Percutaneous tenodesis of the Achilles tendon. [German]

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Abstract:

Approach to the Problem: Various studies (3, 6, 9, 14, 22, 28, 30, 33) have shown that, on average

(26), the surgical treatment of a freshly ruptured Achilles tendon can be considered a more

appropriate and better treatment than a conservative immobilisation therapy. On the other hand the

rate of complications in openly executed reconstructions is quite considerable at 11-29% (13,19, 20,

31). It therefore seems reasonable to develop a process which, by using minimal invasive measures

on the tendon, reduces the risk of complications arising from surgery and simultaneously makes an

early post operative treatment encouraging maximum mobility possible. Method: We have

developed a percutaneous tenodesis of the Achilles tendon using two Lengemann extension wires

and fibrin bonding at the point of rupture (8,18). This process has been applied to 21 patients since

1995. Check-up period for further examination: 1 year. Results: Exclusively male patients have been

treated, average age 42 years. The Achilles tendon ruptures occurred in sporting activities and were

handled with operations in an average time span of 22 hours. In one case there was a re-rupture

resulting from traumatic conditions. All other results were good to very good and free of

complications. Conclusions: The percutaneous tenodesis of the Achilles tendon using Lengemann

extension wires and fibrin bonding provides a simple, good value and reliable process which should

be used for fleshly occurred Achilles tendon ruptures. Clinical relevance: Particularly worthy of

mention are the problem-free treatment, the good results and the broad acceptance by the patients.

These advantages make the demonstrated process ideal for routine clinical application.