**Radiology of Indiana**

| Protocols | .7/ 1.2/ 1.5T | 3.0 T | Special Instructions/Comments |
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| | ** All Sagittals, please scan from patients Left to Right ** | | |
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| **Brachial Plexus (bilateral)** | | | |
| | Coronal T1 TSE (3sk1) | SAME | For Bilateral Brachial Plexus |
| | Axial T1 TSE (3sk1) | | scan shoulder to shoulder |
| | Axial STIR (3sk1) | | FOV= 25cm preferred: 32cm as needed |
| | Sagittal T1 TSE (3s1) | | |
| | Sagittal STIR (3sk1) | | |
| | Coronal STIR (3sk1) | | |
| | Axial C+T1 fat sat | | |
| | Coronal C+T1 fat sat | | |
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| **Brachial Plexus (unilateral)** | | | |
| | Coronal T1 TSE (3sk1) | SAME | For unilateral Brachial Plexus, Scan far transverse process through shoulder (i.e. for |
| | Axial T1 TSE (3sk1) | | LEFT brachial Plexus, Start at RIGHT C7 transverse process ) |
| | Coronal STIR (3sk1) | | FOV=25cm |
| | Sagittal T1 TSE (3sk1) | | |
| | Sagittal STIR (3sk1) | | |
| | Axial STIR (3sk1) | | |
| | Axial C+T1 fat sat | | |
| | Coronal C+T1 fat sat | | |
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| **Brain Cancer** | | | |
| | Sagittal T1 TSE (4sk1) | Sagittal T1 FLAIR (3sk1) | Remove eADC from all protocols, should only do ADC |
| | Axial T1 TSE (4sk1) | Axial T1 FLAIR (3sk1) | Inject contrast , followed immediately by Axial T2 |
| | Axial T2 GRE (4sk1) | SWI (3sk1) with Mis | Axial and coronal contrast enhanced T1s to follow T2 to allow contrast circulation time |
| | Axial DWI/ADC (3 Direction if possible ), reconstruct at 5sk0 | Resolve or 6-Direction DWI/ADC, reconstruct at 4sk0 | |
| | Axial FLAIR FAT SAT (4sk1) | Axial FLAIR FAT SAT (3sk1) | Scan through whole brain (skull to skull) on sagittal images |
| | Axial C+ T2 TSE (4sk1) | Axial C+ T2 TSE (3sk1) | |
| | Axial C+ T1 TSE (4sk1) | Axial C+T1 FLAIR (3sk1) | FOV=23cm |
| | Coronal C+ TSE (4sk1) | Coronal C+FLAIR (3sk1) | |
| | Sagittal C+ T1 TSE (4sk1) | Sagittal C+ T1 FLAIR (3sk1) | |
| | Axial C+ T1 MPRAGE volumetric | Axial Volumetric (MPRAGE or equivalent) with 3-plane reformat | |
| | Sagittal and coronal reformats | See if Perfusion/Spectroscopy needed | |
| | Possible Perfusion/Spectroscopy? | | |
| | Should be done on 3T if possible | | |
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| | ** Brain Cancer protocol used for patients that have/had a known brain lesion (including post surgical/post treatment lesions), lesion seen on another study (i.e. CT Head), or any patient with a current dx of cancer, | | |
| | suspected cancer, or history of cancer for which metastatic disease to the brain is being evaluated | | |
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| **MRI Brain (Contrast Clearance Analysis)** | | | |
| | 3D T1-weighted (MPRAGE, FSPGR, VIBE, SPACE, etc.) | : | |
| | 3D T1-weighted C+ (MPRAGE, FSPGR, VIBE, SPACE, etc.) | 5 minutes post Gad | * It is important that the early time point is at a fixed time post-Gd injection, therefore, it is best to acquire it after a fixed protocol, e.g., after DSCMRI and 2D spin-echo or after DCE-MRI. |
| | 3D T1-weighted C+ (MPRAGE, FSPGR, VIBE, SPACE, etc.) | 60 - 105 minutes post Gad (patient can leave between both scans) | The timing of the late time point is flexible and can change from one follow-up to the next as long as it is acquired between 60-105 min post Gd. |
