Comparison of Intralesional Bleomycin to Intralesional Triamcinolone in the Symptomatic Control of Keloids in Patients Seen at Mulago Hospital Plastic Surgery Unit: A Randomized, Single Blinded Clinical Trail

BY

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ABSTRACT:

Introduction: Keloids are raised skin lesions that develop from poor scar formation and extend beyond the original wound margin. They are dermal fibroproliferative disorders unique to humans that occur following trauma, inflammation and surgery. Currently there are several approaches for treating these conditions; these include, Intralesional Surgical Excision, Corticosteroids, Radiotherapy, Bleomycin, Pressure Therapy, Laser therapy, Verapamil, Cryosurgery and Interferon. None of them is 100% effective.

In Mulago Hospital Plastic Surgery Unit, Keloids are a frequent indication of health seeking behavior, as shown in a pilot review of the patient database. Surgery, Radiotherapy, Corticosteroids and Pressure dressing or a combination these are currently the only treatment modalities in our setting. Although, on very rare occasions newer treatment modalities are used.

Methods: This was a randomized, single blinded clinical trial for 4 months carried out on Patients with Keloids at the plastic surgical outpatient department of Mulago Hospital. They were consecutively recruited and those who were not excluded were randomized into two groups. Altogether, 35 patients were recruited. The treatment group (Bleomycin) had 18 Patients and the control group (Triamcinolone - the standard treatment in Mulago Hospital) had 17 patients. Patients were followed up for 9 weeks at 3 weeks interval, during which they were reassessed and given additional treatment where necessary. I looked at relief of clinical features (signs and symptoms) by measuring changes in volume, height and the Manchester scar scale, plus itching and Pain,. I also looked at development of local side effects due to the drug used.

Results: 3/18 patients in the Bleomycin treatment group were lost to follow up whereas 2/17 patients in the Triamcinolone group were lost to follow up.

All drugs were effective in the treatment of Keloids as shown by significant (p- value < 0.05) decrease in volume, height, Manchester scar scale on subgroup analysis. But there was more significant flattening
(>75%) in the Bleomycin group (87%) compared to 53% in the Triamcinolone group even though this difference was not statistically significant \((p – \text{Value} = 0.108)\). All patients (100%) in each group had relief from itching and pain.

There was a significant presence of local side effects in the Bleomycin group compared to the Triamcinolone group \((p- \text{Value} = 0.009)\).

**Conclusion:** Bleomycin was found to be as effective as Triamcinolone, but with a high rate of local side effects, especially that of ulceration.