

**Synergy TMJ MRI protocol (rev. 8-1-24)**

Use head coil or surface TMJ coil (if available)

1.5T preferred (3T is ok).

Prefer to scan both joints simultaneously, labeling series as open versus closed. If scanned separately, series should be labeled Right vs Left, open or closed.

Localizer planes,

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Scanning sequences (FOV 150 mm x 150 mm; may adjust to avoid wraparound):

* 3 plane SSFSE T2 localizers.
* Sag PD 3/0 mm thick; no fat sat (closed jaw).
* Sag PD 3/0 mm thick; no fat sat (open jaw).
* Cor T1 FSE 3/0 mm thick no fat sat (closed jaw).
* Sag & Axial 3D FIESTA 6 mm thick slab (continuous scanning for 16-17 seconds during slow jaw opening/closure; approximately 6 sec per cycle of opening/closing. Have patient practice before entering the scanner).
  + TR: 3.6 ms
  + TE: 1.8 ms
  + Matrix 128 x 128 (4/8 partial Fourier)
* Post-contrast scans (optional; see note below):
  + Sag 3D T1 GRE fat sat pre-Gad.
  + Sag & Axial 3D T1 GRE fat sat post-Gad.

NOTE: Most TMJ scans will need NO contrast. If contrast is needed (infection, tumor, inflammation, or M.D. request), confirm with Radiologist if contrast is necessary before scanning.

As always please feel free to contact Radiologist with any questions. Thanks for all your help.