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| | | FOV = 23 all sequences | * IV bolus injection of a Gd-based contrast agent (standard dose, 0.1mmol/kg) is required. |
| | | | * T1-weighting of the MRI sequence does not change between the two acquisitions; thus the exact same protocol should be used for both scans (same FOV, slab size, etc.). |
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| | | | * Poor image quality or metal-induced artifacts may affect the interpretation s |
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| **Brain With** | | | |
| | Sagittal T1 TSE (4sk1) | Sagittal T1 FLAIR (3sk1) | Remove eADC from all protocols, should only do ADC |
| | Axial T1 TSE (4sk1) | Axial T1 FLAIR (3sk1) | Inject contrast , followed immediately by Axial T2 |
| | Axial T2 TSE (4sk1) | Axial T2 TSE (3sk1) | Scan Through whole brain (skull to skull) on sagittal images |
| | Axial T2 GRE (4sk1) | SWI (3sk1) with MIPS | Axial and coronal contrast enhanced T1s to follow T2 to allow contrast circulation time |
| | Axial DWI/ADC (3 Direction if possible ), reconstruct at 5sk0 | Resolve or 6-Direction DWI/ADC, reconstruct at 4sk0 | |
| | Axial FLAIR FAT SAT (4sk1) | Axial FLAIR FAT SAT (3sk1) | Scan through whole brain (skull to skull) on sagittal images |
| | Axial C+ T2 TSE (4sk1) | Axial C+ T2 TSE (3sk1) | |
| | Axial C+ T1 TSE (4sk1) | Axial C+T1 FLAIR (3sk1) | FOV=23cm |
| | Coronal C+ TSE (4sk1) | Coronal C+FLAIR (3sk1) | |
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| **Brain Without** | | | |
| | Sagittal T1 TSE (4sk1) | Sagittal T1 FLAIR (3sk1) | Remove eADC from all protocols |
| | Axial T1 TSE (4sk1) | Axial T1 FLAIR (3sk1) | |
| | Axial T2 TSE (4sk1) | Axial T2 TSE (3sk1) | Scan Through whole brain (skull to skull) on sagittal images |
| | Axial T2 GRE (4sk1) | SWI (3sk1) with MIPS | |
| | Axial DWI/ADC (3 direction if possible), reconstruct at 5sk0 | Resolve or 16-direction DWI/ADC reconstruct at 4sk0 | FOV=23cm |
| | Axial FLAIR FAT SAT (4sk1) | Axial FLAIR FAT SAT (3sk1) | |
| | Coronal T2 TSE (4sk1) | Coronal T2 TSE (3sk1) | |
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| **Amyloid Therapy Brain Without** | | | |
| | Sagittal T1 TSE (4sk1) | Sagittal T1 FLAIR (3sk1) | Remove eADC from all protocols |
| | Axial T1 TSE (4sk1) | Axial T1 FLAIR (3sk1) | |
| | Axial T2 TSE (4sk1) | Axial T2 TSE (3sk1) | Scan Through whole brain (skull to skull) on sagittal images |
| | Axial DWI/ADC (3 direction if possible), reconstruct at 5sk0 | Resolve or 16-direction DWI/ADC reconstruct at 4sk0 | FOV=23cm |
| | Axial FLAIR FAT SAT (4sk1) | Axial FLAIR FAT SAT (3sk1) | |
| | Coronal T2 TSE (4sk1) | Coronal T2 TSE (3sk1) | |
| | SWI (Susceptibility Weighted Imaging) | SWI (Susceptibility Weighted Imaging) | |
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| **Cervical With** | | | |
| | Coronal T1 TSE (3sk 0.5) | Coronal T1 TSE (3sk 0.5) | FOV= skull base through upper T-spine on sagittal |
| | Sagittal T1 TSE (3sk0) | Sagittal T1 TSE (3sk0) | FOV=12cm on Axials: FOV = 20cm on Sagittal |
| | Sagittal T2 TSE (3sk0) | Sagittal T2 TSE (3sk0) | Scan from C2 through T1 |
| | Sagittal STIR (3sk0) | Sagittal STIR (3sh0) | |
