Summary and conclusion

Magnetic resonance imaging is currently considered the optimum modality for imaging the TMJ in patients with temporomandibular joint disease, particularly for the soft tissues. **(Usumez et al., 2004).**

Magnetic resonance imaging has replaced computed tomography and arthrography as the primary modality in the evaluation of the temporomandibular joint. Direct visualization of the disk afforded by MRI is a distinct advantage over arthrography. Despite the superior resolution of CT and limited visualization of cortical bone by MRI. **(Roth et al., 2005)**

Magnetic resonance imaging allows excellent depiction of temporomandibular joint anatomy and abnormalities because of its inherent tissue contrast and high resolution, given the use of dedicated surface coils. Concomitant imaging of the closed and open jaw allows additional functional and morphologic assessment and proper grading of disease processes of the articular disk. magnetic resonance imaging is consequently the modality of choice in presumed internal derangement and inflammatory arthritis and allows the clinician to apply therapeutic strategies optimally suited to the underlying abnormality **(Larheim et al., 2001)**.

Magnetic resonance imaging is a unique imaging modality that produces cross sectional multiplanar images without using ionizing radiation. Using Magnetic resonance imaging, the evaluation of the internal derangement of TMJ (the depiction and localization of the disc) can be detected. **(Adame et al, 1998).**

The objective of magnetic resonance imaging is to document both soft and osseous tissue abnormalities of the joint and its surrounding structures. Magnetic resonance imaging is helpful to indicate the neoplastic, arthritic, and traumatic pathology around temporomandibular joint. Rapid scan Magnetic resonance imaging methods provide us with a good method for the functional imaging of the temporomandibular joint. magnetic resonance imaging is the standard imaging modality for the diagnosis of temporomandibular joint disorders**. (Dalkiz et al., 2001).**

Magnetic resonance imaging of the temporomandibular joint can detect the abnormal changes within the disc, joint and other tissues. Disc displacement is the most common diagnosis of these patients**. (Dalkiz et al., 2001)**

Magnetic resonance imaging techniques allow analysis of disc position in both sagittal and coronal planes, dynamic assessment of condylar translation and disc movement during opening and closing, disc morphology, joint effusions, synovitis, osseous erosions and degenerative joint disease. **(Emshoff ., 2003).**