

Clinical Significance of Temporomandibular Joint Abnormalities

P-L Westesson, MD, PhD, DDS

Neuroradiology

University of Rochester, Rochester, NY

PURPOSE

- To determine which TMJ MRI abnormality that are clinically significant

MATERIAL & METHODS

- Bilateral TMJ MR images
- 58 patients with pain and dysfunction
- 62 asymptomatic volunteers

Normal Disk Position



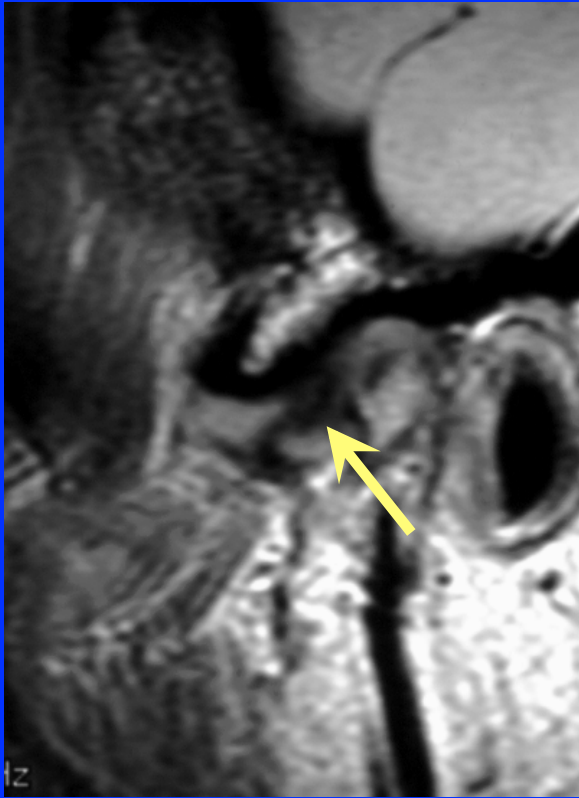
Disk Displacement



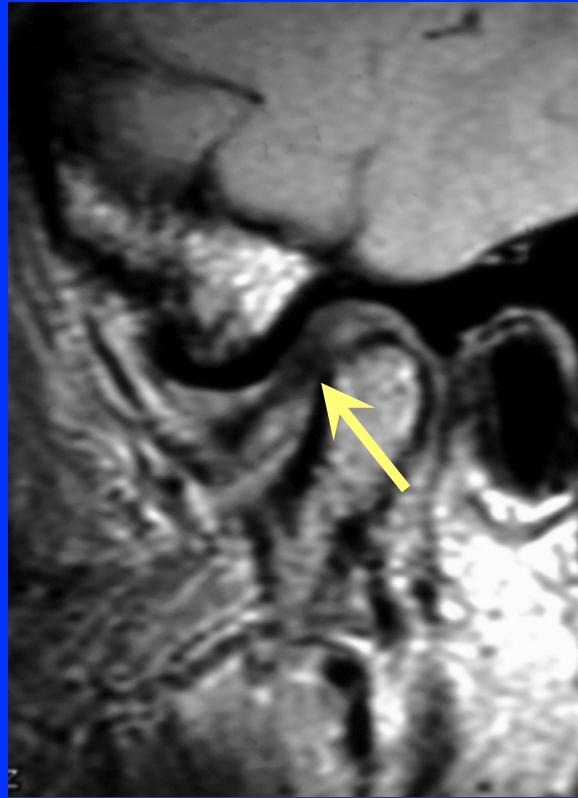
RESULTS

Abnormality	Patients n=62	Volunteers n=58
• Disk Displacement	78%	35%
• Bilateral Disk displacement	47%	13%

