On Sept. 11th the mother and child (the latter now aged five months) were both of them quite well.

Conisbro', Yorks.

A MODIFICATION OF THE ARONSON AND PHILLIPS STAINING METHOD AND ITS APPLICATION IN THE CASE OF MALARIAL BLOOD.

BY EDWARD G. HORDER, F.R.C.S. EDIN.

I WAS much interested in Dr. Gerrard's clinical note in THE LANCET of June 3rd, 1899, p. 1490, giving a modification of the Aronson and Phillips Staining Method and its Application in the Case of Malarial Blood. I quite agree with Dr. Gerrard that the triple stain is one of the best we have for malarial blood, but the non-success of this stain in the hands of many men working on the blood has deterred others from using it to demonstrate the malarial parasite. My colleague, Mr. Hill, and I have used no other stain since we learnt how to heat the specimens. I wish to make a few suggestions and try to show how there is still an easier, surer, and quicker method than Dr. Gerrard's modification of the Aronson and Phillips staining method and will take up the points in the following order.

1. *The preparation of the cover.*—Dr. Gerrard and others suggest receiving the blood on a cover-glass and placing this face down on a second, separating them carefully when the blood is fully spread. This is an excellent plan, but requires a lot of time and often it is difficult to obtain an even spread. A quicker way, and I think more satisfactory, is to combine the use of cover-glasses with Manson's smearing. Having ready a glass cover in a pair of Ehrlich's forceps (these are better than Cornet's for holding and picking up covers) and a small piece of gutta-percha (half an inch square), held in a second pair, we proceed to prick the ear, and as the blood exudes the drop is touched by the edge of the gutta-percha, laid flat and drawn across the cover-glass, *commencing from the edge held by, and parallel to, the Ehrlich forceps.* The gutta-percha is held by forceps for the reason that during the greater part of the year in the tropics it is almost impossible to prevent the gutta-percha sticking when held by the fingers and with forceps it is much easier to manipulate. The smearing is commenced at the side held by the forceps for the reason that if begun from any other point the cover-glass is apt to swing round and spoil the specimen. One cover smeared another and another are picked up, and thus 10 or 20 spreads are prepared in a few moments. There is no touching of cover-glass with heated fingers, and the blood being spread by gutta-percha is more even in its results and therefore requiring the same number of exposures to the flame as other specimens spread in the same way.

2. *The heating.*—The quickest, and I believe the most certain, method of heating is by means of a spirit-lamp. After testing a half-dozen specimens prepared as above it is quickly learnt what exposure is required. If a lamp holding five ounces of spirit with a wick half an inch long be used, from 16 to 18 exposures to the flame will be required—that is, it will be necessary to pass the specimen quickly through the flame about 18 times to obtain a satisfactory staining. With the triple stain all depends upon the heating.

3. *The staining.*—After trying various mixtures—for no two books give the same proportions for the preparing of the triple stain—I find nothing better than the Ehrlich-Biondi powder made by Grubler and a solution¹ of this I have in constant use. It is quickly prepared and produces splendid results, and I agree with Dr. Gerrard when he says that for the malarial blood we have nothing better than the triple stain. Two minutes' staining will be found long enough for all specimens taken as above described. The great advantages of the powder are that it is easily packed, that but one bottle is required, a small quantity of the solution is quickly prepared, and is ready for use at once—all strong arguments in its favour for men who are often on the march and wish to stain a preparation immediately.

Pakhoi.

¹ Cabot gives the following formula: Ehrlich-Biondi powder, 15 grains; absolute alcohol, one cubic centimetre; distilled water, six cubic centimetres.

A Mirror

OF

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

VICTORIA HOSPITAL FOR CHILDREN, CHELSEA.

A CASE OF STRANGULATED INGUINAL HERNIA IN AN INFANT AGED 10½ MONTHS; OPERATION; RECOVERY.

(Under the care of Mr. D'ARCY POWER.)

STRANGULATION of a hernia in a young child is a rare occurrence, for the tissues are soft and are not likely to compress the bowel sufficiently to interfere with the circulation; yet from time to time numerous cases of strangulated hernia in children have been recorded, and it has been met with even during the first few days of life. In many cases partial inversion has led to a return of the bowel, though it has been necessary sometimes to keep the patient in this position for several hours. This treatment was, we believe, first recommended by Pott. It should, of course, only be employed in cases where no very urgent symptoms are present. For the notes of the case we are indebted to Mr. Edward J. Parry, house surgeon.

