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**Recalcitrant Patellar Tendinosis in Elite Athletes: Surgical Treatment in Conjunction with Aggressive Postoperative Rehabilitation. Shelbourne KD, Henne T, Gray T: *Am J Sports Med* 2006;34:1141-1146.**

**Abstract**

**Background:** Recalcitrant patellar tendinosis is difficult to treat and results are varied. Hypothesis: Surgical removal of necrotic tissue, surgical stimulation of remaining tendon, and aggressive and specific rehabilitation after patellar tendonectomy will allow athletes to return to sports.

**Study Design:** Case series

**Methods:** From December 1996 to July 2002, 16 high level athletes, (4 professional, 2 olympic, 9 collegiate, 1 prep,) aged 16 to 25 years (avg. 19.7 years,) with 22 symptomatic patellar tendons failed nonoperative care of their patellar tendinosis symptoms and were unable to compete effectively in their sport. Magnetic resonance imaging showed confirmation of disease with typical findings being necrosis in the posterior half of an abnormally thick patellar tendon often in conjunction with partial tearing of the posterior half with a compensatory enlargement of the anterior half. Each patient then underwent tendonectomy of the necrotic portion in conjunction with stimulation of the remaining tendon by making multiple longitudinal cuts in the tendon. Patients participated in a postoperative rehabilitation protocol that included immediate range of motion, full flexion, and immediate high repetition, low resistance quadriceps muscle exercise. Results: Subjective improvement was noted in all athletes. Return to the same sport at prior level of intensity was accomplished by 14 of 16 patients, (87.5%.) at a mean of 8.1 months (range 3 months to 12 months).

**Conclusions:** Overall, tendonectomy, surgical tendon stimulation and aggressive postoperative rehabilitation were found to be a safe, effective way to return high level athletes to their sport.

**Key Terms:** Patellar tendinitis; tendinosis; surgery; rehabilitation