Intramedullar Epidermoid successfully Operated upon

By

J. Hullay, O. Oszlánzszy and P. Halász

With 2 Figures

The kind of tumours known as epidermoid, cholesteatoma, perlia tumour is of epithelial origin (Remak, 1854, Bostroem, 1897, Bailey, 1920). Epidermoids in the central nervous system originate from the epithelial rest, and are sometimes accompanied with other disorders of development (spina bifida etc.). According to Sachs and Horrax (1949) spinal epidermoids give the $\frac{1}{4}$ of the epidermoids of the nervous system. Within these the intramedullar localisation (especially without the subpial cases generally referring hereto) is rather rare. We have managed to collect only 12 epidermoid cases considered intramedullar and subpial out of the literature at our disposal $^2, 4, 5, 6, 7, 8, 11$, among which it is not always possible to separate the decidedly intramedullar ones after the report given.

Gross (1934) reported the first case successfully operated upon, but it had a recurrence after 2 years and a half. Later Craig (1943), Tytus and Pennybacker (1956) reported intramedullar epidermoid cases successfully operated upon, and at the same time they refer to the aseptic meningitis causing unpleasant and lasting complications after an incomplete operation as well as to the possibility of recurrence. In their material they found the localisation in the lower spinal cord most common.

Our case report: G. L. a boy aged 3 was admitted to our clinic December 30, 1960. He learned walking when 16 months old, since he has been walking with stiff back and his lower extremities are also somewhat stiff when walking. His urination starts with difficulty now and then. His gate has been deteriorating recently, and he complains of pains in the lower limbs and back.

Data of examination: The boy is normal physically and mentally for his age. His back is stiff, its lumbar portion hyperlordotic, the upper back portion kyphoscoliotic. The lower limbs are spastically paretic, his gate is wider than normal. After longer walking his legs grow stiff, he drags them and can advance with difficulty. Bilateral patella areflexia. Bilateral Achilles reflex with busy elongation. Bilateral Babinsky tendency. Disturbances of senses we could not objectivate.

Schellack: ++++. Bic. mastix: 4, 4, 6, 6, 4, 2, 1, 0. Cell count: 8/3 (lymphocytic cell pattern). The Roentgenogram of the spinal column displays a kyphoscoliosis at the upper thoracic level. The arches of the Th. I—V vertebrae are partly open, partly irregularly closed. The body of vertebrae and the articulation of the ribs are irregular. The pedicles of Th. X is narrower (Fig. 1).

The clinical signs first we tried to explain with the deformity of the vertebrae but the albumin increase in the lumbal fluid was much more marked than to be expected on base of this deformity. That is why we carried out myelography (1 ml. lipiodol administered cisternally), which showed a full stop at the level of Th. X (i.e. at the level of the pedicles suspected). This suggested that the malformation, resp. the deformity of vertebrae has no connection whatever with the compression of the spinal cord.

On base of the stop, the patient was operated upon (by J. Hullay) January 4, 1961. Opening the dura after Th. X laminectomy we observed that the spinal cord was voluminous, and in about one cm. section, it felt dense but fluctuating above and below. At the line of the post. med. fissure, having made a 1 cm. incision on the spinal cord we saw that in the spinal cord a yellowish dense tumour took place, and if we cut into it in half a cm. depth we got into a cave containing a fluid like sour cream. The cave spread about 2 cm. far both cranially and caudally from the level of opening; its volume was about 1 × 1 × 4 cm. (Fig. 2). Then we cleared up the cyst containing fluid like cream, and bright sheets and broken mass, removed its lining and the dense yellowish tumour as far as possible. Closing up the dura we closed also the wound in layers. The tumour must have been of intramedullar localisation, and appeared as epidermoid macroscopically. This suggestion of ours (epidermoid) was confirmed by the histological examinations of the removed cyst wall and its content.

After operation uneventful recovery. After 5 days retention, urination comes in order. On the 10th day the patient can walk alone. The restrictions on backbone movement decrease markedly and his gate is improving considerably in comparison to his former one. As his parents say in 3 months and a half after the operation, when a control examination was carried out, he walks much and alone but he gets tired soon, and the drags then his legs somewhat. The back-bone movements are practically free. His walking is excellent, he can even run. Bilaterally prompt patella reflex, bilaterally more sluggish Achilles reflex, good plan-