Clinical and Morphological Studies of Pineal Tumours

By

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With 8 Figures

Summary see p. 74.

Tumours in the pineal region still present diagnostic, morphological, and therapeutic problems (Joyeux et al., Russell, Weber et al., Stern et al., and Stein et al.). According to Russell pineal tumours are classified as follows:

1. teratomas, a) typical and teratoid, b) germinoma and atypical teratomas;
2. pinealomas, a) pinealoblastomas, b) pinealocytomas;
3. gliomas and other forms;
4. cysts.

Among the pineal tumours the germinoma or atypical teratomas (pinealoblastomas) are most frequent (Russell, Kageyama, Yonemasu et al., and Gerhard et al.). We wish to report our experiences with these tumours.

Amongst our own patients we discovered 18 cases with tumours in the pineal region. In twelve of these patients the clinical and radiological diagnosis was verified, in seven cases by biopsy and in five cases by autopsy. In one case the pathological diagnosis was proved by the presence of tumour cells in the third ventricle fluid.

Morphology

One case that did not undergo operation or radiation and died of the tumour showed macroscopically an extensive tumour growth developing in the lower part of the third ventricle. Around the hypothalamus the tumour was expanding and infiltrating into the...
chiasma. The ependyma of the third ventricle and the lateral ventricles was covered with tumour cells. These could have been spread by the fluid. In one of our cases we showed a diffuse metastasis of tumour cells in the region of the fourth ventricle.

Another case had developed a spinal metastasis, as has been reported also by Sakata et al., Gerhard et al., and Jenkin et al.

Macroscopically we found in five autopsy cases an extensive tumour growth in the lower part of the third ventricle (Fig. 1). The tumour tissue was in all cases yellow-white with haemorrhagic portions. Small crystals of cholesterol were sometimes seen. In one of our cases tumour growth could be demonstrated in the epiphysis.