hr.

She was treated with topical emollients and an informed consent was obtained for a series of intralesional Triamcinolone Acetonide Injections, 40mg/ml spaced at 4 week jintervals. (figure 1-4) The patient was counselled about the pain associated with the injections however, after finishing the first round of injections she refused further intralesional injections as she found them unbearable and achieved symptomatic relief from itching with the topical treatment.



**Keloids over plantar aspect of right foot.**



**Keloids over abdomen.**



**Keloids over legs.**

## **DISCUSSION**

Keloids are abnormal, benign hyperproliferative growths that extend beyond the original wound, however in this case, while the initial keloids on the foot and abdomen had obvious inciting injuries to the skin, the newer lesions appeared without any explainable cause in unusual locations and progressed faster than the previous lesions.<sup>[2]</sup>

Painful intralesional injections form the mainstay of treatment of keloids in peripheral centres where alternative methods like cryotherapy and syringe drivers to deliver slow painless injections are not available. Some doctors advocate using 20 G needles with insulin syringes however, keloids might be unyielding and smaller gauge needles can break or bend in cases such as these.<sup>[3]</sup> In certain instances the debate to add lignocaine to the injection arises, as backed by dermatologists and opposed by anaesthesiologists who argue that this only

increases the total volume administered and adds to the pain instead of alleviating it.

The onset of action is also prolonged up to 1 hour after the injection. There is also evidence that suggests giving the drug at a higher concentration of 40mg/ml without dilution may in fact soften the keloid for further injections.

Given all these considerations, it is evident that more avenues need to be explored further in order to find a definitive treatment of keloids and a more universally agreeable alternative is needed to reduce the pain experienced by the patient for the existing first line treatment with intralesional corticosteroids to achieve higher patient compliance and reduce the risk of drop out from future studies.

#### **Conflict of interest**

Nil.

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