| | Sagittal T2 oblique (2sk0) | Sagittal T2 oblique (2sk0) | Sagittal oblique T2 = Align perpendicular to the neural foramen |
| | Axial T2 TSE (2sk0) | Axial T2 TSE (2sk0) | |
| | Axial GRE (3sk0) | Axial GRE (3sk0) | |
| | Sagittal DWI (3sk0.3) | Sagittal DWI (3sk0.3) | |
| | Precontrast Axial T1 TSE (3sk0) | Precontrast Axial T1 FLAIR (3sk0.3) | |
| | Axial C+ T1 fat sat (3sk0) | Axial C+ T1 fat sat (3sk0) | |
| | Sagittal C+T1 TSE (3sk0) | Sagittal C+ T1 FLAIR (3sk0) | |
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| **Cervical Without** | | | |
| | Coronal T1 TSE (3sk 0.5) | Coronal T1 TSE (3sk 0.5) | Could do foraminal oblique reformats off axial T2 |
| | Sagittal T1 TSE (3sk0) | Sagittal T1 FLAIR (3sk0) | FOV=12cm on Axials: FOV = 20cm on Sagittal |
| | Sagittal T2 TSE (3sk0) | Sagittal T2 TSE(3sk0) | Axial images should be from C2 through T1 |
| | Sagittal STIR (3sk0) | Sagittal STIR (3sk0) | |
| | Sagittal T2 oblique (2sk0) | Sagittal T2 oblique (2sk0) | Sagittal oblique T2 = Align perpendicular to the neural foramen |
| | Axial T2 TSE (2sk0) | Axial T2 TSE (2sk0) | |
| | Axial GRE (3sk0) | Axial GRE (3sk0) | |
| | Sagittal DWI (3sk0.3) | Sagittal DWI (3sk0.3) | |
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| **Face** | | | |
| | Cor T1 (3/1) | SAME | FOV= 16 for Cor and Sag |
| | Cor STIR (3/1) | | FOV= 14 Axial |
| | Ax T1 (3/1) | | |
| | Ax T2 Fat Sat (3/1) | | |
| | Sag T1 SE (3/1) | | |
| | Ax DWI (3/1) | | |
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| **IAC** | | | |
| | Preferably with Brain WITH | SAME | FOV= 15-18cm |
| | Posterior fossa : | | |
| | Axial T1 (2sk0) | | Scan from tip of the dorsum Sella through C1 on axials |
| | Axial FIESTA 1mm | | |
| | Coronal HASTE Diffusion | | |
| | Coronal reformats | | Scan from posterior skull through orbital apex on coronals |
| | Sagittal reformats along IAC | | |
| | Axial T2 (2sk0) | | |
| | Axial C+ T1 fat sat (2sk0) | | |
| | Coronal C+ T1 fat sat (2sk0) | | |
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| **Kyphoplasty** | | | |
| | Localizer including cervical and upper thoracic spine | Localizer including cervical and upper thoracic spine | |
| | Sagittal T1 TSE- thoracic (3sk0.5) | Sagittal T1 FLAIR- thoracic (3sk0.5) | |
| | Sagittal T2 TSE- thoracic (3sk0.5) | Sagittal T2 TSE- thoracic (3sk0.5) | |
| | Sagittal T1 TSE -Lumbar (3sk0.5) | Sagittal T1 FLAIR -Lumbar (3sk0.5) | |
| | Sagittal T2 TSE-Lumbar (3sk0.5) | Sagittal T2 TSE-Lumbar (3sk0.5) | |
| | Sagittal STIR -thoracolumbar (3sk0.5) | Sagittal STIR -thoracolumbar (3sk0.5) | |
| | Coronal T1 TSE- thoracolumbar (3sk0.5) | Coronal T1 TSE- thoracolumbar (3sk0.5) | |
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| **Lumbar With** | | | |
| | Sagittal T1 TSE (3sk0.5) | Sagittal T1 TSE (3sk0.5) | No fat saturation if excessive artifact from metal hardware |
| | Sagittal T2 TSE (3sk0.5) | Sagittal T2 TSE (3sk0.5) | FOV: 15cm Axials |
| | Sagittal STIR (3sk0.5) | Sagittal STIR (3sk0.5) | |
| | Axial T2 TSE (4sk1) | Axial T2 TSE (4sk1) | |
| | Axial T1 TSE (4sk1) | Axial T1 TSE (4sk1) | |
| | Coronal T1 TSE (3sk0.5) | Coronal T1 TSE (3sk0.5) | |
| | Sagittal DWI (3/0.5) | Sagittal DWI (3/0.5) | |
| | Axial C+T1 fat sat (4sk1) | Axial C+ T1 fat sat (3sk0.5) | |
| | Sagittal C+T1 TSE (3sk0.5) | Sagittal C+ T1 FLAIR (3sk0.5) | |
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| **Lumbar Without** | | | |
