Contrast enhanced Axial CT, Neck

- Esophagus
- Trachea
- Infrahypoid mm.
- Thyroid
- Longus colli mm.
- SCM
- Vertebral a.
- Anterior scalene mm.
- Middle & Posterior scalene mm.
- Levator scapula mm.
- Trapezius mm.
- Neck extensors
- Transverse foramena
- Spinous process of cervical vertebrae
Conventional X-ray, Lateral cervical spine

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M
MR Angiogram, Anterior-posterior neck, (frontal view)

- Internal carotid a.
- External carotid a.
- Facial a.
- Lingual a.
- External carotid a.
- Superior thyroid a.
- Common carotid a.
- Vertebreal a. (inflection point where artery exits transverse foram of Atlas C1)
- Internal carotid a.
- Carotid bifurcation
Conventional X-ray, Waters' view of skull

- Crista galli
- Frontal sinus
- Lesser wing of sphenoid
- Superior orbital fissure
- Middle nasal concha
- Inferior nasal concha
- Inferior part of nasal septum
- Ethmoid sinus (air cells)
- Maxillary sinus
MRI Axial, Head (with sagittal inset for orientation)

*Note: Veins, arteries, air and DENSE cortical bone have absence of signal
MRI Axial, Head (with sagittal inset for orientation)

*Note: Veins, arteries, air and DENSE cortical bone have absence of signal

- Superior sagittal venous sinus
- Subcutaneous fat & skin (high signal)
- Skull (dense cortical bone)
- Cerebral cortex paranchyma (gray) surrounded by CSF (white)

A

P
MRI Axial, Head (with sagittal inset for orientation)
*Note: Veins, arteries, air and DENSE cortical bone have absence of signal
- Superior sagittal venous sinus
- Anterior cerebral aa.
- Lateral ventricle (contains CSF)
- Branches of Middle cerebral a.
- Superior sagittal venous sinus

A - P
MRI Axial, Head (with sagittal inset for orientation)
*Note: Veins, arteries, air and DENSE cortical bone have absence of signal
MRI Axial, Head (with sagittal inset for orientation)

*Note: Veins, arteries, air and DENSE cortical bone have absence of signal

Superior sagittal venous sinus

Anterior cerebral a.

Temporalis m.

Middle cerebral a.

Internal carotid a.

Posterior cerebral a.

Midbrain

Straight venous sinus

A P
MRI Axial, Head (with sagital inset for orientation)
*Note: Veins, arteries, air and DENSE cortical bone have absence of signal
MRI Axial, Head (with sagittal inset for orientation)
*Note: Veins, arteries, air and DENSE cortical bone have absence of signal

- **Crista galli**
- **Zygomatic process of Frontal bone**
- **Anterior clinoid process**
- **Temporalis m.**
- **Temporal a.**
- **Internal carotid a.**
- **Posterior clinoid process**
- **Sphenoid sinus**
- **Basilar a.**
- **Pons**
- **Confluence of venous sinuses**
- **cn. II (optic nerve)**
MRI Axial, Head (with sagittal image inset for orientation)

*Note: Veins, arteries, air and DENSE cortical bone have absence of signal
MRI Axial, Head (with sagittal image inset for orientation)
*Note: Veins, arteries, air and DENSE cortical bone have absence of signal

- Nasal septum
- Medial rectus
- Lateral rectus
- Ethmoid air cells
- Internal carotid a.
- Sphenoid sinus
- Petrous part of temporal bone
- Basilar a. (ventral to pons)
- Occipital venous sinus and Falx cerebelli
- Internal auditory canal
- Lateral semicircular canal
MRI Axial, Head (with sagittal image inset for orientation)

*Note: Veins, arteries, air and DENSE cortical bone have absence of signal
MRI Axial, Head (with sagittal image inset for orientation)

*Note: Veins, arteries, air and DENSE cortical bone have absence of signal*
MRI Axial, Head (with sagittal image inset for orientation)
*Note: Veins, arteries, air and DENSE cortical bone have absence of signal
MRI Coronal, Head (with sagital image inset for orientation)
*Note: Veins, arteries, adipose and mucosa have high signal
Air, CSF and DENSE cortical bone have absence of signal
MRI Coronal, Head (with sagittal image inset for orientation)
*Note: Veins, arteries, adipose and mucosa have high signal
Air, CSF and DENSE cortical bone have absence of signal

- Cerebral v.
- Superior sagittal venous sinus
- Ethmoid air cell
- Zygomatic bone
- Nasal septum
- Maxillary sinus
- Middle nasal concha
- Inferior nasal concha
- Maxilla
- Buccinator m.
- Mandible
- Body of tongue
MRI Coronal, Head (with sagittal image inset for orientation)
*Note: Veins, arteries, adipose and mucosa have high signal
Air, CSF and DENSE cortical bone have absence of signal
MRI Coronal, Head (with sagittal image inset for orientation)
*Note: Veins, arteries, adipose and mucosa have high signal
Air, CSF and DENSE cortical bone have absence of signal

- Cerebral v.
- Superior sagittal veinous sinus
- cn II Optic n.
- Temporalis m.
- Zygomatic arch
- Masseter m.
- Ethmoid air cells
- Orbital fat
- Middle nasal concha
- Inferior nasal concha
- Maxillary sinus
- Marrow in hard palate
- Maxilla
- Buccinator m.
- Body of tongue
MRI Coronal, Head (with sagittal image inset for orientation)

*Note: Veins, arteries, adipose and mucosa have high signal. Air, CSF and DENSE cortical bone have absence of signal.
MRI Coronal, Head (with sagittal image inset for orientation)
*Note: Veins, arteries, adipose and mucosa have high signal
Air, CSF and DENSE cortical bone have absence of signal

Cerebral v.  Superior sagittal venous sinus

Ethmoid air cells
cn II Optic n.

