Does Keloid Histology Influence Recurrence?

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Keloids are fibroproliferative disorders characterized by excessive deposition of collagen in the dermal layer. Despite many treatment strategies, the keloid recurrence rate has been high, with few factors known to influence the same. We conducted a study to determine whether keloids histology influences recurrence. This was a prospective longitudinal study to determine whether histopathological parameters of keloid influence recurrence. Patients with keloids managed by surgical excision were followed up at Kenyatta National Hospital between August 2018 and July 2020. The excised specimens were histologically examined for inflammatory cells, fibroblasts, and vascularity. These were analyzed to determine whether they had any correlation with keloid recurrence.

Postoperative follow-up was performed for a minimum of one year.

A total of 90 patients with 104 keloids were followed up. The age range for the patients was 15–65 years (mean 29.6 years). The male to female ratio was 1:2. About 50 percent of the keloids were on the ears. Overall keloid recurrence rate was 28.6 percent. There was a correlation between the absolute count of lymphocytes, fibroblasts, and macrophages with recurrence of the disease. There was no correlation between mast cells and vascularity status with recurrence. Routine histology should, therefore, be performed to determine these parameters. Close monitoring and second-line therapy should be considered for patients with elevated macrophages and or lymphocytes so as to reduce the risk of recurrence.