

Recurrent CSF leak and meningitis was detected in one patient who transcranial surgery for aggressive pituitary adenoma. Wound infection was recorded in one patient. Hypothyroidism, proved by hormonal assay was recorded in 4 patients (7.2%). Intracerebral hematoma detected in one patient who died in the third postoperative day. Two other patients died one of them developed pulmonary embolism and the other had hypothalamic ischemia. Post radiotherapy glioma proved by histopathology was recorded in 2 patients from a total of thirty-seven who had radiotherapy (5.4%).

Discussion

In Large series of intracranial neoplasm (Burrow et al., 1981; Kovacs et al., 1986)^[8,9], pituitary adenomas comprise about 10-15 percent of brain tumors. The true incidence in Iraq is unknown.

Regarding the sex distribution, pituitary adenomas are equally distributed between the sexes. From series (Minderman et al., 1994)^[10] one notes a slight female predominates in prolactin hormone (PRL), thyroid stimulating hormone (TSH), and adrenocorticotrophic hormone secreting adenomas, whereas male dominance was recorded in growth hormone (GH) secreting adenomas, and non-functioning pituitary adenomas. Equal sex distribution is found in older patients. In our study, slight male preponderance (56.3%) was recorded.

Pituitary adenomas are more apt to be found in specific age groups. They are tumors of the middle decades of life, although isolated examples have been reported in children with pituitary adenomas. One also notices that the average age is lower in acidophil adenomas than chromophobe adenomas^[11-13]. The results in this study are very similar to the published figures.

Symptoms and Signs

The signs and symptoms of pituitary adenomas are produced by the local mass

effect of the adenoma and by the systemic manifestations, which are related to the hormonal disturbances.

In this study non-functioning pituitary adenomas comprise about (54.5%), whereas functional pituitary adenomas were found in (45.5%). Sassolas et al., (1993), and Nedvidkova et al., (2000)^[14,15] found non-functioning adenomas in only 40% of cases. This may be due new and more thorough hormonal analysis.

The signs and symptoms produced by the space occupying effect are due to the direct pressure or invasion of the adjacent parasellar structures and the optic nerves and chiasm.

We found the most common symptom was headache (90.9%), the cause of the headache is stretching of the diaphragma sellae, However many of the cases with headache, especially females with hormonal disturbances have psychological cause for their headache. Generally the reported incidence of headache is about 40%^[15-17]. The headache is often non-specific, found primarily in the vertex as a dull ache, and does not change with position. In pituitary apoplexy however headache is sudden, severe and is accompanied by neck stiffness.

Visual deterioration was found in 78% of cases, in which decreased visual acuity was detected in all of them, while visual field defect (uni or bitemporal hemianopia) was found in (62.3%) of cases. Comparing the results with other series of Sassolas et al., (1993); Fajardo (1982), and Burrow et al., 1990^[14,17,18], visual defect was reported in about 50-70% of patients, at the time of diagnosis. The higher incidence of visual deterioration probably indicates late presentation.

Primary optic atrophy was found in 29% of cases, whereas papilledema was detected in (12.7%) of patients, which is high compared with the reported incidence of 6% by Chang et al., (2000)^[19]. However the