Treatment of severe Dupuytren contracture by homodigital flaps

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Introduction:

Management of Dupuytren's disease with severe contracture of the proximal interphalangeal joint is always a challenge for hand surgeons due to the soft tissue defect created by full release to the PIP joint. There are 2 methods to cover this defect, either by Z-plasty or by using homodigital skin flap.

Purpose:

The purpose of this study is to evaluate the results of the homodigital skin flap in covering the defects after release of severe contracture of the PIP joint. The technique of the operation, the failure rate, the recurrence rate and the final results were evaluated 1-4 years after the operation.

Patient and methods:

In 40 cases the dorsoulnar skin flap from the proximal phalanx was used to cover the defect after release of PIP joint. The average PIP joint contracture was 73° using Tubiana's classification. The donor site was closed by a full thickness skin graft taken from the ipsilateral forearm.

Results:

In 80% of the cases in this study, it was possible to reach full extension of the PIP joint; in half of these patients, open arthrolysis was necessary to reach full extension. In the other 20%, there was 15° loss of extension in average.

Conclusion:

The mid term results of the use of dorsoulnar skin flap to cover the defects following release of severe PIP joint contracture in Dupuytren's disease showed superior results in our hand. It is an easy technique, it has a minimal complication rate and allow full extension of the PIP joint in most of the cases.