

CASE OF HÆMORRHAGE INTO UMBILICAL CORD, CAUSING HYDRAMNIOS AND DEATH OF FŒTUS.

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Mrs. S., primipara, aged 21, whose pregnancy had progressed favourably until the eighth month, began to show signs and symptoms of hydramnios; abdomen became very prominent, tense and globular in shape; a distinct percussion thrill could be felt, the foetal parts were ill-defined, and the foetal heart sounds, which had been heard quite distinctly from four and a half months onwards, now became inaudible. Urine was scanty, but not albuminous. Under appropriate treatment, rest and diuretics, the abdominal circumference was reduced on an average about $\frac{1}{4}$ inch daily. At eight and a half months the patient was delivered of a dead male foetus, weighing about 7 lbs., and it was then seen what had been the cause of the hydramnios and death of foetus. About 12 inches from the umbilicus there was a swelling on the cord about the size and shape of a small hen's egg. When this was cut open it was found to be a solid clot of blood, which had escaped from and was partially distending the umbilical vein, and exerting pressure on the umbilical arteries, thereby entirely cutting off the circulation. The cause of the hæmorrhage was not very evident; the cord seemed to be quite normal in strength and appearance, except that it was somewhat thicker than usual. The epidermis had peeled off parts of the foetus, and the head bones were very loose, the foetus apparently having been dead for several days. The mother passed through an uneventful puerperium, the fundus uteri reaching brim of pelvis on thirteenth day, and made a good recovery.

BILHARZIA DISEASE IN MIDDELBURG, TRANSVAAL.

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THERE were no less than nine admissions for this disease among the garrison of Middelburg, Transvaal, between July 21st, 1906, and September 16th of the same year. All the cases were contributed by the 3rd Middlesex Regiment. This unit arrived at the station on January 12th, 1904. They had bathing parades at the Klein Oliphants River, just outside the town, once a week, about 6 a.m., between October and February.

According to a local practitioner, the disease, otherwise known as endemic hæmaturia, is very prevalent among the civilian population, especially among boys from 7 to 16 years of age, both European and native; it is generally attributed to bathing in the Klein Oliphants River, and has been greatly on the increase.

The previous admissions from this garrison for the years 1903-5 were as follows:—

1903 (March 17th).—One admission from the 2nd Dragoon Guards. This unit arrived at the station on June 28th, 1902. The man's whole service in South Africa at that time was one year and one month.

1904.—No admissions.

1905.—Three admissions. May 23rd, one man from the 2nd Leinster Regiment; June 13th, one man from the 2nd Leinster Regiment; October 15th, one man from the 3rd Middlesex Regiment.

1906.—Nine admissions. Case 1, service in South Africa prior to admission three years ten months; service in Middelburg eleven months; admitted July 21st, 1906. Case 2, service in South Africa prior to admission ten months; service in Middelburg ten months; admitted July 23rd, 1906. Case 3, service in South Africa prior to admission two years three months; service in Middelburg two years five months; admitted July 24th, 1906. Case 4, service in South Africa prior to admission eleven months; service in Middelburg six months; admitted August 22nd, 1906. Case 5, service in South Africa prior to admission eleven months; service in Middelburg eleven months; admitted August 25th, 1906. Case 6, service in South Africa prior to admission one year five months; service in Middelburg one year five months; admitted August 30th, 1906. Case 7, service in South Africa prior to admission two years two months; service in Middelburg two years two months; admitted September 4th, 1906. Case 8, service in South Africa prior to admission two years six months; service in Middelburg two years six months; admitted September 14th, 1906. Case 9, service in South Africa prior to admission two years two months; service in Middelburg two years two months; admitted September 16th, 1906.

Cases 1, 4, 5 and 8 stated that they first noticed blood in the urine about a month before admission. Cases 1 and 4 had been in Barberton for four months. Assuming that the infection occurred in the Klein Oliphants River at Middelburg, Transvaal, sometime between October and February, the incubation period appears to work out at six to ten months. It is reasonable to suppose that infection occurred from the same source, about the same time, and in the same way.

On examining the river water, collected from the immediate neighbourhood of the bathing place, on September 26th, 1906, I found any amount of water-fleas (*Daphnia pulex* and *Cyclops quadricornis*—both freshwater crustaceans). Specimens of the first could be seen carrying their eggs or their young, almost perfectly formed, under the carapace. Specimens of *Cyclops* were also seen carrying a pair of egg-sacs attached to the lower part of the body; but no ecto- or endo-parasites could ever be seen, even after artificially infecting the water with living ova of bilharzia recently evacuated.

It was ascertained that these ova were living, by examining a drop-

of urinary sediment soon after being evacuated by patients and freely diluted with water. The following phenomena were then observed: The inside of the egg, which is granular and semi-transparent, begins to show movements of contortion almost immediately; this movement, which is at first jerky and intermittent, is gradually communicated to the whole embryo, and finally becomes continuous. In some cases two polar cells can be seen (one at each pole), which are from time to time taken up in the body of the embryo, and again become separated, but generally remaining at the poles of the egg. At the end of fifteen minutes, on an average, the embryo suddenly breaks out of one of the sides of the ovum; it now contracts actively upon itself, somewhat in the shape of a dumb-bell, until it disengages itself completely from the shell, and, once free, it swims actively about and disappears from the field. I could never see embryos moving in their shell so long as the urine was undiluted; and if the urine was kept over-night and the sediment examined next morning, freely diluted with water, all the eggs were also found dead.

BARRACK-ROOM SORE THROAT.

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MAJOR MCNAUGHT'S paper on the bacteriology of sore throat (*JOURNAL OF THE ROYAL ARMY MEDICAL CORPS*, September, 1906) has "taken the wind out of my sails," as I was preparing an article on the same subject.

In the Orange River Colony "septic" sore throats are very rife among the troops during the winter, and I paid some attention to the matter. As the men are housed in huts, which are comparatively new, it would seem that the local conditions of barrack-rooms, which Lieutenant-Colonel Caldwell refers to in his "Military Hygiene," are not at fault; but it is rather remarkable that these sore throats are common during the dry, dusty winter, and show a tendency to disappear as soon as the rains begin. When the epidemic of sore throats at Bloemfontein was at its height, several cases of facial erysipelas occurred among the troops, and I learned that it existed in the town also. There is no military destructor here, and refuse is dumped in various places, more or less round the cantonments. I examined some of this refuse and found innumerable staphylococci in it—an organism which was also present in practically every case of sore throat. Of course, it is a very ubiquitous coccus, but putting all these facts together would lead one to think that the bad throats and the erysipelas were probably due to infection by dust. Anybody who has been in South Africa will admit that it is impossible to avoid a close acquaintance with dust, and that the face and fauces are bound to share in this unpleasant intimacy. It is significant that the laying of the dust