Post-operative Management of Dupuytren's Disease with Topical Nitroglycerin

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Introduction

66-year-old right hand dominant male.
Significant medical history: diabetes mellitus type 2 treated with metformin.
Family history: Positive for Dupuytren's disease.

Clinical presentation:
Severe Dupuytren's contracture of the right ring and little fingers.

Discussion

Because Dupuytren's patients have a tendency to heal with raised, hard scars, postsurgical goals include softening of the surgical scar and preventing complications and recurrence. In our two cases, the patients did not develop raised scars during healing. The surgical site remained soft and smooth and our patients were able to develop full ROM in their treated hand. Additionally, there has been no recurrence in the area of the treated digit and palm at short-term follow-up.

Since both patients had DM, it is possible that the effect of the nitroglycerin is more pronounced in the presence of diabetic vasculopathy/neuropathy.

These observations suggest that postoperative topical nitroglycerin may improve management of patients with Dupuytren's disease following surgery through prevention of local ischemia.

Further study is needed to evaluate the short and long-term effect of topical nitroglycerin on scarring and disease recurrence.

Conclusion

Due to its vasodilatory properties, topical nitroglycerin may improve management of patients with Dupuytren's disease following surgery through prevention of local ischemia.

References