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Percutaneous Needle Fasciotomy a serious Alternative?

Introduction

The treatment of Dupuytren`s contracture is a subject of controversial debates since a long time. The conventional aponeurectomy represents a time consuming procedure regarding the operation as well as the period of recovery. Additionally one has the risk of serious complications like infections, nerve lesions, diminished blood flow of the finger, intolerance for cold temperatures and reduced range of motion.

The present study reconsiders if the less invasive procedure `Percutaneous Needle Fasciotomy` could be a serious alternative, less time consuming and less risky?

Material and Method

In 2008 and 2009, 63 rays in 47 patients with Dupuytren`s contracture were treated using the technique of the `Percutaneous Needle Fasciotomy`.

With the Classification of Tubiana 34 rays stage I, 21 stage II, 7 rays stage III and 1 stage IV were categorized.

Under local anesthesia the percutaneous needle fasciotomy in a fan-shaped fashion at several levels (on average 2) were performed. Immediately after the procedure a splint was adjusted in full extension of the fingers to wear during night for 3 months.

Results

Within the retrospective study 43 patients (58 rays) were reviewed with a mean follow up of 11.1 months. The mean age of the patients was 60.3 years (29 men, 14 women).

39 patients with 52 rays had a totally free extension after the operation. 4 patients (6 rays) retained a mild residual flexion contracture between 5 – 10°.

There was neither infection nor injury of nerve, vessel or tendon. No second operation was needed. The mean total gain was 59°. 6 patients had measurable reoccurrence of a mild flexion contracture. 98% would undergo the procedure again if necessary.

Conclusion

The technique of `Percutaneous Needle Fasciotomy` is reliable and relatively simple to perform, when compared to the open aponeurectomy.

The rate of complications is low. The time of operation and period of recovery is obviously shorter than for the conventional technique.

Therefore the `Percutaneous Needle Fasciotomy` could be seen a serious alternative.