| | Sagittal T1 TSE (3sk0.5) | Sagittal T1 FLAIR (3sk0.5) | Axial Images from L1-S1 |
| | Sagittal T2 TSE (3sk0.5) | Sagittal T2 TSE (3sk0.5) | FOV=15cm Axials |
| | Sagittal STIR (3sk0.5) | Sagittal STIR (3sk0.5) | |
| | Axial T2 TSE (4sk1) | Axial T2 TSE (3sk0.5) | |
| | Axial T1 TSE (4sk1) | Axial T1 FLAIR (3sk0.5) | |
| | Coronal T1 TSE (3sk0.5) | Coronal T1 TSE (3sk0.5) | |
| | Sagittal DWI (3/0.5) | Sagittal DWI (3/0.5) | |
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| **Lumbosacral Plexus** | | | |
| | Obl Axial T1 TSE (3sk1) | Obl Axial T1 TSE (3sk1) | FOV = 25 cm |
| | Obl Axial T2 TSE mid TE fat sat (3sk1) | Obl Axial T2 TSE mid TE fat sat (3sk1) | Planes should be relative to long axis of the sacrum |
| | Obl Coronal T1 TSE (3sk1) | Obl Coronal T1 TSE (3sk1) | Axial images L5 - bottom of sacrum |
| | Obl Coronal STIR (3sk1) | Obl Coronal STIR (3sk1) | |
| | Obl Cor T1 TSE Fat Sat +C (3sk1) | Obl Cor T1 TSE Fat Sat +C (3sk1) | |
| | Obl Ax T1 TSE Fat Sat +C (3sk1) | Obl Ax T1 TSE Fat Sat +C (3sk1) | |
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| **MR Perfusion** | | | |
| | Power injection bolus before C+ images in conjunction with | | If performing Brain Tumor WITH or MS, spectroscopy, offer MR Perfusion |
| | Brain Tumor WITH | | Inject half the contrast prior to obtainin the DSC perfusion EPI sequence |
| | Standard color reformats | | After perfusion, inject remaining contrast to obtain the standard post contrast |
| | | | Bolus injection 4 mL/s |
| | | | |
| **MR Spectroscopy** | | | |
| | Axial T2 TSE whole brain for localizer | | MR Spectroscopy should only be scheduled/ |
| | Single Voxel | | Performed with Neuro Rad in house -plan both |
| | Multivoxel- shim to borders of ROI | | Single and multi voxels with Neuro Rad |
| | | | Selection of multi voxel send to PACS with Neuro Rad |
| | | | |
| **MRA Brain** | | | |
| | 3D TOF | SAME | |
| | COW reformats | | |
| | Anterior circulation reformats | | |
| | Posterior circulation reformats | | |
| | Axial, sagittal, and coronal MIPs | | |
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| | | | |
| **MRA Carotid With** | | | |
| | Survey | SAME | Contrast MRA should be performed if ordered |
| | Auto-trigger | | Also perform if MRI Brain WITH is ordered in |
| | Arterial | | Conjunction with MRA neck (in addition to TOF) |
| | Venous | | |
| | Arterial and venous MIP reconstructions | | |
| | Arterial right and left carotid and vertebral reconstructions | | |
| | | | |
| | | | |
| **MRV Carotid Without** | | | |
| | 2D TOF | 3D TOF multi-slab with recons | Cover aortic arch through basilar on axial images |
| | Right carotid , left carotid , and vertebral reformats | Axial T1 fat sat (4sk0.5) | |
| | If dissection possible : | | |
| | Axial T1 fat sat (4sk 0.5) | | |
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| | | | |
| **MRV with Contrast** | | | |
| | Phase contrast MRV (VENC 10-15) | SAME | |
| | 2D TOF Axial and Coronal | | |
| | MPRAGE | | |
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| **MS Brain** | | | |
| | Sagittal T1 TSE (4sk1) | Sagittal T1 FLAIR (3sk1) | Remove eADC from all protocols, should only do ADC |
| | Sagittal FLAIR (4sk1) | Sagittal T2 FLAIR (3sk1) | Inject contrast , followed immediately by Axial T2 |
