which might be investigated with this machine were postoperative haematomas, tumour recurrences, metastases, porencephalic cysts, and treated hydrocephalus.

Computerized scanning had already shown itself to be capable of playing a very significant role in the investigation of paediatric neurosurgical patients.

TWO CASES WHERE ABNORMAL VASCULAR ELEMENTS OBSTRUCTED OUTFLOW FROM THE THIRD VENTRICLE

R. J. BRUCE (Middlesbrough) described first a woman aged 38 years who presented clinically with symptoms and signs suggestive of right frontal tumour of two months' duration. Carotid angiography revealed evidence of ventricular dilatation. The internal cerebral vein was displaced to the right. Subsequent ventriculography showed a mass in the third ventricle posterior to the interventricular foramina. Exploration with a needle showed that the mass contained arterial blood. Vertebral angiography showed a large basilar aneurysm. After ventriculoatrial shunting there was marked improvement but the patient died six months later. It was assumed that expansion of the sac had been responsible for the fatal outcome.

In the second case, a man aged 58 years showed features of Parkinsonism with tremor of the left arm and leg associated with cogwheel rigidity. Response to L-dopa was poor, and subsequent clinical examination suggested that there might be neoplastic infiltration of the basal ganglia. Right carotid angiography showed a cerebellar arteriovenous malformation supplied from the external carotid artery. There was no indication of a contribution from the vertebro-basilar system. The venous elements formed large masses in the interpeduncular system, obstructing and displacing the proximal portion of the aqueduct. After ventriculoatrial shunting and external carotid artery ligation dramatic improvement took place but the patient died 15 months later from a subarachnoid haemorrhage.

DELAY IN DIAGNOSIS OF OPTIC NERVE AND CHIASMAL COMPRESSION

G. NEIL-DWYER (London) and J. GARFIELD (Southampton) had studied 29 patients with unilateral failing vision, subsequently shown to have optic nerve or chiasmal compression. The diagnoses were chromophobe pituitary adenoma in 16, suprasellar meningioma in 11, craniopharyngioma in one, and internal carotid aneurysm in one. In only five patients had the correct early diagnosis of a compressive lesion been made. In four patients visual deterioration had been considered to be due to refractive error. All these had chromophobe pituitary adenomas but none had

undergone skull radiography or examination of the visual fields before referral. Five patients had been initially diagnosed as having retrobulbar or optic neuritis. Two of these had experienced some visual deterioration. One initially had a central scotoma but in none was there any phase of optic disc swelling or abnormality of pupillary reflexes. Four patients had abnormal skull radiographs when referred. In seven patients no diagnosis had been made and no follow-up had been instigated. In eight patients to whom miscellaneous diagnoses had been attached it was disturbing to find that the diagnosis in two had been hysterical amblyopia.

The importance of visual field examination in the diagnosis of chiasmal compression has been emphasized previously yet in this study only six patients had fields charted at initial visits. Of these six, one had a central scotoma and two had bitemporal hemianopias yet they were not referred for further investigation. The chief errors leading to faulty diagnosis had been too ready acceptance of the diagnosis of neuritis, failure to chart visual fields, failure to consider the possibility of compression in the absence of a demonstrable intraocular cause for failing vision, and failure to follow-up patients in whom no diagnosis had been made. A contributory factor had been the neglect to undertake skull radiography.

ISOLATED FITS—A NEUROLOGICAL DILEMMA

MICHAEL SAUNDERS (Middlesbrough) reported a study of 39 patients referred to an EEG department with an isolated fit. The group was compared with 39 patients with recurrent seizures matched by age and sex. Thirteen attacks were nocturnal during sleep, eight occurred just before waking, 17 were diurnal, and the time of one attack was unknown. Thirty-six presented with a major seizure, two had focal fits, and one had a temporal lobe attack. Fifteen EEGs were normal, one showed spike and wave activity, 16 showed temporal lobe abnormalities, and seven had a general excess of slow activity. For the 22 patients who were known to be well and receiving no anti-convulsants, the follow-up period varied from 10–52 months, the mean follow-up period being 26 months. Thirty-four isolated attacks were of unknown cause, one was associated with the Shy-Drager syndrome, and one was associated with birth trauma. Two were thought to be due to cerebrovascular disease and one was due to primary subcortical epilepsy.

No clear guides to prognosis were found. In this study, the majority of patients with isolated fits appeared to have a low tendency to further seizures. EEG recordings were unhelpful in distinguishing between those likely to have further attacks and those likely to remain well. It was suggested that