

than is at present done, for the early symptoms of this disease. Early cases of anæmia can be recognised by a doctor before the patient is aware that he has a definite illness, and one dose of thymol can prevent the chronic pernicious anæmia which drags the man to the hospital, one, two, or three years after he begins to feel ill.

I am convinced that nearly all the anæmia of adult males among the lower orders in Egypt is due to anchylostomiasis, if we except those cases which are obviously caused by some other kind of hæmorrhage or by wasting disease.

*Life history of the anchylostomum.*—A very brief account will suffice here, because the adult worm is thoroughly described in Blanchard's book already referred to, and Giles has traced out very carefully the rhabdite changes. I first cultivated embryos in a garden, but afterwards found it more convenient to keep infected fæces and damp earth in glass dishes in a room, the temperature of which, during June and July, varied from 21°C. to 24°C.\* In fresh fæces the ova are usually 2—4 segmented, but may contain eight segments, and on the second day I found several already containing living embryos. On the third day several embryos had escaped from their eggs. In the young stage they resemble in structure and habits the free-living rhabdites, and, like them, go on feeding and growing for a considerable time. They then change their skin, either once or several times, and enter upon a stage when they cease to take in nourishment and to increase in size, and then they need to become parasitic. But so long as nourishment in the way of fæces is supplied to them, and they are protected from drought or too great heat, they will continue to live for months in the hopes of being swallowed by a man, in whose duodenum they can alone develop into adult worms. On the fourth day the embryo is almost and on the fifth day quite free in his sheath. On the sixth day, and later, I found empty eggs from which the embryo had just escaped, but it was not until the tenth day that I caught one in the very act of emerging. On the sixth and following days the embryos were of very varying sizes, all very active and wriggling towards the edges of the cover-glass to escape. On the seventh day I could just distinguish that some of the embryos were females. On the eighth day there were on one slide 30 embryos all alive, and of different sizes, the large-sized being now obviously male and female. On the tenth day the eggs were suddenly increased in number, from 1 or 2 to 17 upon one side, apparently rhabditic, but having the same appearance as the original ova. Upon the same slide were 27 embryos of various sizes, and one ruptured empty sheath. On the eleventh day one slide showed 15 eggs and 25 embryos, all alive but moving

\* I am indebted to Ibrahim Effendi Unsi for much help with the microscope examinations.

very slowly. On the twelfth day there were on one slide 27 eggs, 14 dead embryos, and only 2 alive, and those moving very feebly. I then divided the cultivation into two halves, one half to be moistened with filtered water daily, and a new half to be mixed with the fæces of a healthy man, after negating anchylostoma by the microscope. On the fifteenth day a slide from the old half showed 5 eggs and 3 dying embryos, while a slide from the new half showed 30 eggs, 6 embryos dead, and none alive. On the sixteenth day the old half showed 6 eggs and 4 dead embryos, while the new half had 14 eggs and 7 very lively but very young embryos. This new brood had thus been produced by healthy fæces in four days.

It is not necessary to give all the daily examinations.

On the thirty-first day the slide from the old half still showed 12 eggs, 1 of which was empty, 5 dead embryos, and 2 living ones. The new half had 34 eggs and 18 embryos, all very lively but not growing. Fortieth day.—No eggs, and only 1 embryo dead in the old half; while in the new half there were also no eggs, but 21 very lively embryos and 3 dead ones, as also one complete sheath. On the forty-fourth day, when I had to leave Cairo, the old half still contained 2 embryos faintly moving, 1 dead embryo, but no eggs. The new half showed 4 eggs and 2 very lively embryos on one slide. The addition of fresh fæces would again revive the embryos.

The experiment is enough to show that embryos on damp earth in Cairo will live for more than six weeks.

## A Mirror of Hospital Practice.

### A CASE OF PULMONARY EMBOLISM.

BY PRANDHAN BOSE, M.B.

Mrs. D., aged 25, multipara, was delivered on 24th December of a healthy female child. There was nothing unusual about her labour except that it was a little premature, on account of her having suffered from fever for a week previously. The fever left her immediately after delivery, but returned with vigour after a few hours, the temperature rising to 105°. This was followed by excruciating pain in the right ovarian region, with much tenderness over the uterus. The ovarian pain was so severe that I had to inject a quarter of a grain of morphine every twelve hours for four days successively. This, with the aid of hot linseed meal poultices over the abdomen, reduced the pain a great deal, but the temperature still continued to be high, ranging between 102° and 104°. I should have mentioned that she had suffered during her last confinement (three years ago) from endometritis, and pelvic cellulitis for about a year. She continued to be in this condition for about a fortnight, when she complained all of a

