have been tried and failed I should like to suggest that cervico-thoracic sympathectomy be carried out by the posterior route.

Finally, it would be interesting to know whether sympathectomy would influence the action of "compound E" when it is given for peri-arthritis of the upper limb.

This case was referred to me by Dr. J. Hope Poole, and I thank him for his help and detailed observations; Dr. Raymond Whitehead has supervised the presentation of this paper, and I am grateful for his criticism; and much is owing to Miss Norma Harvey.

Medical Memoranda

Spontaneous Subarachnoid Haemorrhage in Children

As very few reports have been published of spontaneous subarachnoid haemorrhage in children from rupture of intracranial aneurysms, three such cases are presented. It is remarkable that more cases of haemorrhage in children have not been described in view of the congenital origin of the aneurysms. Miller (1938) reviewed the literature and refers to Ramsay's case aged 10, Barker's fatal case aged 5 months, and two others at 11 years, and describes five further cases at ages 2, 3, 10, 11, and 12 years. Other cases have been published. Forbus (1930) describes a case aged 8 years. Jefferson (1947), in a series of cases presenting with ocular palsy, includes one at 13 years and one at 14 years, and mentions a baby of 9 months which he states is one of the youngest on record. In a series of 81 cases of subarachnoid haemorrhage Taylor and Whitfield (1936) had only one in a child, aged 10 years, and in Beadles's (1907) series of 555 cases there is no mention of a child. Thus it would appear that rupture of a berry aneurysm is a rare accident in children.

Case Reports

Case 1.—A boy of 12 was seen in 1936 with the classical syndrome of prostrating headache and deepening coma, signs of meningeal irritation, and heavily blood-stained C.S.F. There was no history of trauma or undue strain, and no evidence of any other congenital abnormality. The boy recovered, but had a residual hemianopia. When last seen in 1939 he was an apprentice in an engineering works.

Case 2.—A girl aged 8½ came to the children's out-patient department on February 16, 1949, with a history of vomiting six days previously. Three days later she had been giddy and had fallen, and the next day she was again very sick, after which she was noticed to have weakness of the left side of the body. On examination she had a left hemiparesis with a doubtful extensor plantar response. The fundi were normal and no other abnormal signs were present. A tentative diagnosis of intracranial tumour was made and arrangements for her early admission to hospital were completed. On the day of admission, February 18, she vomited repeatedly, became febrile, and on examination had a tender stiff neck, a positive Kernig's sign, left-sided weakness, and a left extensor plantar response. The disks were abnormally pink and a little swollen, and there were a few scattered retinal haemorrhages. Other systems were normal. She was restless and irritable, with periods of drowsiness. Lumbar puncture showed fluid under increased

pressure, with a normal Queckenstedt test. The C.S.F. was uniformly and heavily blood-stained, and the supernatant layer was xanthochromic. Later reports showed the fluid to be sterile and to have a negative Wassermann reaction.

The next day the patient complained of headache, which was relieved by the removal of about 10 ml. of C.S.F. The fluid looked just as blood-stained as on the previous day. The neurological signs were unchanged. From then she improved steadily and it was soon impossible to restrain her activity. There was considerable recovery of power in the paralysed arm and leg. After three weeks physiotherapy was started and she was discharged from hospital on May 15, 1949.

In June, 1950, her general condition was good and she was attending school. Unless she became excited or tried to hurry there was little disability. On examination she then had some weakness of the left arm and leg and an up-going toe on that side. The fundi were normal. At that time there had been nothing to suggest that any further bleeding had taken place.

Case 3.—A boy aged 9 was admitted to hospital in coma on October 2, 1948. Since an attack of bronchopneumonia at the age of 2 he had had recurrent respiratory infections and had had curious turns which may have been attacks of petit mal. For two years these attacks, which occurred at intervals of many months, had been accompanied by occipital headache and vomiting. On the morning of October 2 his mother had heard him cry out and found him on the floor, struggling aimlessly. He had become drowsy and at times unconscious. The family doctor saw him six hours later and referred him to hospital. When the boy was admitted he could be roused from his light coma, but was restless and resentful of examination. His face was turned to the left, there were no voluntary movements of the left arm or leg, and he had a slow, coarse nystagmus. The pupils were small and equal. The fundi were normal. There was moderate neck stiffness and a positive Kernig's sign. No other abnormality was found on routine clinical examination. Lumbar puncture was done and showed a blood-stained C.S.F. On standing, the supernatant fluid was yellow. The fluid was sterile. The following day he was very restless and the left hemiplegia was marked. The left plantar response was extensor. Lumbar puncture was repeated and the fluid found blood-stained as before. He then became delirious and his general condition appeared to be deteriorating rapidly. On October 7 there was slight papilloedema, left hemiparesis with an up-going toe, and left hemi-anaesthesia. The appearance of the C.S.F. was unchanged. He remained restless and noisy, swallowing little, and with a stiff neck and positive Kernig's sign until the beginning of November. The C.S.F. was examined at intervals and remained blood-stained. On November 5, although there was still some neck stiffness, he was started on physiotherapy because of commencing contractures in the left arm and leg.

During the next two months the boy made steady progress, and after recovering from an acute attack of tonsillitis he was eventually discharged from hospital on April 20, 1949. He attended for out-patient physiotherapy for some time and treatment was then stopped. When seen in June, 1950, he had minimal weakness of the left arm and leg, and an extensor plantar response on that side. He had remained well, and his mother thought that his general condition was much better than before his illness in October, 1948. He had had no further headaches or petit-mal attacks.

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