



Alternative Approaches to Access to the Hip Joint

Starting in the Peripheral Compartment

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INTRODUCTION

Portal placement in the hip joint is a demanding and crucial step during hip arthroscopy.¹⁻³ This is related to the following various anatomic features: a thick soft tissue mantle; a strong articular capsule; the constrained ball and socket architecture of the joint; a relatively small intra-articular volume; and the additional sealing of the deep, central part of the joint by the acetabular labrum. In particular, the anatomy of the acetabular labrum must be considered before accessing the hip joint. It separates the hip joint into the central compartment (CC) and the peripheral compartment (PC).⁴

Even with the knowledge of current techniques for avoiding the labrum and cartilage in hip arthroscopy,³ occasionally some degree of damage is unavoidable.² The highest risk of iatrogenic damage is during the first access to the CC under traction. Here, only fluoroscopy and the surgeon's feeling when penetrating the soft tissues and articular capsule help not to penetrate the labrum and scratch the hyaline cartilage of the femoral head. In addition, there are situations in which direct access to the CC under traction at the beginning of arthroscopy is not possible due to insufficient distraction of the hip joint. This may be caused by a stiff and thickened capsule or a bony overhang of the acetabular rim as is frequently found in femoroacetabular pincer impingement with advanced ossifications of the acetabular labrum.

With this experience, the authors have developed the PC-first technique. The portals are placed in the PC first, without traction and without the risk of injury to the acetabular labrum and femoral head cartilage. For arthroscopy of the CC, further portal placement is controlled arthroscopically. This chapter describes the current PC-first technique, including a discussion of advantages and disadvantages.