

**MR Brain Pituitary Routine (Everything Except Microadenoma)**
**Last Updated: 02/07/2020**

Name	Plane	Sequence	Slice	Gap	FOV	Scan Range
<b>3-Plane Localizer</b>	Ax, Sag, Cor				21-25 cm	
<b>AX DWI AX ADC</b>	Axial	Epi DWI	4 mm	0.4 mm	21-25 cm	Vertex to Odontoid
<b>AX T1</b>	Axial	T1 FLAIR or FSE	4 mm	0.4 mm	21-25 cm	Vertex to Odontoid
<b>AX T2</b>	Axial	T2 FSE	4 mm	0.4 mm	21-25 cm	Vertex to Odontoid
<b>AX FLAIR</b>	Axial	T2 FLAIR	4 mm	0.4 mm	21-25 cm	Vertex to Odontoid
<b>AX GRE</b>	Axial	T2* FGRE	4 mm	0.4 mm	21-25 cm	Vertex to Odontoid
<b>COR T1 FS</b>	Coronal	T1 FSE FS	2 mm	0.2 mm	10-13 cm	Sella from orbital apex to pons
<b>SAG T1 FS</b>	Sagittal	T1 FSE FS	2 mm	0.2 mm	10-13 cm	Sella including cavernous sinuses
<b>INJECT CONTRAST</b>						
<b>COR T2</b>	Coronal	T2 FSE	2 mm	0.2 mm	10-13 cm	Sella from orbital apex to pons
<b>COR T1 FS POST</b>	Coronal	T1 FSE FS	2 mm	0.2 mm	21-25 cm	Sella from orbital apex to pons
<b>SAG T1 FS POST</b>	Sagittal	T1 FSE FS	2 mm	0.2 mm	10-13 cm	Sella including cavernous sinuses
<b>AX T1 POST</b>	Axial	T1 FLAIR or FSE	4 mm	0.4 mm	21-25 cm	Vertex to Odontoid
<b>COR T1FS POST</b>	Coronal	T1 FS FSE	4 mm	0.4 mm	21-25 cm	Frontal Sinus through Occiput

**Notes:**

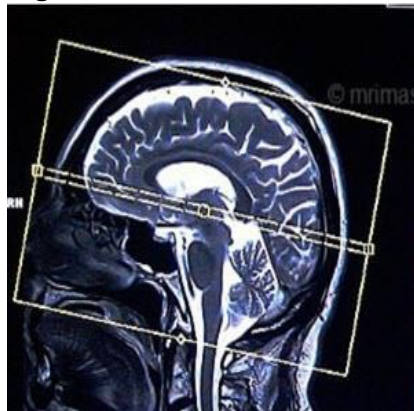
- Use for pituitary macroadenomas and other sellar/subsellar masses. Use dynamic pituitary protocol for microadenomas
- Small FOV pre and post contrast imaging through the sella in coronal plane extending from orbital apex to pons and in sagittal plane from cavernous sinus to cavernous sinus (see below)

- 3 min delay between injection of contrast and scanning. Acquire T2 coronal after contrast injection during delay before acquiring post-contrast sequences.
- Contrast type –per site. Dose- 0.2ml/kg.
- Use Propeller if excessive motion
- Use ARC/GRAPPA if available for parallel imaging to reduced scan times.

**Images:**

- AXIAL- Plan on sagittal plane, angle parallel to genu and splenium of corpus callosum, cover from odontoid to vertex (**see Figures 1, 2, 3**).
- - CORONAL Small FOV- Plan on sagittal plane parallel to infundibulum, cover from orbital apex to pons (**see Figures 4, 5, 6**).
- - SAGITTAL Small FOV- Plan on axial plane parallel to midline, cover from cavernous sinus to cavernous sinus (**see Figures 7, 8, 9**).

