

MR SIM: Head and Neck

9/21/2016 EP

Patient Preparation:

- Confirm GFR > 60 within 45 days
- Have patient change into gown and robe.

Coils and Immobilization Devices:

- (2) Large flex (surface) coils
- (1) Extremity flex (surface) coil
- (3) Nylon (locking) straps
- G9 fiberglass flat table insert
- Patient-specific immobilization devices (thermoformed mask and headrest)

Setup and Landmark:

1. Remove everything from MR table except spine array coil.
2. Secure G9 fiberglass table insert in place over spine array.
3. If patient signed consent for research place IV into patient arm and fill injector.
4. Setup patient head-first supine, with the thermoformed mask and head rest. **Verify mask is completely dry.**
5. Call radiation therapists (x53809) to verify patient setup.
6. Wrap two large flex coils around patient's head and secure with two Nylon straps.
7. Confirm that the coils **overlap** anteriorly, are positioned as inferiorly as possible, and are **symmetric**.
8. Place extremity flex coil over neck and secure with Nylon strap.
9. Landmark over patient's chin

Notes:

- Do not oblique axial slices.

Protocol:

- USER → MR SIM → HEAD and NECK → HEAD and NECK

Scans:

- LOC
- N AX STIR (~6:30):
 - Confirm **R/L phase encode** direction.
- N AX T1 (~4:30):
 - Copy N AX STIR prescription.
- N AX DWI (~5:30):
 - Copy N AX STIR prescription.
- N AX Neurography (3:00)
- ***** RESEARCH SCANS (IF PATIENT SIGNED CONSENT) *****
- N AX T1+F (~6:00):
 - Copy pre-contrast N AX T1 slice prescription.

Post-Scanning:

- **Distortion-correct all images** (in the Browser window, select a series and then go to Evaluation → 3D Distortion Correction. Note: After correction the corrected images will have a "_DIS3D" suffix).
- Send the distortion-corrected images (i.e., those with a "_DIS3D" suffix) to **MIM Clinical** and **PACS**.
- **If advanced imaging performed**, transfer raw k-space data with Yarra client (Ctrl+Esc → Transfer Raw Data).

