CYSTS LOCATED solely within the dura mater are a rarity. Apparently the only one on record was situated in the spinal canal. The case in point, described by Voss,9 concerned a boy aged sixteen who over a period of about three months had developed symptoms of compression of the lower thoracic cord. Myelography disclosed subarachnoid block at the levels of the fifth and the eighth thoracic vertebrae. There was also a uniform dilatation of the spinal canal in this region. At operation a non-pulsating, pale cystic structure extending from the sixth to the tenth thoracic vertebra, was encountered. Incision of its dorsal wall released 8.0 cc. of clear fluid. Examination of the interior of the cyst revealed a smooth and glistening lining. No communication with either the subdural or the subarachnoid space could be found. When the ventral wall of the cyst was incised the dorsal part of the spinal cord could be clearly seen. Obviously, then, both walls of the cyst were dural. The incision in the ventral wall of the cyst was repaired and the entire dorsal wall was removed. Microscopic examination of the cyst wall disclosed “the usual fibrillary connective tissue” lined by a single layer of mesothelial cells.

On the other hand, some ten instances of cysts spatially related to the dura have been described (Elsberg, Dyke and Brewer,1 Flatau and Sawicki,2 Lehman,3 Mixter,5 Roger, Arnaud, Poursines and Alliez,6 Schlesinger,7 and Schmidt.8) All were intraspinal, most of them being situated in the thoracic region. Almost all were manifested by symptoms of cord compression. Dilation of the spinal canal was the most conspicuous roentgenologic finding. The cysts lay snugly against the dorsal outer surface of the dura, to which in one or more places they were firmly attached. Almost all were single and unilocular. All contained colorless limpid fluid except for one into which a hemorrhage had occurred. In only three instances was there a communication between the cyst and the subarachnoid space, and this was by means of a narrow neck at the upper pole of the respective cysts.

The histologic appearance of the cyst walls varied somewhat. In about half the cases the wall was reminiscent of dura in that it was composed of rather dense interlacing connective tissue lined by a single layer of mesothelial cells. In two such instances a delicate trabecular connective-tissue network spanned the cyst cavity; in only one of these, that of Roger, Arnaud, Poursines and Alliez,6 was there a free communication between cyst and subarachnoid space. Another type of wall had the appearance of hyperplastic
arachnoid in that it was composed of rather delicate loculated connective tissue, lined in places by flattened mesothelial cells.

Certain of the epidural cysts would seem to have originated as dural diverticuli, others as a herniation of the arachnoid through a congenital defect of the dura (see Elsberg, Dyke and Brewer and Lehman). Thus, they differ fundamentally from the intradural cyst described in the opening paragraph, as well as the intracranial cyst now to be considered.

**CLINICAL HISTORY**

*First Admission to Hospital:* 29 May 1942. *Discharged on* 3 June 1942.

**Chief Complaint.** Intense headache and a blurring of vision.

**Present Illness.** The patient, a male aged 34, an enlisted man in the Army and previously a steel worker, had had excruciating intermittent headaches and blurring of vision for two days prior to admission. The attack started suddenly soon after a verbal altercation with a superior officer. On questioning it was learned also that from the onset the patient had lost his sense of smell.

**Previous Personal History.** Other than typhoid fever in 1922 and three attacks of pneumonia (dates unknown), there had been no previous illnesses. As a child he was said to have fractured his skull when his head hit a radiator; no further history on this point could be obtained. He had had intermittent severe headaches since 1938. These occurred every two or three years. Over a period of a week or two they would reach a crescendo and then would disappear. During the bouts of headache there was usually a blurring of vision in the right eye but sometimes it was bilateral. Occasionally there was also pain in that eye.

**Family History.** Nothing of significance was elicited.

**Physical Examination.** The patient, of excellent physique, presented the picture of intense pain. He thrashed about the bed, pulled his hair and cried out. The temperature was 98.6°F., the pulse 84, the respirations 18, the blood pressure 128 systolic, 74 diastolic.

There was bilateral anosmia and a hemianesthesia of the left side regarded as of the "hysterical type." Otherwise the examination revealed nothing of note; speech and articulation were normal; the eyes moved freely in all directions; the pupils were equal, regular and responded to light and in accommodation; the Romberg test was negative; and reflex activity was unaltered.

**Course.** On admission the patient received morphia, 1/4 grain subcutaneously, but it afforded little relief. A few hours later the pain over the head increased so that he tore at his hair and pounded on the walls. Later in the day he was given an intravenous injection of sodium amytal, 3 1/4 grains. Twice the injection had to be repeated. Over the next two days he received the drug by mouth. On 31 May 1942 he complained of severe pain in the right eye and because of restlessness had to be restrained. On the same day a spinal puncture was performed. The manometric figures were in the normal range. The fluid was not examined. On 1 June 1942, the third day after admission, the headache had disappeared. There is no further note on the progress of the anosmia. His improvement was ascribed to the therapeutic effects of strong suggestion while under the influence of sodium amytal. He was discharged from hospital 3 June 1942.


**Further Progress.** The patient had been relatively well until 13 June 1942 when the headaches again appeared. Up to the time of readmission they had become progressively worse. During this time a blurring of vision of the right eye was very noticeable: it was "as if hair was hanging over that eye." There had been no vomiting, no vertigo, no difficulty in walking.

**Physical Examination.** The blood pressure was 125 systolic, and 90 diastolic, and the pulse rate was within normal limits. The reflexes were normally active. There was no defect of the sense of smell. The pupils were round and equal and reacted to light and in accommodation.