

TUMORS OF THE PITUITARY GLAND AND SELLA TURCICA USING 3.0 TESLA MRI SCANNER AT ZILKHA RADIOLOGY

The pituitary gland is the most important gland of the body because it controls most of the body endocrine functions.

Many sellar lesions are benign or cystic while malignant tumors are rare.

Pituitary adenomas are divided into non-secreting tumors and secreting tumors. The non-secreting tumors are usually benign and large when diagnosed. They may cause symptoms because of their size, compressing the adjacent structures (**Figure 1**).

The secreting adenomas are usually small when diagnosed. The symptoms are related to the specific hormone they produce. Because the tumors are small when diagnosed, being less than 10mm in size, they are called microadenomas. The most common secreting microadenoma is **prolactinoma** (**Figure 2**).

Pituicytomas are rare benign pituitary tumors. They originate from the posterior pituitary and the stalk and occur in the suprasellar region, the sella or both (**Figure 3**). They may cause symptoms if located in the suprasellar region.

Rathke cleft cysts originate from remnant of the Rathke cleft and are benign and cystic. (**Figure 4**). When small they are usually intrasellar. They may grow into the suprasellar space and become symptomatic because of compression of the surrounding structures.

Empty sella occurs as a result of CSF pulsation through a defect in the roof of the sella turcica, resulting in compression of the pituitary gland and subsequent enlargement of the sella turcica. Symptoms are variable. (**Figure 5**).

There are other sellar and suprasellar tumors including craniopharyngiomas, hamartomas, gliomas, etc.

Zilkha Radiology has a 3.0 Tesla ultra high field MRI scanner in each of our offices. The 3.0 Tesla scanner provides excellent image quality and superb diagnostic images.

For your convenience we are open 7 days a week, 7:30am-10pm Monday thru Friday, Saturday and Sunday 8am to 4pm.



FIGURE 1

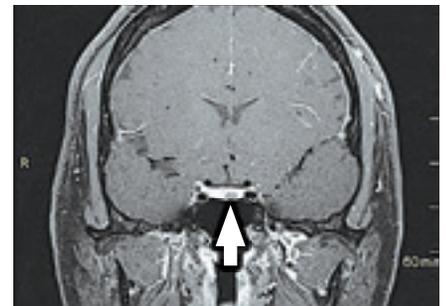


FIGURE 2



FIGURE 3

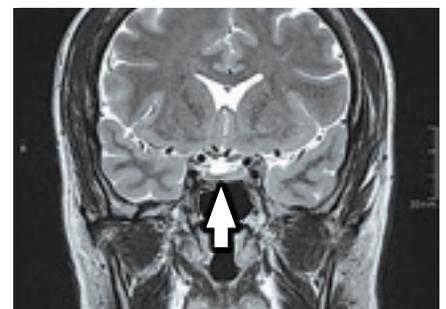


FIGURE 4

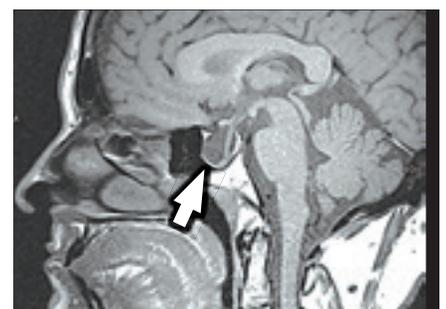


FIGURE 5