LOCAL bulging of the skull is an uncommon manifestation of an intracranial space-occupying process. It is commonest in children and the usual causes are chronic subdural hematomas and cerebral tumors. The skull changes in cases of juvenile chronic subdural hematomas have been described by Davidoff and Dyke and Bull. Hardman reported a case in which similar changes in the skull were associated with what was believed to have been a chronic subdural hygroma—a closely related condition. Like cases have been recorded, and they will be reviewed later. We have had such instances and from a study of them fresh suggestions as to their nature will be made.

**CASE REPORTS**

**Case A** (NS 5234). A boy aged 8 years was admitted on July 14, 1953 with a 3 months' history of swelling of the head above the left ear. It was thought that this had increased in size. There were rare headaches. He had no other complaints and he was in the normal class for his age.

**Examination.** The sole physical sign was a painless swelling above the left ear. Roentgenograms of the skull showed thin bulging bone in the left temporal region above and in front of the left ear (Fig. 1). The middle fossa was not expanded forwards. Left carotid arteriogram showed that the middle cerebral artery was elevated from its origin and there was a slight shift of the anterior cerebral artery to the right (Fig. 1). No tumour circulation was seen. EEG showed excessive slow activity in the left temporoparietal leads. The pre-operative diagnosis was of a temporal glioma.

**Operation.** A temporal bone flap was raised. The bone was thin and bulged outwards. A normal-looking dura mater was opened. At the site of the temporal pole was a bluish transparent cyst. The arachnoid swept off the temporal and frontal lobes to make up the outer wall of the cyst (Fig. 2). There were some small vessels running in the wall to the middle cerebral vessels. The cyst was opened and contained clear fluid. The medial part of the cyst communicated with the subarachnoid space over the free edge of the tentorium. Cerebrospinal fluid welled up into the cyst during the operation. The anterior part of the temporal lobe was absent and such lobe as was present had a normal gyral pattern. There did not appear to be any arachnoid over the brain that walled the cyst. Beside the tentorium, the olfactory, optic and oculomotor nerves and the carotid artery and its bifurcation were visible without retracting the brain. The arachnoid wall was stripped away. In closing the wound, the bone flap was wired into place.

**The postoperative course** was uneventful and he was well a year later.
Case A. Left carotid arteriogram (anteroposterior view) showing elevated course of middle cerebral artery and slight shift of anterior cerebral artery to right. The bulging of the left temporal area can be seen.

Case B (NS 6522). A boy aged 14 years was admitted on April 9, 1954 with a story that at the age of 4 years he had been hit on the head with a toy pistol. Since then his parents had noticed that the left temple had been swollen. There had been a dubious increase in size. There were no other complaints and he was in the normal class for his age.

Case A. View of operation showing the cyst at the temporal pole. This is covered with arachnoid.