Non-traumatic Rupture of the Achilles Tendon Secondary to Local Corticosteroid Injection

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INTRODUCTION:

Spontaneous Achilles tendon rupture in elderly is most often related to degenerative process and may be associated with overuse of the tendon and comorbidities. It is increasingly reported in patients treated with corticosteroids resulting to disruption of normal healing process of the partially injured tendon, contributing to its eventual rupture.

CASE REPORT:

A 64 years old working lady with underlying hypertension and dyslipidemia presented to casualty with worsening pain over the posterior right ankle without trauma for 1 week. The pain was initially started since 3 months ago, aggravated when walking. She gave history of right ankle local corticosteroid injection about 1 month ago at a private clinic. On examination, a palpable gap can be appreciated. She had a positive Thompson's test. The ruptured side was in neutral position and she was unable to perform active plantar flexion. In a lateral radiograph. there was Haglund's deformity and ossification of Achilles tendon. Ultrasound confirmed right Achilles tendon rupture 2.2cm proximal to calcaneum. The distal tendon showed calcification favouring tendinosis. Right Achilles tendon repair, exostectomy of Haglund's deformity and reconstruction of right Achilles tendon done. Intraoperatively, scanty fibrotic tissue associated with bony avulsion over the proximal stump identified. After 7 months follow-up, patient achieved good return of ankle plantarflexion strength and range of motion.

CONCLUSION:

Corticosteroids causes changes in microvascularization, inhibit production of extracellular matrix collagen, and decreased tensile strength, ultimately leading to tendon rupture. Therefore, local corticosteroid injection should be prescribed appropriately by weighing the benefits and risks based on the patients' comorbids and medical history.

Figure 1: Right foot lateral xray



Figure 2: Fibrotic tissue from proximal stump of right Achilles tendon



Figure 3: Postoperative xray



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