OUR PRIZE COMPETITION.

WHAT IS ANEURYSM OF THE AORTA? MENTION THE PRINCIPAL SYMPTOMS. STATE THE GENERAL MODE OF TREATMENT AND MANAGEMENT.

We have pleasure in awarding the prize this week to Miss E. A. Noblett, London Homeopathic Hospital, Great Ormond Street, W.C.I.

PRIZE PAPER.

An aneurysm may be defined as "a localised and persistent dilatation of a blood-vessel," and may be classified as follows :—

1. Fusiform or spindle-shaped, where the dilatation of the vessel is more or less uniform. All the arterial coats are present in the sac.

2. Sacculated, where a limited part of the vessel only is dilated. The inner and middle coats are ruptured, and the sac is formed by the outer coat.

3. Dissecting. The inner coats being ruptured, the blood forces its way between their layers and breaks back into the vessel lower down.

The two main causes of aneurysm are :---

(a) Damage to the vessel walls.

(b) Increased vascular strain.

The Aorta is the most frequent seat of aneurysm in the body, both the fusiform and saccular varieties being common in this situation. There are many reasons why aneurysms should be so common in the arch of the aorta :---

(a) It is much curved.

(b) The first part of the arch has very little support.

(c) The blood-stream ejected during systoles of the heart tends to bulge the aorta locally

(d) This part is much more affected by the variation of the cardiac pressure than the distal arteries.

(e) Aortitis and atheroma are very common in this situation.

Aortic aneurysm occurs most frequently amongst men who are either prematurely old through intemperance, syphilis, &c., or in those engaged in occupations which tend to increase the normal aortic strain, such as hammermen, rivetters, and young soldiers subjected to forced marches with heavy kit, &c.

The symptoms depend on the portion of the arch affected and on the size and shape of the aneurysm. Briefly they are :---

1. Symptoms in connection with the circulation—palpitation, anginoid pains, imperfect fillings of the arteries, and sometimes difference in the two radial pulses.

2. Symptoms due to pressure :---

(a) Œsophagus. There is difficulty in swallowing, especially solids.

(b) Respiratory system. Less air enters the lung, the bronchus of which is pressed upon. There is much dyspnœa, and a peculiar alteration of the voice.

(c) Implication of nerves. The symptoms will depend on the amount of pressure exerted on the nerves. Thus, if slight, we get symptoms due to irritation; if severe, symptoms due to paralysis.

(d) Veins. Œdema of the superior extremities, one side of the head, &c.

(e) Bones. Erosion and absorption; the process being accompanied usually with intense boring pain. When the spine is involved the pain is intense, due to irritation of the intercostal nerves and meninges; there may be much deformity, and even paraphlegia, through implication of the spinal marrow; and a murmur may be heard over the spine.

(f) Thoracic Duct. Rapid emaciation and fatty stools. Pressure on the thoracic duct is very rare.

Inspection may reveal a pulsatile swelling, usually to the right of the sternum.

The X-Rays may show the presence of a pulsating shadow in the mediastinum.

Treatment—General.—Everything must be done to quiet the circulation, by the observance of absolute rest, and abstinence from all alcoholic drinks, &c. The diet should be nourishing, but limited, and the quantity of liquid taken reduced to a minimum. The bowels should be carefully regulated. After some weeks or months of absolute rest, the patient may be allowed to resume a very carefully guarded life.

Medicinal.—Anodynes and sedatives are called for, but iodide of potassium in considerable doses daily is the most efficacious among drug's.

Local treatment is highly unsatisfactory.

Considering the hopeless character of this affection, morphia may, in the last stages, be given with some freedom if it is called for by severe pain. Death is usually due to rupture into the pericardium.

HONOURABLE MENTION.

The following competitors receive honourable mention :---Miss Amy Phipps, Miss S. A. Cross, Miss Myers, Mrs. Farthing, Miss Henrietta Ballard.

QUESTION FOR NEXT WEEK.

What indications would lead you to suspect contracted pelvis? How is labour affected by this condition?



