

PROTOCOL: MRI TMJ (TEMPOROMANDIBULAR JOINTS) WO OR WWO

CLINICAL INDICATIONS/ HISTORY Jaw pain, clicking, locking, difficulty chewing, osteoarthritis

TIPS:

- **SHOULD IDEALLY BE DONE WITH A DEDICATED COIL AT 1.5T, HEAD COIL ACCEPTABLE AT 3T**
- Sag Obliques plane should be parallel to the ramus of the mandible.
- For cine view, direct patient to start with mouth closed and to open mouth as wide as possible even spaced over 10 seconds, then complete close evenly spaced over 10 seconds.
- Place marker on RIGHT ear lobe or tragus. This marker must be seen on bilateral view and individual TMJ views. It will help the doctors localize the laterality on small FOV images of the TMJs.
- For open mouth view, use something like a clean 20 mL syringe. Place the syringe cross-wise like a dog biting a bone. Ask the patient to bite the syringe on the molar teeth as far in the mouth as possible. The patient should not bite the syringe with the front teeth.
- TMJ WWO is primarily designed as a pediatric protocol for patients 12-20 years old. Patients under the age of 12 should be scanned at a primary pediatric hospital since they have the most appropriate sedation / anesthesia and nurse teams with well-established workflows.
- For post-contrast studies, hand injection gadolinium. Wait minimum of 3 minutes after injection to allow contrast soak time before scanning.

SCAN ORDER	PLANE	IMAGE CONTRAST/WEIGHTING	MODE	PULSE SEQ	COVERAGE	TR RANGE	TE RANGE	TI	FLIP ANGLE	THICKNESS/G AP (mm)	FOV (cm)	Max Pixel (mm) Fr x Ph	PHASE AXIS	SEND TO PACS	Max scan time (target)
1	AX LOC	T1 BILAT CLOSED	2D	FSE	TOP OF SELLA TO MAXILLARY TEETH ROOTS	350-790	MIN		>130	3.0 / 0.3	16-18	.8X.8	LR	FULL SERIES	3:00
2	SAG	PD CLOSED	2D	FSE	TMJ R THEN L	>2500	28-40		>130	3.0 / 0.3	8-13	.5X.5	AP	FULL SERIES	4:00
3	SAG	T2 CLOSED	2D	FSE	TMJ R THEN L	>3500	70-100		>130	3.0 / 0.3	8-13	.5X.5	AP	FULL SERIES	4:00
4	SAG	PD OPEN	2D	FSE	TMJ R THEN L	>2500	28-40		>130	2.0 / 0	8-13	.5X.5	AP	FULL SERIES	4:00
5	SAG	T2 OPEN	2D	FSE	TMJ R THEN L	>3500	70-100		>130	3.0 / 0.3	8-13	.5X.5	AP	FULL SERIES	4:00
6	COR	T1 BILAT CLOSED	2D	FSE	TMJ FOSSA	350-790	MIN		>130	3.0 / 0.3	8-13	.5X.5	LR	FULL SERIES	3:00
7 IF PT TOLERATES	SAG	PD CINE OPEN + CLOSE	2D	SSFSE	TMJ R THEN L	PRN	28-40		>130	10	20	1.2X1.2	AP	FULL SERIES	25s