

USE OF VEIN GRAFT AS A TENDON SHEATH SUBSTITUTE FOLLOWING TENDON REPAIR: AN INNOVATIVE TECHNIQUE IN TENDON SURGERY

Moosavi, SR¹, Kalantar Motamedi AR²

¹Department of general and vascular surgery and traumatology, Shohada medical center, Associate professor of vascular and trauma. ²Attending vascular surgeon and assistant professor of surgery. Shahid Beheshti University of medical sciences, Tehran, Iran

Objectives

This is a new technique for managing tendon repair which can improve the results of existing methods.

Methods

105 patient with new or old tendon injuries or complications of previous repair underwent tendon repair by modified Kessler method and a portion of the saphenous veins was used to cover the repaired tendon. 75 patient had flexor tendon injuries which involved zone 1 to 5, and 30 patient had tendon injuries (zone 2). A modified Kessler technique with 3-0 prolene was used for the core suture. Afterwards, a running 6-0 nylon or prolene epitendinous suture was used to even the repair site. After the tendon repair, a segment of vein which the tendon has been passed through prior to the repair was used as a tendon sheath substitute. A 6-0 prolene was used for anastomosis of the proximal and distal ends of the sheath defect to an interposed segment of autogenous vein.

Results

Our preliminary results appear encouraging for reducing recovery time (2 - 3 weeks) when compared with outcomes achieved by conventional tendon repair techniques (3 - 4 weeks) and very low complications.

Conclusions

Because this technique reduce the adhesion formation, and also improve tendon nourishment, and also decrease the need of intensive physiotherapy, it can be a standard choice in the future.
