Evaluation of use of Hyaluronidase in prevention of recurrence of Hypertrophic and Keloid scars after surgical excision

Abstract

Background: Hypertrophic and Keloid scars are a form of aberrant wound healing that is of unknown etiology, its pathogenesis is poorly understood with some theories linking its formation to excess aminoglycans during wound healing process including hyaluronic acid.

Patients and methods: A prospective study done in Al-Sader medical city in Najaf during Oct 2019 –Sept 2020 ,the study included 20 patients diagnosed with (hypertrophic scars (8 of 20) and keloids (12 of 20

The patients underwent the following protocol: they had complete preoperative blood work, then excision done under local anesthesia, and received hyaluronidase injection according to the following timeline

• Immediately intra-operatively (1st session).

• At day 14 postoperatively (2nd session).

• At day 21 postoperatively (3rd session).

Results :The patients were assessed using the REHIT score and results of patients

were followed up for 9 months; symptoms wise, 2 of the patients had persistent redness, residual hardness was observed in 3 patients, itching was observed in 5 patients (managed successfully by oral anti-histamines), no elevation or tenderness was reported in any of the patients.

Conclusion :We can conclude that the hyaluronidase injection following surgical excision of keloids and hypertrophic scars has promising preliminary results that encourage us to continue this study on larger population and for longer period of time.