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Repair of chronic rupture of the insertion of the gastrocnemius tendon in the dog using a polyethylene terephthalate implant. Early clinical experience and outcome.

Objectives

Chronic degeneration of the gastrocnemius tendon results in scar tissue formation at the insertion of the tendon, and detachment from the calcaneus. In severe cases, excision of this tissue makes repositioning of the tendon to the calcaneus extremely difficult. A polyethylene terephthalate implant, used to aide repair by bridging gaps and allowing tissue ingrowth, was evaluated.

Methods

In this retrospective study, clinical records were evaluated to assess long-term outcomes and complications. The surgical technique is also described. The implant was sutured proximally into the gastrocnemius at the myotendinous junction, and secured into the calcaneus using an interference screw.

Results

The implant was used in 10 patients; of which seven returned to full function. Major complications, due to infection, were identified in two of the 10 patients. Minor complications occurred in five of the 10 patients. These were associated with external coaptation in three of the patients in the immediate postoperative period. One minor infection was reported. These all resolved without further complication. Long-term outcome was available in eight patients, with six of these eight dogs returning to normal exercise.

Clinical Significance

This implant may be suitable for use in canine patients with severe gastrocnemius tendon degeneration. Ongoing evaluation is warranted.

Keywords

Achilles; Gastrocnemius; dog; interference screw; synthetic

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