At 10.30 on the evening of July 26th a well-nourished male child, aged 10½ months, was taken by his mother to the Victoria Hospital with the history of having suddenly strained himself while coughing violently at 3 o'clock on the same afternoon. The child previously had been perfectly healthy except that he had had a right inguinal hernia for about six months for which he had worn a truss. On examination the local signs were as follows: a tumour of about the size of a hen's egg, extremely tense, was found in the scrotum and inguinal region on the right side, possessing the usual signs of a strangulated hernia with the exception that it was almost perfectly translucent. With regard to the general symptoms the child did not appear to be in much pain; he had not vomited at all and had taken his food as usual; the bowels had been open twice since the strangulation occurred. The pulse and temperature were normal. The pelvis and abdomen were elevated and taxis was tried gently for about one minute, but without any favourable result. Mr. D'Arcy Power operated an hour later, eight and a half hours from the commencement of strangulation. Some clear fluid was found in the sac and the gut was congested; the stricture which was fairly tight was situated at the neck of the sac. The bowel was returned and an operation for radical cure was performed. There was a good deal of swelling during the next two or three days, but this disappeared within a week. The infant made a rapid and uninterrupted recovery and was discharged on August 16th.

ROTHERHAM HOSPITAL.

A CASE OF VOLVULUS OF THE SMALL INTESTINE;
LAPAROTOMY; RECOVERY.

(Under the care of Mr. REID.)

IN the following case the slowness with which the symptoms appeared points to the volvulus of the bowel having been by no means acute. It is probable that at first the twisting of the intestine was only slight and that about the time of admission to the hospital the bending of the gut was increased so that complete obstruction resulted. The value of early laparotomy in cases of volvulus is well shown by Braun.¹ For the notes of the case we are indebted to Dr. J. S. Martin, house surgeon.

A married woman, aged 26 years, was admitted into Rotherham Hospital on June 30th, 1899. She had had two children, the youngest of whom was three years old. Ten

¹ Therapeutic Gazette, April 15th, 1892.

months before admission she had a child which was born dead. Menstruation had been regular until seven weeks previously to the date of admission when she went six weeks without seeing anything. Her period then came on, lasting a week. On June 21st she got up at 9.30 A.M. to light the fire when she suddenly felt pain in her abdomen. The pain was so severe that she fainted and half an hour afterwards her sister found her lying unconscious on the floor. In another half hour she came round and feeling great pain in the abdomen she went to bed. The pain was increased by pressure and it continued to be severe for the next three days, but she did not see a medical man. On the 26th she felt better and the pain left her entirely. She felt so well that she went about her ordinary work and the next evening she went to see a circus performance. On the 28th she was out in heavy rain and on the 29th, at 8.30 P.M., the pain returned as severely as before. On the 30th she sent to the hospital. The assistant house surgeon saw her and advised her admission. She was admitted at 7 P.M. Up to the time of her admission there had been no vomiting. Two years ago she had a similar attack which, however, was less severe; it lasted five days and was unaccompanied by sickness. On admission the tongue was clean and dry. The patient lay on her back with the knees drawn up. The cardiac impulse was not displaced and the heart sounds were soft. No murmurs were present. The pulse was 98, soft and intermittent, and the temperature was 100° F. The abdomen was distended and tender, the distension not being general but localised round the umbilicus, giving this region a heaped-up appearance. The tenderness was diffused all over the abdomen, though somewhat less marked in the left inguinal region. There was no special tenderness over McBurney's point. On vaginal examination there was fulness in the posterior fornix and the uterus felt bound down to the pelvic floor. The bowels were constipated and she had not had a motion since the 26th. On the following day (July 1st) she vomited seven times in the course of the morning. The vomit was of a light straw colour with a sour smell. The abdominal pain was less severe than the previous day, but it was still present. A simple enema was administered with an unsatisfactory result. Two small masses of faeces came away, with a little dark fluid. At 4 P.M. she vomited again, this time bringing up nothing but watery mucus stained with bile. At 9 P.M. a consultation was held by the members of the staff. There was some difference of opinion as to whether the case was one of appendicitis or of intestinal obstruction. The balance of opinion fell towards the former and it was decided to wait. During the night the patient vomited twice and her condition next morning was no better, so after another consultation an exploratory laparotomy was decided on and at 10.30 A.M. on July 2nd Mr. Reid opened the abdomen. The incision was made over the appendix, starting from McBurney's point, and continued downwards for about three inches. The cæcum and appendix were perfectly healthy, the latter being about three inches in length and extending towards the brim of the pelvis. The small intestine was then examined. Beginning at the ileo-cæcal valve the operator passed the bowel through his fingers, returning the examined part to the abdominal cavity. About two feet above the valve the bowel showed signs of congestion and soft yellowish flakes of lymph were found on the surface, but there was no loss of lustre. On examining the bowel in the direction of the greatest congestion a volvulus was found about a foot higher up. A loop of the bowel had become twisted upon itself, the constriction being caused by the manner in which the upper end fell over the lower. It is of interest to note that at this part the flakes of lymph were scarcer than they were lower down and there were no adhesions. The bowel was readily untwisted and was spread out on a flat, warm sponge. No predisposing cause for the volvulus could be discovered and the gut was returned to the abdomen. The wound was closed with a single layer of silk-worm-gut sutures and a dressing was applied. The patient made an uninterrupted recovery. On July 9th she began to take solid food; on the 12th the stitches were removed and on August 14th she left the hospital feeling well and wearing an abdominal belt as a support.

