PARAPHYSSAL CYSTS OF THE THIRD VENTRICLE
WITH REPORT OF EIGHT CASES*

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The paraphysial cyst is one of the most favorable brain tumors with respect to operative mortality. Despite the fact that it lies within the 3rd ventricle, a most vulnerable area of the brain, its fragile attachments make its removal relatively easy. There is a challenge to the surgeon in that removal must be accomplished without damage to the walls of the 3rd ventricle, for it seems that if this occurs permanent character and personality changes will result.

The gross appearance of the cyst (Fig. 4) is characteristic: a bluish or greyish appearing capsule with a gummy or rubbery feel. Nearly always there is a firm attachment to the choroid plexus at the anterior part of the roof of the 3rd ventricle (Fig. 7). The contents of the cyst are a thick, greyish or brownish colloid material and when looking into the lateral ventricle, the tumor nearly always can be seen presenting at the foramen of Monro. Microscopically there is a fibrous cyst wall with a lining of columnar epithelium (Fig. 6). Goblet cells and cilia have been described.

Bailey as early as 1916 studied the paraphysis in human embryos and the possibility of a relationship to this structure in these tumors. There were many isolated reports in the literature, but there were no successful surgical attempts until Dandy in 1933 reviewed 31 autopsies in the literature and reported 5 operated cases of his own, all but 1 of his patients having survived surgery. He doubtless encountered others later, but did not report them. Zimmerman and German in the same year reported 2 cases with 1 death. Stookey in 1934 placed emphasis on the intermittent symptoms. Rehbock in 1936, in reviewing 56 cases, including 3 of his own, noted that in 14 per cent death occurred in the initial attack. McLean, Trescher and Ford, Gardner and Turner, Zeitlin and Lichtenstein, Traut and Piette, Larson, Weinberger and Boshes, Shannon, and Wilson all reported 1 or 2 cases. Shaver reported 4 cases, 2 of the patients having been operated upon. A total of something over 60 cases has been reported, and in 15 of these operations were successfully performed. There are, of course, many unreported successful surgical cases.

I wish to report 5 operated cases of my own, and 3 additional autopsy cases, included through the courtesy of Baylor University and the Houston City Health physician. These last 3 are of particular importance, since they greatly emphasize the need for emergency ventriculography in cases of sudden coma where there is no evidence of infection, diabetes, or nephritis.

* Read before the Central Neuropsychiatric Association, October 1947 (one additional case since).
In reviewing the literature, the three most popular names for this tumor are colloid cysts, neuroepithelial cysts, and paraphysial cysts. The last seems most desirable. If the paraphysial origin is not correct, one would expect to find the tumor arising in other ventricles, or at least at other points in the 3rd ventricle. The name is good from the standpoint of position and should be used until a better one is found.

The neurological symptoms are very meager and seldom are sufficient to make a diagnosis. A patient may have intermittent headaches for years, but once the foramen of Monro is blocked the course of events proceeds rapidly. Blocking may be sudden, since the tumor may act as a ball valve. Inconvenience of urine, nystagmus, parkinsonian rigidity, and other signs of little localizing value are seen occasionally. Choked disc occurs in approximately half of the cases.

A peculiar type of organic mental reaction has occurred in all of the 5 operated cases. This consists of varying degrees of disorientation, particularly for time and place, while the patient superficially appears to be alert and mentally normal. Only careful checking has revealed this reaction. It is similar to Korsakoff's psychosis in that the patient fills in his memory defects with confabulation. In all cases, this feature cleared up within 2 to 3 months after operation.

RADIOLOGY AND SURGERY

During the ventriculography, usually it can be demonstrated that there is no free communication between the lateral ventricles. The ventricles will contain a large amount of fluid, and plates taken following replacement of the fluid with oxygen will show dilated lateral ventricles and often a deviated septum pellucidum (Fig. 3). With the patient on his back and the head hy-