

INTRODUCTION

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Meniscal injuries are common lesions in sports injuries particularly among the young sporting population. Meniscal tears are usually caused by rotational stress applied to the flexed weight-bearing knee. Injury can also result from rapid knee extension.

The meniscus is now universally recognized as an important component of the knee joint and its important load-bearing, stabilizing, lubricating and energy-absorbing functions are now recognized. Many experimental and clinical publications have indicated that partial or total meniscectomy produces derangement of the knee functions (*Baratz ME, et al., 1985*). As a consequence of this, degenerative changes in the articular cartilage and early osteoarthritis of the knee may develop. Many orthopaedic surgeons therefore prefer to repair rather than excise a damaged meniscus whenever possible.

Repair of meniscal tears is currently achieved with sutures using the “inside-out” “outside-in” or “inside-inside” techniques but complications including vascular and nerve injuries have been described (*Edelson et al., 1994*). Thus, there is an obvious need for an alternative repair technique and/or device that avoids these problems, like the T-fix anchor suture technique and meniscal fixation with an absorbable staple.

Meniscal repair is not applicable in every instance. Only approximately 20% of injured menisci can be repaired and thus, nowadays, most symptomatic degenerative and complex tears are treated by partial or subtotal arthroscopic resection. Meniscal transplantation

may be a potential method of replacing a severely damaged meniscus and thus preventing the degenerative changes in the articular cartilage following meniscectomy (*Arnoczky SP et al., 1990*).

The aim of this essay is to review the literature concerning about meniscal repair and replacement proceeding under the following topics:

- Anatomy.
- Mechanism of tear and classification.
- Diagnosis and management.
- Methods of repair and their complications.
- Replacement.