sudden of severe headache and shortness of breath. The pulse was small and frequent, and the extremities were nearly cold and bloodless. She was also slightly delirious, and evinced the utmost reluctance to speak or being spoken to. The dyspnoea began to increase rapidly, so that in the course of four days she found it impossible to be in the recumbent posture. On stethoscopic examination, large crepitations were heard over the base of both lungs, and a slight murmur (which gradually developed into a distinct bruit) could be detected over the base of the heart. There was also general anasarca, the swelling having commenced in the face, and gradually extended to the trunk and extremities. She was troubled with an incessant cough, and expectorated frothy mucus tinged with blood. She continued in this condition for about a week, her life being nearly despaired of. On the tenth day signs of improvement began to be noticed. The pulse improved in volume, the respiration was less embarrassed, the cough was less troublesome, and the patient was able to lie down. The extremities and lips gained in colour, and were less cold to the touch. The improvement from this period was steady and fairly rapid. The anasarca and other physical signs disappeared. On the 13th February following her delivery she was able to walk up and down stairs without difficulty.

*Remarks.*—The present case is a rare instance of recovery from pulmonary embolism. The pathological process which occurred can be easily traced. The patient having during her preceding confinement suffered from endometritis, it would not be unreasonable to assume that she was predisposed to some inflammatory process about the neck of the womb. Coagulation had taken place in the uterine sinuses, and had extended through the iliac vein to the inferior vena cava. There having been no premonitory symptoms of what might follow, she had probably made some violent effort in trying to sit up in bed. This was followed by the detachment of a small portion of the fibrinous clot, which, not being large enough to plug the pulmonary artery, had found its way into a small branch, and brought about in a short time the obstructive changes detailed above.

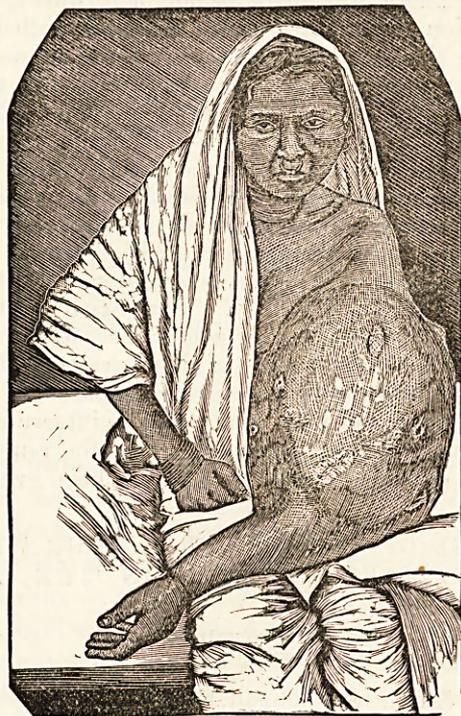
I might mention that this case was at the outset mistaken for one of pernicious anæmia, but the sudden onset of the symptoms and their equally rapid disappearance preclude the possibility of such a supposition.

#### A CASE OF SARCOMA OF THE LEFT UPPER EXTREMITY—AMPUTATION AT THE SHOULDER JOINT—RECOVERY.

By RAJENDRA NATH DE, *Assistant-Surgeon, Ghazipur.*

BHAGMAUTIA, a Hindu female, by caste Bhuinhar Rajputin, married woman, whose case

is illustrated in the accompanying photograph, mother of two children, came to the Ghazipur Lady Dufferin Fund Female Hospital on the morning of the 29th April 1894, suffering from a huge sarcoma of the left upper extremity. The great emaciation and weakness added to the great weight of the tumour, which was subsequently found to weigh about 32lbs. avoirdupois, utterly incapacitated her from moving out of her bed without help. She was brought in a dooly. The history of the case as given by the patient is as follows: she used to enjoy excellent health, till August 1891, when she began to have severe lancinating pain in a situation corresponding to the centre of the left humerus. There was no swelling or redness during the first month and a half. With a view to remove the pain, the arm was leeches, cupped and painted with applications of indigenous drugs without relief. Then she noticed a hard swelling, without any change of colour of the skin, appear on the front aspect of the upper arm below the middle. In the course of about 27 months the tumour had grown all round the limb. Then the tumour began to encroach on the forearm, and during the last six months it has rapidly increased till it has attained its present size as shown in the photograph.



*Condition on admission.*—The tumour measures 19ins. in length and 33ins. in girth at its thickest part. It extends from 3ins. below the shoulder joint to the middle of the forearm. It is fusiform in shape, nodulated, firm