

of patients have improved vision, which is a good result compared with the reported improvement rate of 41-90%^[11,19,36].

Tumor recurrence was recorded in 3 patients (6.5%) following transcranial approach, with no recurrence following trans-sphenoidal approach. The previous histopathological results of those with recurrent adenoma were of invasive character, and all had radiotherapy. The result is quite good compared with those registered from other series, which ranged between 6 and 11%, usually following transcranial approach of highly invasive adenoma (Linfoot, 1979; Ciric, et al, 1983; Domingue, et al., 1980; Faria, et al., 1982)^[28,36-38]. Invasiveness was the only factor that was associated with recurrence, which raises question regarding the necessity and effectiveness of conventional radiotherapy. Postradiotherapy (glioma) was detected in 2 patients(3.6%), which is similar to other series (George, et al., 1995 and Fajardo, et al., 1982)^[33,39].

Conclusions

1. Pituitary adenoma is usually benign relatively avascular soft in consistency with characteristic clinical and radiological features, commonly present in 4th decade.
2. Hyperprolactinemia was the most common hormonal disturbance, and visual deterioration was the most common presenting symptom.
3. Regarding the postoperative prognosis, unless associated advanced primary optic atrophy, there was dramatic improvement in the optic nerve function (83.3%), and other cranial nerves function (50%), which indicate that the primary lesion is due to the pressure effect rather than invasion.
4. Diabetes insipidus is the commonest postoperative complication especially following trans-sphenoidal approach (10.9%) and it is transient in most cases.

5. Tumor invasiveness was the only factor that was found to be associated with recurrence of pituitary adenoma.

6. Postoperative radiotherapy should be considered for invasive adenomas; however the risk of tumor genesis makes one think of an alternative treatment such as Gamma knife surgery.

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