Recurrence of Plantar Fibromatosis after Plantar Fasciectomy: Single-Center Long-Term Results.

Reference:

Scientific Literature Review

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Podiatric Relevance:
The recurrence rate for the treatment of the plantar fibromatoses has always been high whether the treatment modality involves surgery or conservative management. This study provides useful data for the comparison of three different surgical treatment regimes of plantar fasciectomy for plantar fibromatosis.

Methods:
The study was retrospective in nature and included 27 patients (33 feet; 40 operations) who had been evaluated at the VU University Medical Center in Amsterdam, Netherlands, with symptomatic plantar fibromatosis lesions. All patients failed to respond to conservative regimens including orthopedic insoles, physical therapy, NSAID and steroid injection prior to surgical excision. All patients were treated by plastic surgeons and orthopedic surgeons utilizing three different types of operations: 1) local excision of the nodules with margin less than 2cm in normal tissue, 2) local excision of the nodules with margins between 2- to 4-cm, or 3) total plantar fasciectomy. Statistical analyses were performed to determine which surgical treatment methods were associated with a high recurrence rate.

Results:
Follow-up data of the 40 operations were obtained to determine the recurrence rate of plantar fibromatosis after partial or complete plantar fasciectomy. 27 operations were performed on feet with primary lesions, and 13 operations were performed on the feet with recurrent plantar fibromatosis. For the treatment of primary lesions, local excision with narrow margin was performed in 5 cases, local excision with wide margin was performed in 18 cases, and total plantar fasciectomy was performed in 4 cases. For recurrent lesions, local excision with narrow margin was performed in 4 cases, local excision with wide margin was performed in 5 cases, and total plantar fasciectomy was performed in 4 cases. The lowest recurrence rate was 25% following total plantar fasciectomy of a primary lesion; the highest recurrence rate was 100% following local excision with narrow margin of recurrent lesions. The overall recurrence rate was 60%.

Conclusions:
The authors concluded that despite the fact that there is a high recurrence rate associated with the surgical treatment of plantar fibromatosis, the total plantar fasciectomy technique may be the treatment of choice in effectively eliminating plantar fibromatosis when the symptomatic patients fail all the conservative measures. In addition, further research on this topic is warranted because this study did not include a prospective multicenter study to compare different surgical procedures.