

OUR PRIZE COMPETITION.

WHAT IS A HYDATID CYST? MENTION THE TWO COMMONEST SITUATIONS IN WHICH THEY ARE FOUND, ALSO THE SURGICAL EMERGENCIES WHICH ARE LIKELY TO OCCUR IN CONNECTION WITH THEM.

We have pleasure in awarding the prize this week to Miss Mary D. Hunter, Royal Infirmary, Leicester.

PRIZE PAPER.

A hydatid cyst is formed by the embryo of a small worm called the *Tænia Echinococcus*, which gains entrance to the stomach by water or watercress contaminated with fæces containing the ova. From this are developed little six-hooked embryos, which perforate the intestinal wall and are carried by the circulation to different parts of the body.

Hydatid cysts may be single or multiple. The embryo becomes a small cyst, surrounded by a fibrous capsule that develops from the patient's tissues, and is formed by chronic irritation. The cyst wall is formed by the parasite, and from the lining buds start, and other cysts thus develop, being of the same structure as the original or mother cyst. The fluid contained in these cysts is clear, of neutral reaction, and with a specific gravity varying from 1005 to 1009. A hydatid cyst may die or become eventually calcified—otherwise it may rupture, or form an abscess owing to suppuration occurring. The disease is very common in Australia, but recovery takes place in the majority of cases treated by Australian surgeons.

The two most common situations for a hydatid cyst are the liver and lungs, and treatment should be surgical. Incision and removal of the cyst should be done as soon as possible before inflammatory complications set in. When this is delayed till too late, and suppuration begins, it would need to be treated as an abscess.

The general health and condition of the patient is usually good till complications begin. In the lungs the cysts compress the organ with their growth, and in time inflammation or gangrene results. Hæmorrhage may take place. When the cyst bursts into the pleural cavity, the patient may cough up the parasitic membrane and recover, or he is suffocated, or in some cases death occurs later from septic absorption. Perforation of the bile passages causes intense jaundice—there may be acute colic and biliary obstruction. In connection with rupture of a cyst, urticaria is an interesting symptom. Other places where rupture may occur are into the stomach, or peritoneal

cavity, causing shock and development of daughter cysts. Retention of urine may result from rupture into the urinary passages. Cases have been known where the daughter cysts have been found in the heart, plugging the tricuspid orifice and pulmonary artery after rupture into the inferior vena cava. Rupture sometimes takes place externally. If there is suppuration of a hydatid cyst, the chief symptoms are rigors, sweat, some jaundice, and rapid loss of weight; in fact, a condition very like pyæmia.

After rupture, the symptoms of toxæmia are supposed to be due to a highly toxic material in the cyst fluid, which is then set free and absorbed.

HONOURABLE MENTION.

The following competitors are accorded honourable mention, Miss J. G. Gilchrist, Miss D. F. Chapman, Miss B. James, Miss F. Sheppard, Miss J. Atkins, Miss M. B. Smith.

Miss J. G. Gilchrist points out that other organs, besides the liver and lungs, may be affected, such as the kidney, uterus, spleen, and pancreas, or the peritoneum may be the site of multiple cysts. The surgical operation for complete removal of the cyst is the most satisfactory; by abdominal section, in the case of septic peritonitis following rupture of cyst, and adhesion and pressure on surrounding organs. Thoracic incision in the case of lung obstruction.

Hydatid disease is not common in this country, but in others, such as Australia, Norway, and Iceland, where a considerable amount of salted food is in use, and the water is drawn from open tanks and streams, near where sheep and dogs are herded, and the water supply scanty, it is common. The cysts are extremely common in dogs, and in Australia, where, as the water pools dry up, and the ovum which has been deposited is air-borne also, it is necessary to prevent dogs coming into the vicinity of man. Infected districts should be advised as to boiling all drinking water, and to avoid dogs licking scraps of food off plates.

Miss D. F. Chapman writes:—Large and growing cysts produce symptoms of tumour with increased size of the organ. When suppuration is present, the patient shows all the symptoms of pyæmia, as the cyst has practically changed into an abscess formation.

QUESTION FOR NEXT WEEK.

In nursing a case of diphtheria, what possible complications would you guard against, and how? What precautions have you seen observed for the safety of contacts?

[previous page](#)

[next page](#)