Determinants Of Keloid Recurrence: The Role of Keloid Recurrence Scoring System

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Running Title
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Word Count - 235 words

BACKGROUND
Keloid disease is a fibro-proliferative disorder characterized by excessive deposition of collagen. Keloids have been shown to have high recurrence rate. We undertook this study to determine what factors could influence recurrence of the disease with the aim of developing a keloid recurrence scoring system.

METHODS
This was a prospective longitudinal study of patients who presented with keloids, managed by surgical excision followed by post excision radiotherapy. Post-surgery patients were followed up for at least one year to determine recurrence. Variables analyzed included patients history, clinical presentation and keloid histology. Data captured were analyzed using SPSS version 21. Student T-test and Chi-square test were used to compare means and frequencies respectively at 95 percent confidence level (P-Value <0.05).

RESULTS
Ninety patients were followed up in the study for a minimum duration of two years. Overall keloid recurrence was 21 % with Male patients having a significantly higher recurrence rate of 31% compared to the females at 12%. The recurrence rates were also higher in familial keloids at 26.9 % compared to sporadic keloids at 18.5%. Other factors that influenced recurrence included anatomical location, patient's blood group and histological composition of the keloid.

CONCLUSİON
Keloid recurrence is influenced by many factors including family history, clinical presentation and keloid histology. A Keloid recurrence scoring system encompassing these factors could assist in the determination of post excision management as well as prediction of the likelihood of recurrence.