

Evidence Discussion (HD-30.1)

Temporomandibular Joint Disease

- MRI is preferred for evaluation of the temporomandibular joint (TMJ) due to its superior contrast resolution and its ability to acquire dynamic imaging for demonstration of the functionality of the joint.^{3,8}
- MRI is the imaging modality of choice for the diagnosis of internal derangement with an accuracy of 95% in assessing the disc position and form and 93% accuracy in assessing the osseous changes.³
- MRI is reserved for patients with persistent symptoms in whom conservative measures have been ineffective, or in those with suspected internal joint derangement.^{2,6,7} Imaging the TMJ prematurely may lead to harms including unnecessary surgery.⁵
- CT is the alternative modality for evaluating bony anatomy of the TMJ, fractures, degenerative changes, erosions, infections, congenital anomalies, acute and chronic inflammatory conditions, pre-operative evaluation and follow up after surgery.^{1,3,8}
- For pre-operative planning of unilateral condylar hyperplasia, bone scintigraphy is useful to predict ongoing condylar growth.¹⁰
- The diagnosis of chronic rheumatoid arthritis of the TMJ is established with contrast-enhanced MRI.¹¹ It is the preferred imaging study for diagnosis, disease progression, treatment monitoring and annual surveillance of TMJ arthritis in juvenile idiopathic arthritis (JIA).¹¹

References

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