had been reduced to less than 10 mmg. per 100 c.cm., and he made an uninterrupted recovery.

I am indebted to Professor Delépine, of the Public Health Laboratory, Manchester, for the analytical reports submitted, and to Mr. Thomas Callan, M.Sc., Ph.D., for help in subsequent analyses.

RUPTURED MALARIAL SPLEEN: SPLENECTOMY: RECOVERY.

BY

CYRIL A. RAISON, M.B., CH.B.,

LATE ACTING MAJOR R.A.M.C. (T.).

OFFICER IN CHARGE SURGICAL DIVISION 33RD STATIONARY HOSPITAL.

BATTLE wrote: "The rupture of a malarial spleen may be compared with that of an aneurysm—the rupture of a normal spleen to that of a large artery," while Lieut.-Colonel Crawford, in the *Indian Medical Gazette*, summarizes his extensive experience in a statement that "Ruptured spleens not infrequently come under the notice of surgeons in India—not as a rule in hospital during life, but after death in the subject of a judicial post-mortem examination. The injury is always of grave importance and practically always fatal." The late Surgeon-General Coull-Mackenzie stated that 68.9 per cent. of cases of splenic rupture end fatally within half an hour. Captain Jamison published an interesting series of six cases in the *BRITISH MEDICAL JOURNAL*, September 14th, 1918, but in view of the fact that relatively few recoveries have been recorded, the following case may be of interest:

A Macedonian, 56 years old, was admitted on May 30th, 1918. He was very collapsed and complained of great abdominal pain, aggravated by movement or by coughing; his expression was extremely anxious and few words could be elicited from him. His skin was sallow, his lips were pale and slightly cyanotic. The pulse was 145, and the respirations were 44 per minute; they were shallow, and there were signs of diffuse bronchitis. The abdominal wall scarcely moved and was rigid and tender generally, but particularly in the left hypochondrium. The left part of the upper abdomen was distinctly prominent; the knees were flexed. The splenic dullness extended to the umbilicus, and both flanks were dull on percussion. There was no external sign of bruising.

Operation.—Under local anaesthesia by $\frac{1}{2}$ per cent. novocain a median incision was made above the umbilicus. When the peritoneum was opened a large quantity of blood gushed forth. Morphine gr. $\frac{3}{4}$ was given, and Captain A. C. Smith induced gas and oxygen anaesthesia. An oblique incision was made through the left rectus parallel to and one inch below the costal margin. The spleen was seen to be greatly enlarged, the anterior surface of its capsule was almost completely raised from the matrix, and showed an irregular tear about four inches long, through which blood was coming. In consequence of adhesions to the diaphragm it was impossible to bring the spleen up, and therefore (with considerable difficulty) the pedicle was clamped from the front. Intravenous injection of glucose and sodium bicarbonate was made throughout the remainder of the operation. The adhesions giving considerable trouble, they were divided between clamps and ligatured after the removal of the spleen. The abdominal cavity, which contained much blood, was irrigated with warm saline solution, and a certain amount being allowed to remain inside, the abdomen was closed.

The patient's condition was critical, but on the following day he was much improved, the pulse falling to 128 about twelve hours after the operation. He was given 10 grains of quinine four-hourly, and made steady progress, the evening pyrexia, which disappeared on the tenth day, being the only point of note. When last seen, in February, 1919, he said he had never felt better in his life; he certainly looked many years younger.

The spleen was found to be $13\frac{1}{2}$ inches long, and $6\frac{1}{2}$ inches wide, and to weigh 3 lb. 2 oz. In the upper end there was an irregular tear about four inches long, penetrating two inches into the substance; the capsule was raised in front. The blood, limited above by the diaphragmatic adhesions, had burrowed beneath the capsule, which had eventually given way, a tear being produced. The blood count made on June 6th (a week after operation) showed 3,520,000 erythrocytes, and 26,000 leucocytes (polynuclears 67 per cent., eosinophils 4 per cent., small lymphocytes 11 per cent., large lymphocytes 9 per cent., large hyalines 9 per cent.); many red cells showed polychromatophilia.

Three days subsequent to the operation the following history was obtained from the patient's wife, but doubt is cast on its accuracy: "He had had malaria for many years. Four or five days before his operation he had been kicked in the back by a donkey, but felt little the worse and continued his ordinary work. During the early hours of the morning prior to his

admission he suddenly awoke with great pain in his left side and then in his abdomen. He vomited several times."

The interesting features of this case are that the rupture occurred in a man of 56, that the spleen was the largest I can trace as having been removed in a case which subsequently recovered, and that there were massive adhesions. According to Vanverts the presence of the latter in splenectomies for malarial hypertrophy without rupture raises the mortality from 5.7 per cent. to 72 per cent.

SYPHILIS INSONTIUM.

BY

J. C. MCWALTER, M.D., LL.D., M.R.I.A.,

SOMETIME SPECIALIST SANITARY OFFICER R.A.M.C.

D'ARCY POWER teaches that syphilis is transmitted to the fetus only at conception or in the earlier months of pregnancy. Almost all the experts seem to hold the same view, and hence it may be worth while to record a case, at present under my care, which appears to prove conclusively that infection can take place in the eighth month of pregnancy.

It is also of great importance to have definite and scientific records of cases of syphilis insontium, because there is usually something short of conclusive proof that a case of syphilis was extragenital in origin.

My patient was a married woman in the earlier thirties with four healthy children and no history of abortion. She consulted me about an ulcer at the angle of the mouth; it was shallow and of greyish colour; at first I supposed it to be due to pyorrhoea. She expected her confinement in the following month. I prescribed some solution of iodine with glycerin, but when she returned the following week the ulcer was no better, the submaxillary glands had become inflamed, and the whole sore began to exhibit a typically chancroid appearance. I sent her to the Pathological Laboratory at Trinity College, Dublin, and it was reported that the sore was teeming with *Spirochaeta pallida*.

One is peculiarly prone to jump to rash conclusions in these cases, and I presumed that the woman's husband was responsible. I interviewed and examined him, but he had no trace of the disease. It then seemed probable that the woman herself was to blame, when further investigation showed that she had got the sore on her mouth from kissing a child who had an acutely virulent sore on its mouth.

On consultation, it was decided that salvarsan treatment might be risky, in view of the expected early confinement, and the patient was put on an ordinary course of mercury, cinchona, and iodides. The sore rapidly healed, and in four weeks she was delivered of a fine infant, which exhibited no signs of syphilis at birth, or for four weeks afterwards. The child had never a primary sore.

I had begun to conclude that the infant had escaped syphilis when the mother reported that it had commenced to look unwell, and when examined in the fifth week it showed slight but unmistakable signs of congenital syphilis. These cleared up so rapidly under mercurial treatment that it is with great difficulty the mother can be induced to continue the treatment for her child.

Does the *Spirochaeta pallida* pass directly from the maternal blood to the infant's? The patient would seem to prove the affirmative. This case proves, I think—

1. Infection of a mother with syphilis in the eighth month of her pregnancy results in infection of the child.
2. The syphilis in the child is of a milder form and develops later than ordinary congenital syphilis.
3. Infection of the mother with syphilis in the later months of pregnancy may have no deleterious effect on her confinement.
4. There are some cases of syphilis insontium capable of the most rigid proof.

PROFESSOR P. LEBEAU, of the School of Pharmacy of the University of Paris, will give two advanced lectures in chemistry at the end of this month at King's College, London. The first lecture, on June 28th, at 5 p.m., will deal with the ammonium metals in organic chemistry; in the second, on June 30th, the theoretical and practical results of the work of M. Moissan will be discussed.