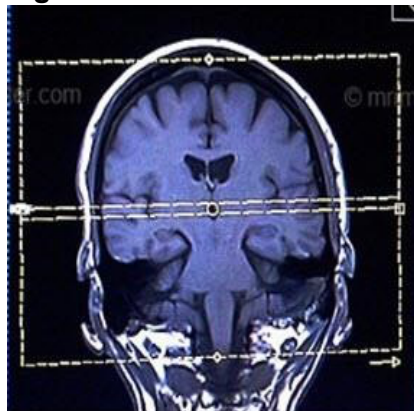
**Figure 1:**



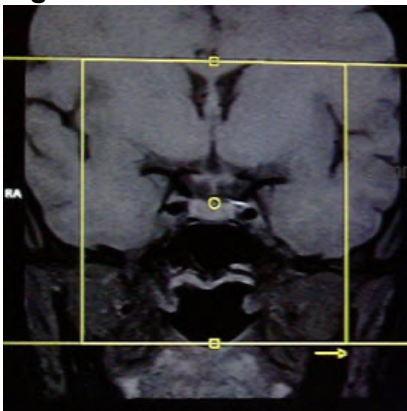
**Figure 3:**



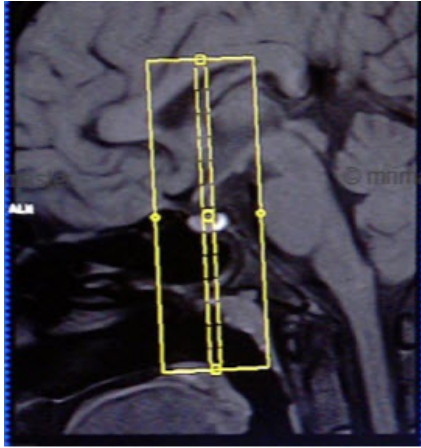
**Figure 2:**



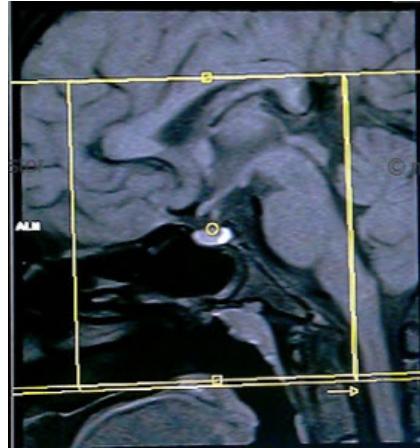
**Figure 4:**



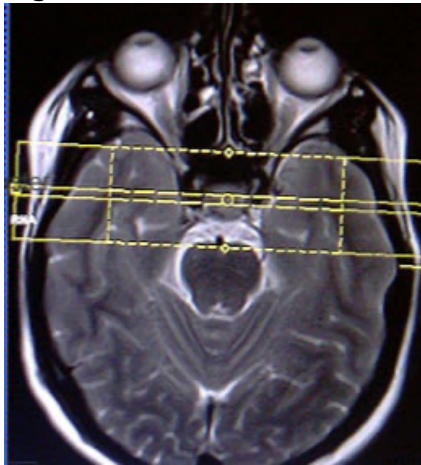
**Figure 5:**



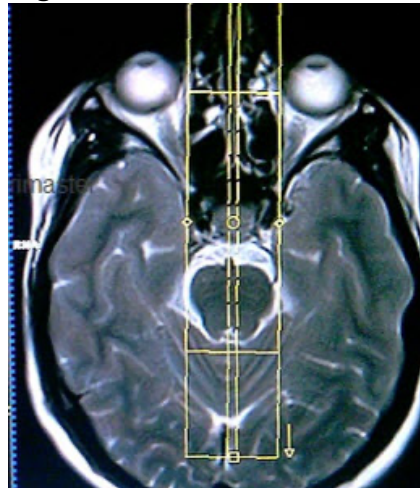
**Figure 8:**



**Figure 6:**



**Figure 9:**



**Figure 7:**

