43. Treatment of Pituitary Tumors

Takeshi Masui and Minoru Jinbo
Department of Neurosurgery, Toranomon Hospital, Tokyo

Between the years 1958 and 1971, 60 patients with pituitary tumor—33 males and 27 females—were treated at Toranomon Hospital.

Histologically, 41 cases of all the pituitary tumors have been classified as chromophobe adenoma, 8 as eosinophil, 1 as mixed. The number of operations performed was 58. The conventional subcapsular removal of the tumor with postoperative irradiation was used in 53 cases. Only irradiation without operation was used in 2 cases. Three cases were operated microsurgically by the transphenoidal approach. Neurologically, decrease in visual acuity, defects of visual fields and optic atrophy were chief complaints in many cases. Endocrinologically, amenorrhoe, obesity acromegaly and hirsutism were seen in high percentage. Visual acuity compared with the preoperative state was improved in 43%, was unchanged in 34%, and was worse in 23%. Also, the visual fields was improved in 55%, was unchanged in 39%, and was worsed in 5%. The improvement of the visual fields were recognized in more cases than that of visual acuity. HGH in 15 patients were examined pre- and postoperatively. HGH levels were significantly greater in 10 acromegalic patients. Of these 10 cases, 6 were operated conventionally, 3 cases were operated microsurgically by the transphenoidal approach and one case was treated by only irradiation. In the first 6 cases, postoperative HGH levels were decreased not so much or even elevated. It became to normal ranges in 2 cases in which the tumors were removed totally by microsurgical operation. It has been normal ranges in these 2 cases more than 2 years after operation. About HGH, therefore, operative effect was not gained by conventional method. These 49 cases died within 7 years after operation. Forty-six cases have survived and 32 cases (about 70%) have been able to return to their works. The remainders, 14 cases (about 30%) have not been able to enjoy their social life. Seven cases of them have been suffered from strong visual disturbance or blindness and other 7 cases have been suffered from endocrinological disorder, especialy diabetes mellitus.

Finally, in the postoperative patients, unexpectedly many postoperative patients of pituitary tumor have been suffered from not only visual disturbance, but also endocrinological disorder.