Partial Anterior Disk Displacement



Lateral

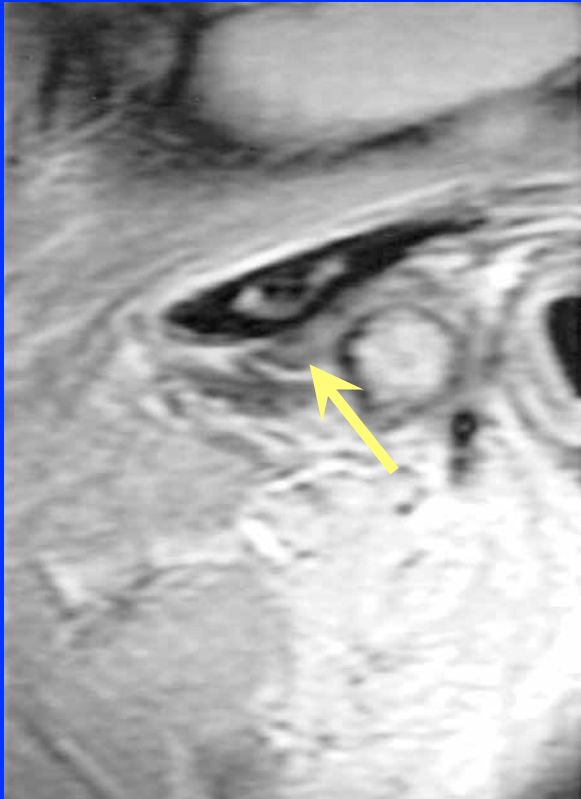


Central



Medial

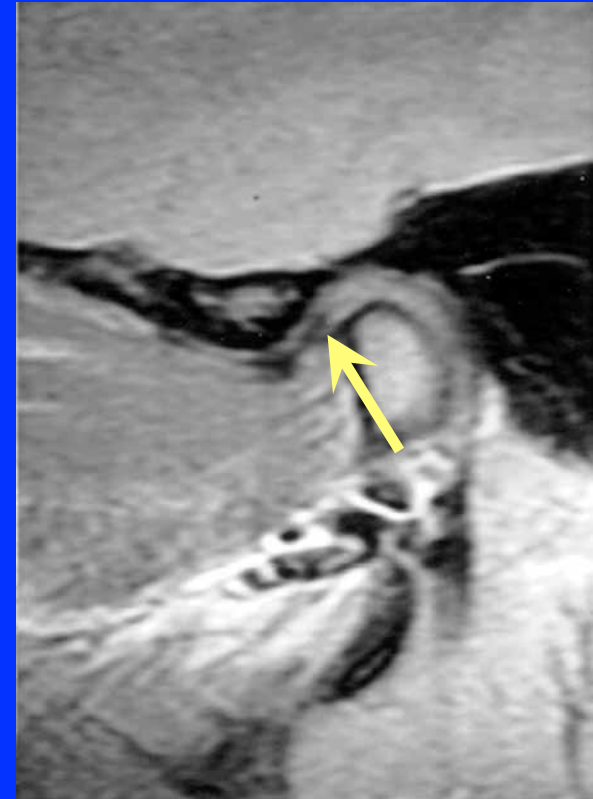
Complete Anterior Disk Displacement



Lateral



Central

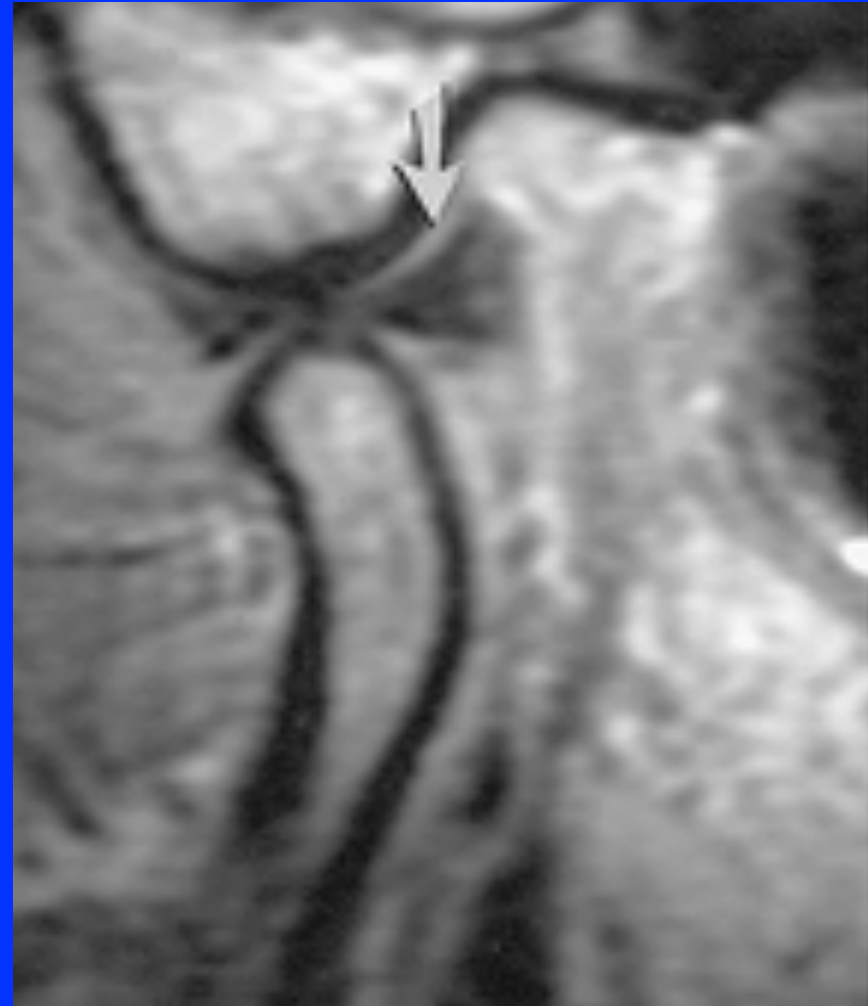


Medial

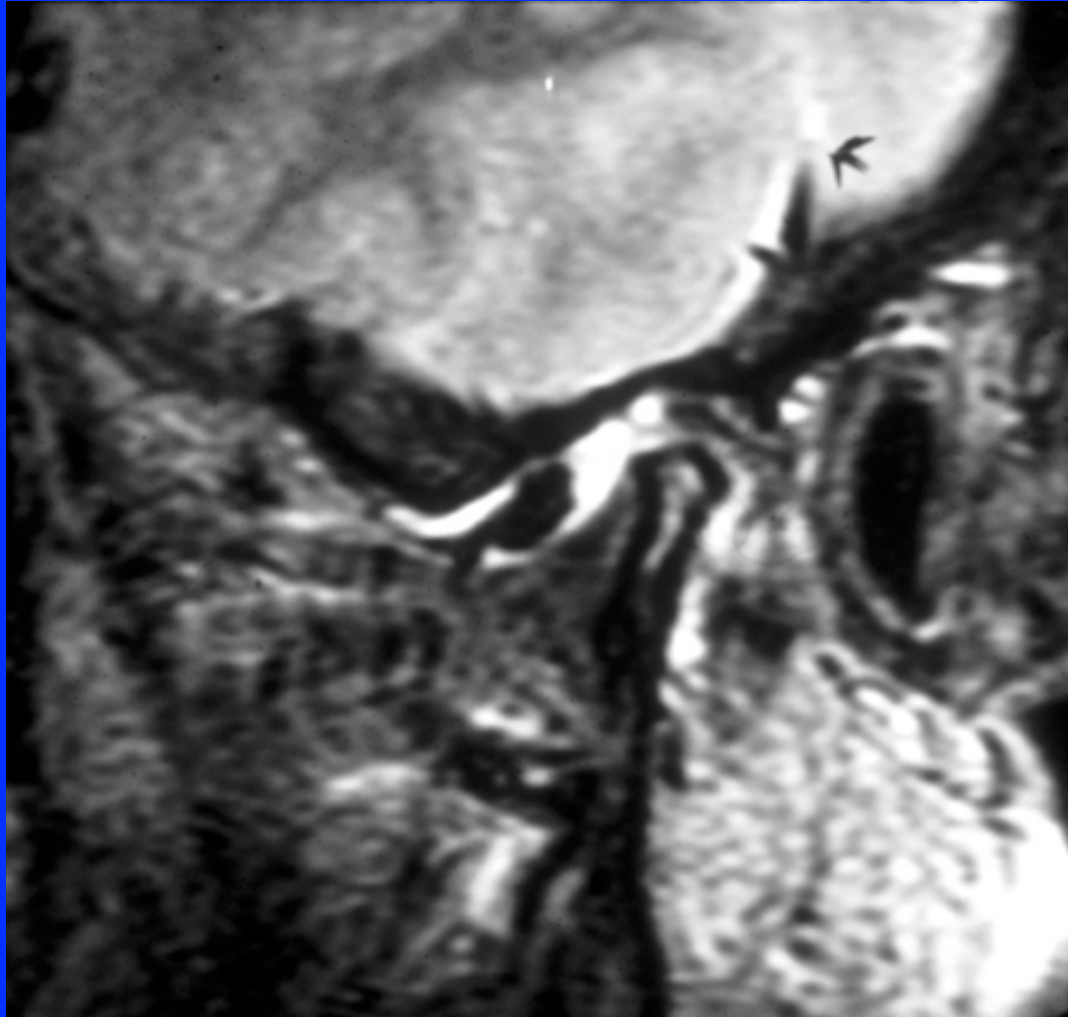
Joint Function on Open Mouth

