INTRODUCTION

Temporo-mandibular joint (TMJ) dysfunction is a common condition that is best evaluated with magnetic resonance (MR) imaging. The first step in MR imaging of the TMJ is to evaluate the articular disk, or meniscus, in terms of its morphologic features and its location relative to the condyle in both closed- and open-mouth positions. Disk location is of prime importance because the presence of a displaced disk is a critical sign of TMJ dysfunction. However, disk displacement is also frequently seen in asymptomatic volunteers, so that other findings may be required to help make the diagnosis. These findings include thickening of an attachment of the lateral pterygoid muscle, rupture of retrodiskal layers, and joint effusion and can serve as indirect early signs of TMJ dysfunction. It is important for the radiologist to detect early MR imaging signs of dysfunction, thereby avoiding the evolution of this condition to its final stage, an advanced and irreversible phase that is characterized by osteoarthritic changes such as condylar flattening or osteophytes. Further studies conducted with the latest MR imaging techniques will allow a better understanding of the sources of TMJ pain and of any discrepancy between imaging findings and patient symptoms. **(Tomas et al., 2006)**