Operation.—On July 28th Mr. C. Roberts, F.R.C.S., performed left parietal decompression; considerable bulging of the brain was noticed when the dura was opened, but no localized tumour could be detected, and when the wound healed there was still bulging.

After-History.—On admission to Booth Hall Infirmary there was a large swelling over the left parietal area—4 inches by 2 inches; the skin in one part was broken down, and there was a purulent discharge. The right foot was in the position of talipes equinovarus. The wrists were hyperflexed, but could be extended voluntarily. The oculist reported slight blurring only of the disc edges; the vessels were not engorged. The Wassermann test was negative, and general examination, including x-ray examination of the thorax, did not afford any evidence indicative of tuberculosis. The diagnosis was cerebral tumour, not syphilitic, and probably not tuberculous. The child remained comfortable, and gained 2 lb. in weight until the second week in November, when he was reported as not so well; there was oozing of cerebro-spinal fluid and oedema of feet and scrotum. Albumin, half a gram to the litre, was present in the urine. Diarrhoea commenced a week later, and vomiting started the day following, death ensuing in a couple of days (November 24th, 1926).

Post-mortem Examination.—This was performed on the following day. Dr. Dawson reported as follows: "Beneath the fluctuant swelling on the left side of the head was an abscess the size of a Tangerine orange in the brain substance, containing greenish pus. Pus of the same kind was free at the base of the brain. The liver and spleen, the latter fixed by dense fibrous adhesions to the stomach, contained very extensive suppurating areas with a honeycomb appearance, with pus of the same greenish colour. The base of each lung was similarly affected, but to a small extent only. No other organs were found to be affected. Microscopically, sections of isolated nodules from the liver and spleen showed granulomatous lesions, including one or more typical actinomycotic colonies.

"Diagnosis: Actinomycosis, with extensive metastasis. The site of the original infection is not clear, but may have been gastric."

Thorough inquiry into the history shows that the patient had nothing to do with horses or grain, but regularly carried straw from banana crates. This is the only suggested means of infection.

Thanks are due to the librarians of the Manchester Medical Society and of the British Medical Association for their assistance in an extensive search of the literature, to Mr. Charles Roberts for the use of his notes, and to others for the assistance they have given.

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PERNICIOUS ANAEMIA IN ELDERLY PEOPLE.

BY

W. L. TEMPLETON, M.D.,

LONDON, N.

PERNICIOUS ANAEMIA is regarded generally as a disease of middle and later life, and it does not seem to be as generally recognized that it may occur in persons of 70 years and over.

Cabot¹ makes the striking statement that pernicious anaemia is a disease of elderly people, its incidence being not far different from that of cancer; and Eason,² working on the figures of the Edinburgh hospitals, concludes that senility is a much more important etiological factor in the production of the disease than has been hitherto recognized. He finds, too, that the rate of incidence in the sexes varies with age. Under 50 the rate of incidence is higher in females than in males; over 50 the reverse is true. Ward³ could find in the literature four other cases besides his own in which the disease had been recognized in patients over 70 years (70, 73, 76, and 80), and his own patient was 85 when she died.

The following notes refer to two women over 70 who both died of the disease. In one (Mrs. B.) the disease undoubtedly began after she had passed her 75th birthday, and in the other (Mrs. M.) probably at the age of 67 or thereabouts. The fact that the disease may have commenced at a much earlier age and undergone long remission has not been forgotten, but a careful inquiry into the history does not reveal any evidence to support this view, and both patients were under the supervision of the same medical attendant for many years.

CASE I.

Mrs. B., aged 75, was operated on for double hernia when over 70 years of age. She was very feeble for several years before the symptoms and signs of severe anaemia appeared, and was thought

to be suffering from general arterio-sclerosis, but no focal lesions were observed and her blood pressure was below normal. She had a good appetite, slept well, and complained of little until three or four months before her death, when she showed the typical lemon tint of the skin, developed complete anorexia and obstinate constipation, and died from progressive weakness. A blood examination, which was repeated, showed:

Red cells	...	...	...	...	850,000 per c.mm.
Haemoglobin	...	...	...	...	30 per cent.
Colour index	...	...	...	...	1.7
Leucocytes	...	...	...	...	2,000 per c.mm.
Differential count:					
Polymorphs	...	...	...	...	30 per cent.
Small lymphocytes	...	...	...	...	69 "
Normoblasts	...	...	...	...	1 "

There was marked poikilocytosis and anisocytosis.

