Meniscal repair is not new. The first open meniscal repair was performed over 100 years ago and the first arthroscopic repairs were performed in 1969, prior to the use of fibreoptic cable and video screens. Over the last 10 years, arthroscopic meniscal repair has been growing in popularity but despite many advances in equipment and techniques***(Forster and Aster 2003)***.

An appreciation of meniscal structure and its relation to function is useful for an understanding of the role of the meniscus, meniscal tear patterns and the potential for repair***(Forster and Aster 2003).***

It has been argued that restoration of the meniscus by performing repair instead of meniscectomy can restore joint biomechanics and theoretically reduce the progression of chondrosis and arthrosis***(Angel et al. 2009).***

Clinical evaluation of meniscal pathology begins with the history, including the location of pain, recent trauma, prior injuries/surgery, as well as symptoms of recurrent effusions, antalgia, or instability (which may indicate associated ligamentous pathology). Specific mechanical symptoms such as locking, catching, or loss of motion should be noted***(Angel et al. 2009).***

Meniscus tear evaluation and physical examination begins with inspection to determine whether the patient has an effusion of the knee or muscular atrophy, and observations of the gait may define antalgia. Localized swelling may indicate the presence of a meniscal cyst, which occurs due to degenerative horizontal tears, found more commonly on the lateral side. These patients often have focal point tenderness over the joint line. A knee with a “locked” or limited range of motion often indicates a displaced bucket-handle tear***(Angel et al. 2009).***

Preoperative radiographic evaluation includes plain radiographs and also may include magnetic resonance imaging. Plain radiographs should be taken to evaluate for bony pathology, full-length standing mechanical axis alignment, evidence of arthritis, chondrocalcinosis, or findings consistent with associated acute or chronic injuries such as osteochondritis dissecans lesion, osteochondral fracture, or ligamentous injuries***(Angel et al. 2009).***

Magnetic resonance imaging is more useful as a confirmatory test and is valuable in the evaluation of associated injuries and concomitant pathology when a meniscus tear is suspected. The sensitivity of MRI for meniscus tears is reported to be as high as 96%, with a specificity of 97%***(Angel et al. 2009).***

Classification of the different types of meniscal tears is essential in planning the subsequent treatment. The location in the red, red–white, or white zone is the principal determinant of the further management***(Almqvist et al. 2010).***

A wide variety of techniques exist to repair a torn meniscus. The pattern, length, and stability of the tear play important roles in the choice of the repair method. Tears in the vascular outer third are most amenable to repair with an inside–out, all-inside, or outside–in technique***(Almqvist et al. 2010).***

It is undisputed that as much meniscus tissue should be preserved as possible because removal leads to degenerative changes in the involved compartment. However, the problem of promoting healing of meniscal tears in the avascular area has not been resolved as yet. Different promising approaches have been advanced to improve meniscal healing. Technically simple techniques such as abrasion, rasping or trephination should be adopted whenever possible and are currently widely propagated***(Jacobi and Jakob 2010).***

There is no universal technique, but rather several techniques which are adapted to different indications. Even if all-inside fourth-generation devices are now the gold standard in the majority of cases, inside-out, outside-in, and even open techniques are still indicated in selected cases. The ultimate goal is to achieve a strong repair***(Jouve et al. 2010).***