| | Axial T1 TSE (4sk1) | Axial T1 FLAIR (3sk1) | Axial and coronal contrast enhanced T1s to follow T2 to allow contrast circulation time |
| | Axial T2 GRE (4sk1) | SWI (3sk1) with MIPs | |
| | Axial DWI/ADC (3 Direction if possible ), reconstruct at 5sk0 | Resolve or 6-Direction DWI/ADC, reconstruct at 4sk0 | Scan through whole brain (skull to skull) on sagittal images |
| | Axial FLAIR FAT SAT (4sk1) | Axial FLAIR FAT SAT | |
| | Axial C+ T2 TSE (4sk1) | Axial C+ T2 TSE (3sk1) | FOV=23cm |
| | Axial C+ T1 TSE (4sk1) | Axial C+ T1 FLAIR (3sk1) | |
| | Coronal C+ TSE (4sk1) | Coronal C+ T1 FLAIR (3sk1) | |
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| **MS Brain (Dr. Hermann - JWM)** | | | |
| | Sagittal volumetric T1 inversion recovery with 3mm | Precontrast Sagittal T1 FLAIR , T2 ,T2 T2 FLAIR | Important to do as close to CMSC protocol as possible , |
| | reconstructions (3 plane ) | with 3mm reconstructions in 3 planes | this has been specifically requested by JMW Neurology (Dr. Hermann). |
| | *If possible , Sagittal volumetric 3D T2 FLAIR with 3mm | DWI/ ADC- Resolve or 6- direction (4sk0) | It may not be possible to do this protocol on the open magnets (specifically the 0.7) |
| | reconstructions (3 plane ) | SWI | (specifically the 0.7) or the older 1.5 |
| | * If possible volumetric 3D T2 with 3mm | Post-contrast Sagittal T1 non-IR with 3mm reconstructions in 3 planes | This section imaging is required , however . |
| | reconstructions (3 plane) | Please image following 5 min delay to allow for contrast circulation | |
| | *If volumetric imaging not possible , axial T2 and axial and | | Label these studies / sequences in PACS as CMSC Protocol? |
| | Sagittal and FLAIR (3sk0) | | |
| | Axial T1 spin echo (3sk0) | | FOV=23cm |
| | Axial GRE (3sk)) | | |
| | DWI/ADC (5sk0) | | |
| | Sagittal volumetric T1 non-IR post-contrast with 3mm | | |
| | reconstructions (3 plane) | | |
| | Axial C+ T1 (3sk0) | | |
| | Coronal C+ T1 (3sk0) | | |
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| **Neck With** | | | |
| | Sagittal T1 TSE (3sk0.3) | SAME | FOV=25cm sagittal and coronal |
| | Coronal T1 TSE (3sk0.3) | | FOV=18cm axial |
| | Axial T1 TSE (3sk0.3) | | |
| | Axial T2 fat sat (3sk0.3) | | Scan from pituitary through clavicles (lower if substernal extension of Thyroid ) on axial |
| | Axial DWI - 3mm | | Scan from posterior neck through nose/ chin on coronals |
| | Axial T2 (3sk0.3) | | Scan to lateral sides of neck on sagittal |
| | Coronal STIR (3sk0.3) | | |
| | Axial C+T1 fat sat (3sk0.3) | | |
| | Coronal C+T1 fat sat (3sk0.3) | | |
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| **Neck Without** | | | |
| | Sagittal T1 TSE (3sk0.3) | SAME | FOV=25cm sagittal and coronal |
| | Coronal T1 TSE (3sk0.3) | | FOV=18cm axial |
| | Axial T1 TSE (3sk0.3) | | |
| | Axial T2 fat sat (3sk0.3) | | Scan from pituitary through clavicles (lower if substernal extension of Thyroid ) on axial |
| | Axial DWI - 3mm | | Scan from posterior neck through nose/ chin on coronals |
| | Axial T2 (3sk0.3) | | Scan to lateral sides of neck on sagittal |
| | Coronal STIR (3sk0.3) | | |
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| **Orbits** | | | |
| | Preferably with Brain WITH | SAME | Orbit images should extend from the lens to mid-pons coronal and maxillary teeth to above |
| | Orbits: | | and maxillary teeth to above orbits on axial |