Without Reduction

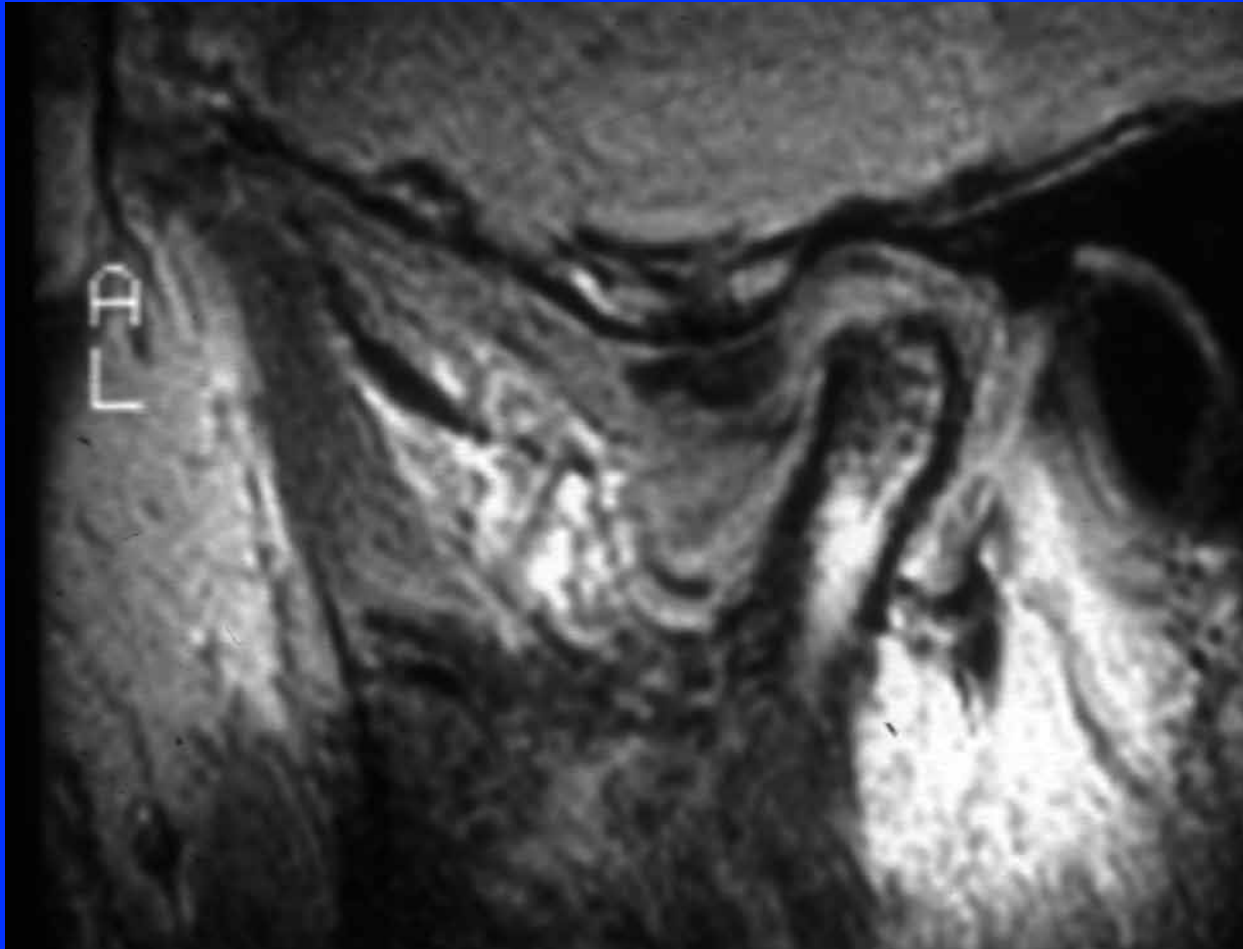
With Reduction



Joint Effusion



Bone Marrow Abnormality



RESULTS

Abnormality	Patients n=62	Volunteers n=58
• Disk Displacement	78%	35%
• Bilateral Disk displacement	47%	13%
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• Complete Disk Displacement	40%	2%
• Non Reduction of a Displaced Disk	76%	2%
• Bone Marrow Abnormalities	6%	0%
• Large Joint Effusion	13%	0%

CONCLUSION

Significant abnormalities:

- Bone marrow abnormalities
- Large joint effusion
- Complete types of disk displacement

Less significant abnormalities:

- Partial types of disk displacement
- Disk displacement with reduction