Inferior nasal concha Temporalis m.

Maxillary sinus

Zygomatic arch

Masseter m.

Buccinator m.
MRI Coronal, Head (with sagittal image inset for orientation)

*Note: Veins, arteries, adipose and mucosa have high signal
Air, CSF and DENSE cortical bone have absence of signal
MRI Coronal, Head (with sagittal image inset for orientation)
*Note: Veins, arteries, adipose and mucosa have high signal
Air, CSF and DENSE cortical bone have absence of signal

- Anterior cerebral vessels
- Superior sagittal venous sinus
- Lateral ventricle
- Middle cerebral a.
- Sphenoid sinus
- Torus tubarius
- Nasopharynx
- Zygomatic arch
- Masseter m.
- Lateral pterygoid m.
- Soft palate
- Midline of tongue
- Mandible
MRI Coronal, Head (with sagital image inset for orientation)
*Note: Veins, arteries, adipose and mucosa have high signal
Air, CSF and DENSE cortical bone have absence of signal
MRI Coronal, Head (with sagittal image inset for orientation)
*Note: Veins, arteries, adipose and mucosa have high signal
Air, CSF and DENSE cortical bone have absence of signal

Anterior cerebral vessels
Superior sagittal venous sinus

Branches of Middle cerebral a.

Temporalis m.

Cavernous venous sinus

Sphenoid sinus

Nasopharynx

Soft palate

Zygomatic arch

Mandible

Masseter m.

Medial pterygoid m.

Uvula
MRI Coronal, Head (with sagittal image inset for orientation)
*Note: Veins, arteries, adipose and mucosa have high signal
Air, CSF and DENSE cortical bone have absence of signal
MRI Coronal, Head (with sagital image inset for orientation)
*Note: Veins, arteries, adipose and mucosa have high signal
Air, CSF and DENSE cortical bone have absence of signal

Superior sagittal venous sinus
Choroid plexus (in lateral ventricle)
Paired Vertebral aa. (just entered skull at foramen magnum)
Sigmoid venous sinus
Posterior belly of digastric m.
Sternocleidomastoid m.
Axis (C2)
C3
Spinal cord
Atlantis (C1)
MRI Coronal, Head (with sagital image inset for orientation)
*Note: Veins, arteries, adipose and mucosa have high signal
Air, CSF and DENSE cortical bone have absence of signal
MRI Coronal, Head (with sagittal image inset for orientation)
*Note: Veins, arteries, adipose and mucosa have high signal
Air, CSF and DENSE cortical bone have absence of signal

Superior sagittal venous sinus
Posterior horn of lateral ventricle
Transverse venous sinus
Mastoid air cells
Sternocleidomastoid m.
Spinus process of C2
MRI Sagittal, Head (with axial image inset for orientation)
*Note: Veins, arteries, air and DENSE cortical bone have absence of signal
MRI Sagittal, Head (with axial image inset for orientation)

*Note: Veins, arteries, air and DENSE cortical bone have absence of signal

- Straight sinus
- Confluence of venous sinuses
- Basilar a. (ventral to pons)
- Anterior cerebral a. (coursing ventral to corpus callosum)
- Sphenoidal sinus
- Middle concha
- Inferior concha
- Vestibule
- Maxillary tooth
- Genioglossus
- Soft palate
- Epiglottis
- Spinal cord
- Axis (observe dens)
- Atlas
MRI Sagittal, Head (with axial image for orientation)
*Note: Veins, arteries, air and DENSE cortical bone have absence of signal
MRI Sagital, Head (with axial image for orientation)

*Note: Veins, arteries, air and DENSE cortical bone have absence of signal

Extraocular muscle

Transverse venous sinus

Ethmoid sinus

Trapezius

Maxillary sinus

Maxillary tooth

Internal carotid a.
MRI Sagital, Head (with axial image inset for orientation)*

Note: Veins, arteries, air and DENSE cortical bone have absence of signal

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B
C
D
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R
L
MRI Sagittal, Head (with axial image inset for orientation)

*Note: Veins, arteries, air and DENSE cortical bone have absence of signal

- Temporals m.
- Obicularis oculi m.
- Zygomatic bone
- Masseter m.
- Mandible
- Cerebellum
- Parotid gland
- Sternocleidomastoid m.
Magnetic resonance angiogram, frontal view, Circle of Willis
*Note: Posterior communicating arteries are not well visualized

- Basilar a.
- Posterior cerebral a.
- Internal carotid a.
- Anterior cerebral a.
- Internal carotid a.
- Middle cerebral a.