| | Coronal T1 (3sk0.5) | | |
| | Coronal STIR (3sk0.5) | | FOV=18cm |
| | Axial T1 TSE (3sk0.5) | | |
| | Axial T2 fat sat (3sk0.5) | | |
| | Axial C+T1 fat sat (3sk0.5) | | |
| | Coronal C+ T1 fat sat (3sk0.5) | | |
| | DWI (3sk0.3) | | |
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| **Peds Routine** | | | |
| | Sag T1 SE (5/1) | SAME | FOV= 24 and Sag FOV=18 Axial |
| | Ax IR (4/1) | | |
| | Ax DWIRTFA (4/1) | | |
| | Ax Prop FLAIR (4/1) | | |
| | Ax T2 Prop (4/1) | | |
| | Ax EPI GRE (4/1) | | |
| | Ax T1SE (4/1) | | |
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| **Pituitary** | | | |
| | Optionally with Brain WITH | SAME | FOV=13cm (cone to pituitary) |
| | Pituitary | | |
| | Sagittal T1 TSE (2sk0) | | Sagittal scan from mid-orbit through mid-orbit |
| | Coronal T1 TSE (2sk0) | | Coronal scan from anterior margin of pons through orbital apex |
| | Coronal T2 TSE (2sk0) | | |
| | Coronal C+T1(2sk0) | | |
| | Sagittal C+ T1 (2sk0) | | |
| | Dynamic contrast enhanced sequence (Coronal) | | |
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| **Sacrum** | | | |
| | Cor STIR FSE Global (6/1) | SAME | FOV=44 for global FOV =20 for Sag & Axial FOV=24 Coronal |
| | Cor T1 FSE Global (6/1) | | |
| | Sag T2 FS (4/1) | | |
| | Sag T1 FSE (4/1) | | |
| | Cor STIR (4/1) | | |
| | Cor T1 (4/1) | | |
| | Ax STIR (4/1) | | |
| | Ax T1 FSE (4/1) | | |
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| **Seizure** | | | * Should not be completed on ED patients and performed as inpatient or outpatient only |
| | Sagittal T1 TSE (4sk1) | Sagittal T1 FLAIR (3sk1) | Remove eADC from all protocols, should only do ADC |
| | Axial T1 TSE (4sk1) | Axial T1 FLAIR (3sk1) | Inject contrast , followed immediately by Axial T2 |
| | Axial T2 GRE (4sk1) | SWI (3sk1) with Mis | Axial and coronal contrast enhanced T1s to follow T2 to allow contrast circulation time |
| | Axial DWI/ADC (3 Direction if possible ), reconstruct at 5sk0 | Resolve or 6-Direction DWI/ADC, reconstruct at 4sk0 | |
| | Axial FLAIR FAT SAT (4sk1) | Axial FLAIR FAT SAT (3sk1) | Scan through whole brain (skull to skull) on sagittal images |
| | Axial C+ T2 TSE (4sk1) | Axial C+ T2 TSE (3sk1) | |
| | Axial C+ T1 TSE (4sk1) | Axial C+T1 FLAIR (3sk1) | FOV=23cm |
| | Coronal C+ TSE (4sk1) | Coronal C+FLAIR (3sk1) | |
| | Sagittal T1 MPRAGE with 2mm recons | Sagittal T1 MPRAGE with 2mm recons | Added coronal seizure sequences perpendicular to the temporal lobe |
| | Coronal T2 TSE (2sk0.5) | Coronal T2 TSE (2sk0.5) | Sagittal volumetric cover scalp to scalp |
| | Coronal FLAIR (2sk0.5) | Coronal FLAIR (2sk0.5) | FOV=23cm |
| | | | |
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| **Spine Survey** | | | |
| | Separate acquisitions for cervical , thoracic, and lumbar spine | Separate acquisitions for cervical, thoracic, and lumbar spine | |
| | Sagittal T1 TSE (3sk0.5) | Sagittal T1 FLAIR (3sk0.5) | |
| | Sagittal T2 TSE (3sk0.5) | Sagittal T2 TSE (3sk0.5) | |
| | Sagittal STIR (3sk0.5) | Sagittal STIR (3sk0.5) | |
| | Sagittal C+ T1 fat sat (3sk0.5) | Sagittal C+ T1 fat sat (3sk0.5) | |
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| **Stealth/ Treatment Plan *** | | | |
| | Ax FSPGR 3D (2/-1) | SAME | FOV=24 for 3D : FOV= 22 for FLAIR |
