CASE REPORT

Adductor longus ruptures in elite sportsmen—pitfalls of surgical repair: a report of two cases

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SUMMARY

Insertional tendinopathy of the adductor longus is a common and problematic condition in elite athletes and may lead to rupture. Previous literature has reported good outcomes in these patients when these ruptures are treated with both surgical and non-operative management. This paper will discuss the available literature on management of adductor tears and describe two case reports of deep infection following surgical repair of ruptures in soccer players and the effects this had on their profession. We conclude that, given the overall evidence of conservative management of adductor tears and possible complications associated with the surgery that these cases highlight, acute adductor tears in the majority should be treated conservatively.

BACKGROUND

Gives evidence of poor outcomes with surgical repair and aims to improve medical practice.

CASE PRESENTATION

The patient is a top-level professional footballer who presented with a history of continuing right groin pain and an intermittent fluctuant discharge following acute adductor tendon repair performed 12 months previously. Initially, he made good recovery after his initial surgery but his pain returned preventing him from training at a full level. To add to his difficulties, he had a previous mesh hernia repair and there was some concern that the sepsis had tracked into the margin of the repair.

On initial review, his adductor longus was approximately 3 cm across together with a fluctuant swelling. An ultrasound scan had suggested a collection of fluid in the region. CT demonstrated a significant myositis of the adductor longus muscle often seen in professional jockeys.

The right adductor insertion was explored by a joint orthopaedic and general surgical procedure in view of the previous problems with his hernia. At surgery there was a considerable difficulty in mobilising the muscle on account of the myositis. A large chronic abscess cavity was encountered, which was drained and the bone anchors removed. He was started on appropriate antibiotics according to the sensitivities.

Remarkably the wound healed at 2 weeks and he got into some light training. By approximately 2 months he got back to near normality.

The patient was also an elite professional footballer who had an adductor longus repair with

bone anchors some 3 years previously presented with persistent groin pain and a chronic discharging sinus. He had numerous explorations to settle the sinus down, none of which had been satisfactory. He also had a mesh hernia repair and again there was concern that the infection had tracked into his hernia region. A MR scan was performed to assess the area, which showed evidence of infection around the bone anchors (figures 1 and 2).

A joint orthopaedic and general surgical procedure was carried out. Initially, the sinus was excised that revealed large pieces of Ethibond suture material within the sinus itself and tracked down to the bone anchors which were again removed piecemeal. Necrotic tissue was removed and the area thoroughly irrigated and the wound closed.

Staphylococcus aureus was cultured from this region and he was put on appropriate antibiotics.

His wound healed well and he returned to training. About a month later he developed a small nodule which responded well to a course of antibiotics. However, he was not able to regain his previous level of sporting excellence after being 3 years away from playing and retired from the sport. He is currently seeking legal advice on the initial surgical management he received.

DISCUSSION

There is limited literature on the subject of adductor longus repairs. Of the papers available both non-operative and operative treatments have been reported as successful.^{1–3} Accepted techniques for repair of the tendon are Mitek anchors or fibre-wire suture anchors.^{1–3}

This paper highlights the problem of chronic low-level sepsis that may occur and the potential

Figure 1 Coronal MRI showing increased uptake around the adductor origin.

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Figure 2 Axial MRI again showing increased uptake around the adductor origin.

effects this may have on elite athletes. Of course, infection is a complication of any operation but surgical repair should be carefully considered in these patients in particular owing to the potentially career threatening effects of chronic groin infection described in these cases. This particularly holds true as non-operative treatment has been reported as successful.² In addition, treating elite level athletes opens-up a potential legal minefield should recovery not go as planned and any surgeon should bear this in mind.

The authors also note that the current accepted management for adductor longus tendinopathy, refractory to conservative measures in elite athletes, is an adductor tenotomy.^{4 5} So why do we repair adductor longus tendons when they rupture given the potential risks, particularly in elite level athletes when they can effectively have a tenotomy? We do however accept that surgery may be indicated on occasion; such as when there is a large bony avulsion associated with the injury.

Given the overall evidence of conservative management of adductor tears and possible complications associated with the surgery this would suggest that acute adductor tears in the majority should be treated conservatively.

Learning points

- ▶ Literature reports good outcomes with both surgical and conservative management.
- ▶ Surgical repair carries potentially devastating complication of the infection.
- ▶ Adductor tears should be treated non-operatively in majority of the cases.

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