

Tendon disorders

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Tenosynovitis/tendinitis is probably a misnomer as the histological data support neither pathology in many cases. It often occurs as a result of injury or overuse or is secondary to inflammatory disease. Rest, anti-inflammatory medication and physiotherapy are often helpful but, in inflammatory conditions, tenosynovectomy may be required. The tendons most commonly affected by degeneration are the Achilles (Figure 41.6), tibialis posterior and the peronei (brevis more than longus). Ruptured Achilles tendon The Achilles tendon rupture is relatively frequent in the 40- to 50-year-old age group who are undertaking vigorous sport after a long period away from such activities, but can occur in any age and with little provocation. One-quarter are missed in primary care or in the accident and emergency department and the recording of the Simmonds test is mandatory . The test is non-reliable after 1 week. Management of acute rupture is more frequently non-operative nowadays, provided ultrasound has shown closure of the gap in plantarflexion (although the importance of this even is now debated), and many protocols are described for non-operative management. Surgical fixation is an alternative but large meta-analyses have shown little if any advantage of surgical fixation with an increased complication rate. Many patients do not suffer the acute rupture classically described in all textbooks and many seem to have a series of micro-tears that gradually lead to total rupture. Studies have shown that older adult patients with Achilles rupture regained 70–90% of the normal power with no treatment whatsoever when reviewed at 1 year; for many patients, this is enough to allow some of them to return to normal function. Non-operative options for a missed rupture include a sprung ankle-foot orthotic ankle brace, while operative options involve reconstructive surgery with or without FHL tendon augmentation or synthetic ligament replacement. Achilles tendinosis Non-insertional tendinosis is frequent, often related to overuse and is usually managed non-operatively . Multiple tendon Franklin Adin Simmonds , 1911–1983, orthopaedic surgeon, The Rowley Bristow Hospital, Pyrford, Surrey , UK. Patrik Haglund , 1870–1937, Swedish orthopaedic surgeon. negative arthritides. Shockwave therapy is a recent addition to the armoury . Steroid injections may rupture the Achilles tendon and are discouraged; high-volume saline, dry-needling and sclerosant injections have all been described but are used less frequently with the advent of shockwave. Surgery for non-insertional tendinosis has moderate success. Insertional tendinosis is usually associated with a Haglund's bony deformity or the presence of intratendinous bony spurs/ shelves seen on lateral radiograph. Significant intratendinous bony spurs rarely get better without surgical input in the author's experience. Minimally invasive or mini-open excision of the prominent posterolateral corner of the calcaneum in Haglund's deformity , detachment, debridement and reattachment or reshaping osteotomy form the mainstay of modern surgical techniques for insertional problems, but both conditions have a relatively high rate of failure and complication with surgery . Peroneal tendon problems The peroneal tendons may develop tendinosis, may subluxate or may become involved in an inflammatory process with or without bony overgrowth at the inferior retinaculum (Figure 41.7). An associated varus heel will amplify the problem and will need addressing with an appropriate reconstruction/osteotomy or fusion. Investigation as to w

Whether the varus heel caused the peroneal problem or vice versa should be established or recurrence is guaranteed. Peroneal tendon subluxation can occur spontaneously or after injury. It may be associated with the groove at the back of the fibula being too shallow to contain the peroneal tendons, but may just be secondary to a superior retinaculum tear. The patient may be able to demonstrate a tendon subluxation over the fibula. Surgical repair is usually required and involves deepening of the groove. Tendinosis/tendinitis can be managed non-operatively, although injections have occasionally caused rupture. Surgical debridement or repair of splits/tears/ruptures is well described but has only moderate success.

Figure 41.6 Insertional Achilles tendinitis (arrow). Figure 41.7 Split and degenerate peroneus brevis.

Figure 41.8 Tarsometatarsal arthritis.

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input in the author's experience. Minimally invasive or mini-open excision of the prominent posterolateral corner of the calcaneum in Haglund's deformity, detachment, debridement and reattachment or reshaping osteotomy form the mainstay of modern surgical techniques for insertional problems, but both conditions have a relatively high rate of failure and complication with surgery. Peroneal tendon problems The peroneal tendons may develop tendinosis, may subluxate or may become involved in an inflammatory process with or without bony overgrowth at the inferior retinaculum (Figure 41.7). An associated varus heel will amplify the problem and will need addressing with an appropriate reconstruction/osteotomy or fusion. Investigation as to whether the varus heel caused the peroneal problem or vice versa should be established or recurrence is guaranteed. Peroneal tendon subluxation can occur spontaneously or after injury. It may be associated with the groove at the back of the fibula being too shallow to contain the peroneal tendons, but may just be secondary to a superior retinaculum tear. The patient may be able to demonstrate a tendon subluxation over the fibula. Surgical repair is usually required and involves deepening of the groove. Tendinosis/tendinitis can be managed non-operatively, although injections have occasionally caused rupture. Surgical debridement or repair of splits/tears/ruptures is well described but has only moderate success.

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