| | Ax Prop FLAIR (5/1) | | * If no Brain MRI completed within last 7 days, please complete Brain with contrast protocol |
| | | | in addition to Stealth/Treatment Plan protocol sequences. |
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| **Thoracic With** | | | |
| | Sagittal T1 TSE (3sk0.5) | Sagittal T1FLAIR (3sk0.5) | Axial images from C7-L1 |
| | Sagittal T2 TSE (3sk0.5) | Sagittal T2 TSE (3sk0.5) | |
| | Sagittal STIR (3sk0.5) | Sagittal STIR (3sk0.5) | |
| | Axial T1 TSE (4sk1) | Axial T1 FLAIR (4sk1) | 3 slices per disc |
| | Axial T2 TSE (4sk1) | Axial T2 TSE (3sk0.5) | 3 slices per disc |
| | Coronal T1 TSE (3sk0.5) | Coronal T1 TSE (3sk0.5) | |
| | Sagittal DWI (3sk0.3) | DWI sagittal (3sk0.3) | |
| | Axial C+ T1 fat sat (4sk1) | Axial C+ T1 fat sat (4sk1) | 3 slices per disc |
| | Sagittal C+ T1 FSE (3sk0.5) | Sagittal C+ T1 FLAIR (3sk0.5) | |
| | | | |
| **Thoracic Without** | | | |
| | Sagittal T1 TSE (3sk0.5) | Sagittal T1FLAIR (3sk0.5) | Axial images from C7-L1 |
| | Sagittal T2 TSE (3sk0.5) | Sagittal T2 TSE (3sk0.5) | |
| | Sagittal STIR (3sk0.5) | Sagittal STIR (3sk0.5) | |
| | Axial T1 TSE (4sk1) | Axial T1 FLAIR (4sk1) | 3 slices per disc |
| | Axial T2 TSE (4sk1) | Axial T2 TSE (3sk0.5) | 3 slices per disc |
| | Coronal T1 TSE (3sk0.5) | Coronal T1 TSE (3sk0.5) | |
| | Sagittal DWI (3sk0.3) | DWI sagittal (3sk0.3) | |
| | | | |
| | | | |
| **TMJ** | | | |
| | Localizer (coronal and sagittal) | SAME | FOV=12cm |
| | Sagittal PD oblique Right Closed (2sk0) | | |
| | Sagittal PD oblique Left Closed (2sk0) | | Could do axial or coronal T1 of head (4sk1) instead of localizer |
| | Sagittal T2 oblique Right Closed (2sk0) | | |
| | Sagittal T2 oblique Left Closed (2sk0) | | |
| | Coronal T1 Right Closed (2sk0) | | |
| | Coronal T1 Left Closed (2sk0) | | |
| | Sagittal PD oblique Right Open (2sk0) | | |
| | Sagittal PD oblique Left Open (2sk0) | | |
| | Sagittal T2 oblique Right Open (2sk0) | | |
| | Sagittal T2 oblique Left Open (2sk0) | | |
| | | | |
| | | | |
| **Trigeminal** | | | |
| | Complete Brain MRI protocol | SAME | Whole brain FOV= 22cm |
| | Posterior fossa : | | Posterior fossa FOV=18cm |
| | Axial T1 (3sk0.5) | | |
| | Axial T2 fat sat (3sk0.5) | | Scan from the suprasellar cistern to the C1 level on axials, cover through posterior fossa |
| | Coronal T1 (3sk0.5) | | and orbital apex on coronals |
| | Axial Fiesta w/coronal reformats | | |
| | Axial C+T1 FS (3sk0.5) | | |
| | Coronal C+T1 FS (3sk0.5) | | |
| | Coronal C+ T1 whole head (4sk1) | | |
| | | | |
| | | | |
| **Spine SBRT Treatment Planning** | | | |
| | Coronal T1 TSE (3sk 0.5) | Coronal T1 TSE (3sk 0.5) | Axial coverage to be specified on order. Axial images only acquired through areas to be treated |
| | Sagittal T1 TSE (3sk0) | Sagittal T1 TSE (3sk0) | Sagittal coverage = Typical FOV for region of spine to be treated (i.e. If treatment to cervical spine cover skull base to T1) |
| | Sagittal T2 TSE (3sk0) | Sagittal T2 TSE (3sk0) | FOV = 12cm on Axials |
| | Sagittal STIR (3sh0) | Sagittal STIR (3sk0) | |
| | Axial T2 TSE (2sk0) | Axial T2 TSE (2sk0) | Axial Plane = Perpendicular to vertebral body. If vertebral body is fractured image perpendicular to bed |
| | Precontrast Axial T1 FLAIR (2sk0) | Precontrast Axial T1 TSE (2sk0) | |
| | Axial C+ T1 fat sat (2sk0) | Axial C+ T1 fat sat (2sk0) | |
| | | Sagittal C+T1 TSE (3sk0) | |
| | | | |