Remarks by Dr. MARTIN—Apart from the rarity of the condition, the severity of the onset and the interval which occurred during the attack are features of interest. It would seem that the bowel had untwisted itself and had twisted a

second time. It is a matter for surprise that the symptoms were not more acute. During the nine days prior to admission the patient had no vomiting. Lastly, in Treves's System of Surgery it is questioned whether a volvulus of the small intestine can occur without some adhesion causing kinking of the bowel; but in the above case no such adhesion was found. I am indebted to Mr. Reid for permission to publish these notes.

GOVERNMENT CIVIL HOSPITAL, HONG-KONG.

A CASE OF EXALGINE POISONING; RECOVERY AFTER A VERY LARGE DOSE.

(Under the care of Mr. J. BELL)

EXALGINE was introduced as a substitute for antipyrin and its constitution is indicated by its structural name, "methyacetanilide." In its physiological effects it closely resembles antipyrin, but its sedative action on the nervous system is decidedly greater. As the ordinary dose is from four to six grains the quantity taken in the case described by Mr. Bell was truly enormous. Weber¹ recorded a case where 240 grains of exalgine were taken; the patient recovered, but there was temporary suppression of urine and the first urine passed contained blood. A case of poisoning from only five grains of exalgine was reported by Mr. F. G. Crookshank;² complete unconsciousness lasted for three hours, but recovery ultimately occurred.

A Chinese male adult was taken to the Government Civil Hospital, Hong-Kong, on July 31st at 11 A.M. by his friends who stated that he had taken some medicine out of a tin purchased in the town and this tin they produced. It was the usual one-ounce tin stamped with the words "Exalgine" and "Merck." The patient was quite unconscious, intensely livid, with pin-point pupils and a full bounding pulse. His temperature was 100.8° F. He had vomited once. He was given 30 grains of salicylic acid by the nasal tube and one-fiftieth of a grain of atropia hypodermically and was put to bed. He remained in much the same condition, so two hours later he was given one-hundredth of a grain of atropia with small quantities of milk and strong coffee. The urine was examined and contained one-fifteenth albumin. During the night he again had one-hundredth of a grain of atropia. Next morning he was out of danger though his colour and pupils were not quite normal, but the urine was now free from albumin. He was somewhat weak for several days and his temperature varied between normal and 100.8°, though this might have been due to the primary syphilis from which he was found to be suffering. He apparently purchased and took the medicine to open his bowels, though it was found impossible to ascertain why and where he bought it.

Remarks by Mr. BELL—This case is deemed worthy of recording, as poisoning by this drug is uncommon. The similarity between its effects and those due to opium are noteworthy, and fortunately the similarity extends to the treatment, if it is considered that treatment was of avail. There does not seem to be any note in the text-books as to whether albumin is present in the urine in opium poisoning, and though poisoning by this latter drug is common here no note has so far been made as to its presence, though this omission will in future be remedied. Mr. Browne (the Government analyst) kindly confirmed the fact of the drug in question being exalgine and informed me that the patient must have taken 150 grains, judging from the amount missing from the box and from the patient's statement that he only took one dose. The hints as to treatment were found in "Martindale's Extra Pharmacopœia."

¹ Revue Générale de Clinique et Thérapeutique, Nov. 3rd, 1894.

² THE LANCET, May 25th, 1895, p. 1307.

FEES FOR LUNACY CERTIFICATES.—At the meeting of the Newport (Mon.) Board of Guardians held on Sept. 16th it was reported that three members, including the chairman, had been surcharged by the Local Government Board auditor in connexion with the payment of a guinea to the medical officer for the examination of a pauper lunatic. The auditor stated that all that was required was an expression of opinion whether the parish patient was fit to be removed from the workhouse, and that that came within the ordinary duties of the medical officer.