

Surgical correction of flat foot due to posterior tibial muscle tendon injury: case report

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Rupture of the posterior tibial tendon (PTT) is the main cause of acquired flatfoot in adults, commonly treated by transfer of the flexor digitorum longus (FDL) tendon. This study aims to report and describe the surgical application of a poorly documented technique: PTT reconstruction using hamstring autografts to treat stage II flatfoot deformity in a patient who suffered low-energy trauma. This is a case report of a 44-year-old female patient with a complete rupture of the retromalleolar portion of the PTT after ankle sprain. Surgical treatment involved a combined approach (open and arthroscopic) using grafts from the semitendinosus and gracilis tendons. The technique included Pulvertaft tenorrhaphy, fixation to the navicular bone with an interference screw, and retinaculum reconstruction. The surgery provided satisfactory correction of the plantar arch, as evidenced by the immediate formation of a medial cavus and confirmed by podoscopy in the postoperative period. The patient presented preservation of dorsiflexion and inversion movements, absence of pain during ambulation, and satisfactory balance. Only temporary plantar paresthesia was observed due to the neurolysis required during the procedure. Reconstruction with hamstring autograft showed favorable results in the treatment of stage II flatfoot secondary to PTT rupture. Despite the technique's potential, the literature still lacks sufficient studies to establish a definitive consensus on its application.

Keywords: Flatfoot; Tendon transfer; Treatment outcome.

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