CASE II.

Mrs. M., aged 70, was always pale but had no severe illness before three years ago, when some grave form of anaemia was suspected. No blood examination was made, and the patient was able to go about her household duties fairly well until about six months before her death, when she complained of sensory changes in the fingers and toes, described as tingling, burning, and numbness. Later loss of temperature sense was noted, but at no time was there evidence of involvement of the pyramidal tract except for involuntary twitching of one big toe. She had a peculiar interrupted form of speech, cog-wheel in type, for which no explanation could be found by the laryngologist or neurologist who examined her. A blood examination showed the following:

Red cells	...	...	...	...	1,500,000 per c.mm.
Haemoglobin	...	...	...	...	28 per cent.
Colour index	...	...	...	...	1+
Leucocytes	...	...	...	...	5,000 per c.mm.
Differential count:					
Polymorphs	...	...	...	...	32 per cent.
Small lymphocytes	...	...	...	...	64 "

Poikilocytosis and anisocytosis were present.

Three weeks later the red cells fell to 900,000 per c.mm., whereas the haemoglobin was if anything higher, in the region of 30 per cent., giving a colour index of 1.6.

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- ¹ Eason: *Edinburgh Med. Journ.*, 1920, pp. 389-399. ² Idem, *ibid.*
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ANEURYSM OF POSTERIOR TIBIAL ARTERY
CAUSED BY FRACTURE OF THE
TIBIA AND FIBULA.

BY

MANFRED MORRIS, M.D., CH.B.,

MAJOR R.A.M.C.; SPECIALIST IN SURGERY TO THE CENTRAL PROVINCES
DISTRICT, INDIA.

CASES of aneurysm of the posterior tibial artery of traumatic origin are of sufficient rarity to justify the publication of the following notes.

A native cavalry soldier, aged 26, was admitted to hospital, having fallen and broken his left leg, both bones being fractured at about the junction of the middle and lower thirds. Radiological examination showed no points of special interest, the fracture being transverse with little displacement and separation. The limb was treated by fixation on a back splint, with footpiece and side splints. I was asked to see the man four months after the accident as there were no signs of union. I found him to be a healthy man with no venereal history; the limb was considerably wasted. Radiological examination showed the fragments to be in good position. There were no signs of callus or reaction at the ends of the bones. I recommended that the limb be re-splinted, and the patient given a liberal diet, a course of tonics, and potassium iodide. His Wassermann reaction was negative on two separate dates. Three weeks later (seven weeks after the accident) there was little or no callus formation and a very poor attempt at union. I now found a pulsating expansile swelling in the calf opposite the point of fracture; it was the size of a hen's egg and in the line of the posterior tibial vessels. A loud blowing systolic bruit could be heard over the tumour; this disappeared on compressing the main vessel above the mass. The pulse at the ankle could not be felt, but the circulation in the foot appeared to be normal. There was some disordered action of the heart, consisting of marked irregularity and a very accentuated first sound. I wondered if these physical signs were the so-called "tumultuous action of the heart" described by Makins in cases of aneurysm of peripheral vessels. A diagnosis of arterio-venous aneurysm was obvious, and, as the swelling at the end of a week appeared to be rapidly enlarging, I decided to operate.

Operation.

The operation consisted in applying a tourniquet and excising the sac, tying the vessels above and below it. Posteriorly the sac was covered by fascia and skin only, any muscle tissue having entirely disappeared; the fascia was stretched and thinned out over it. Anteriorly the sac was very adherent to periosteum, and had hollowed out the tibia, forming a smooth cup-shaped depression