Case report:

Novel treatment of Keloid: Intralesional Triamcinolone acetonide combined with Urea

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Abstract

We are presenting a case of 24-year-old girl who visited our OPD for a raised lesion on her skin of back. On examination we found it to be a keloid which was present for 2 years. We treated the lesion with Intralesional Triamcinolone acetonide 10mg once a month and 40 % urea cream applied at home. Reduction of keloid was observed after 6 months of treatment.

Key words: Intralesional Triamcinolone acetonide injections, Urea cream, Keloid

Introduction:

A Keloid is a raised thick scar. It can occur anywhere on the body after an injury but is most commonly seen over the earlobe, shoulders, cheeks or chest. Keloids vary clinically from hypertrophic scars in growing beyond the original borders of the injury and, in time, do not show any trend toward resolution.[1]

Keloids (which occur after surgical operations, injury, burns, or dermal infections) create mutilating and occasionally giant scars with accompanying redness, erythema, and pain or pruritus or limited range of motion, are chief cause of morbidity often stressful to patients.[2] Sadly, excision of hypertrophic scars and keloids results in 45%-100% recurrence.[3] Many treatment options are available which are mostly surgical, medical treatment is usually not effective.

Case report:

A 24 year old girl to our hospital with complaint of a raised lesion on her back for 2 years. On observation, we diagnosed it as keloid (figure-1). The patient was prescribed intralesional injections of triamcinolone acetonide 10mg once a month along with 40 % urea cream. After treatment for 6 months, we found visible improvement in keloids (figure-2).

Figure-1

Figure-2

Discussion:

Urea 40 percent cream has been used as a keratolytic agent in various dermatological conditions like Palmoplantar keratoderma, Psoriasis, corns and callus and nail conditions like ingrown toenail etc. Urea dissolves the intercellular matrix which consequences in a loosening of the skin and shedding of scaly skin at regular intervals, which results in softening of hyperkeratotic areas of the skin. Corticosteroid intralesional (IL) injections can only soften and flatten keloids but cannot make keloids disappear or narrow wide hypertrophic scars.[4] Intralesional triamcinolone acetonide, a powerful anti-inflammatory hydrocortisone fluoridated at its ninth carbon, is a first-line treatment for keloids. Large trials in the

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1960s and 1970s established that the effectiveness of triamcinolone against keloids exceeds 80 percent.[5-6] Triamcinolone constrains the production of normal and keloid fibroblasts, hinders collagen synthesis, upsurges collagenase production, and decreases the level of collagenase inhibitor.[7] Working over fibroblast glucocorticoid receptors, steroids similarly persuade ultrastructural changes in collagen synthesis that improve the organization of collagen bundles and degenerate the characteristic keloidal collagen nodule.[8] Adverse effects, comprises of subcutaneous atrophy, telangiectasis, and pigment changes, occur in roughly half of all patients treated with Triamcinolone but often resolve without intervention.[9] Systemic effects of steroids (Cushing's syndrome) usually do not occur with intralesional Triamcinolone treatment, but occasional cases have been reported.[10] Combination treatment of Intralesional triamcinolone acetonide and 40 % urea cream can give enhanced results. No major side effects were observed with 40 % urea cream. Only dryness and itching can be a minor Side effects.

Conclusion:

Keloids can be treated successfully using a combination treatment of Intralesional Triamcinolone acetonide 10mg and urea 40 % cream.

Conflict of interest:

None

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