part, much the same as is seen in an early hydronephrosis due to some obstruction to the outflow of the urine from the renal pelvis.

The exciting cause of the pyonephrosis and the period at which the infection occurred are factors, however, which are most difficult, if not impossible, to determine.

ACUTE PYELONEPHRITIS COMPLICATING PREGNANCY.

BY

F. D. CREW, M.B., B.C. CANTAB.,

HIGHAM FERRARS.

ALTHOUGH pyelonephritis is by no means rare as a complication of pregnancy, the following case, which was under my care, seems worth recording on account of the severity

o, Operation; A, abortion; D, dressed; s, stitches removed.

of the symptoms and the difficulty in making a correct diagnosis.

A lady, aged 35, was pregnant for the sixth time, the pregnancy being of five months' duration. A fortnight before the onset of the disease she had been in a nursing home on account of a retroverted gravid uterus which had been replaced under an anaesthetic. Since then she had not felt well but had no definite symptoms beyond occasional vomiting, which was thought to be due to the pregnancy.

History of Present Illness.

On February 2nd, in the night, she was suddenly seized with severe abdominal pain and vomited several times. I saw her in the morning, when I found her looking very ill and complaining of great pain in the right loin and right iliac fossa, where there was well marked tenderness. There was no swelling to be felt, no dullness, and the bowels had acted naturally. By vaginal examination the uterus was felt to be enlarged to about the size of a five months pregnancy, but nothing abnormal was discovered. The temperature was 101° and the pulse 120. Whilst I was in the house the patient had a rigor, during which the temperature rose to 106°, and this was followed by profuse sweating, the temperature falling to 97°. The urine was acid in reaction, specific gravity 1020, and contained no albumen. Microscopical examination showed that blood and pus were absent.

The next day her condition was the same, the rigors and vomiting still continuing. The case was considered to be either appendicitis or acute pyelonephritis.

Exploratory Laparotomy.

On February 4th her condition was very grave, the rigors and vomiting occurring more frequently. The abdomen was distinctly distended, and there was dullness in the right flank, but very little rigidity. As she was so much worse I asked Mr. Victor Bonney, under whose care she had been, to see her in consultation. There being no pyuria, the more likely diagnosis seemed to be appendicitis, with the formation of pus, but the case not being quite clear it was decided to wait. In the morning, as she was found to be in the same condition, the abdomen being more distended and the pulse 140, an exploratory laparotomy was undertaken. The ascending colon was found to be distended, but there was no peritonitis and the appendix was healthy. The gall bladder and pelvic organs were normal, but the right kidney was very much enlarged, a fact which pointed to the case being one of pyelonephritis.

After-History.

On the following morning vomiting began to be very troublesome, becoming almost incessant in the afternoon. Labour pains began at 2 p.m., and she was delivered of twins at

6.30 p.m. Delivery was difficult owing to the rigidity of the os and the inconvenience of the abdominal incision.

The urine had been examined microscopically each day, with negative results, but on this day a catheter specimen was found to contain a large quantity of pus. A cultivation was made, with the result that a pure culture of *Bacillus coli communis* was obtained.

On the next day the patient suddenly collapsed, and her pulse was hardly perceptible at the wrist, but she gradually rallied after hypodermic injections of strychnine and digitalin.

After delivery the sickness ceased, but the rigors continued. The incision healed by primary union, but the pyuria did not disappear for three weeks, after which the temperature gradually fell to normal. The patient was sent to the sea for a month, and is now quite well.

After the diagnosis had been made she was given urotropin gr. viii every four hours, her chief food being peptonized milk.

The case illustrates well the sudden onset of the disease, and is instructive because of the difficulty in arriving at the diagnosis. From the beginning pyelonephritis was considered, but the absence of albumen and pus from the urine for the first three days led us to think that the symptoms were more correctly accounted for by a diagnosis of appendicitis, with the formation of pus, and it was on this assumption that the abdomen was opened.

Another unusual feature was the occurrence of abortion, which was probably produced by the toxæmia and resulting high temperature. It is worthy of notice that emptying the uterus did not appear to have any beneficial effect on the symptoms, this being contrary to the experience of some reported

cases,¹ and showing that the induction of premature labour is not justifiable as a routine treatment for severe cases of this disease.²

REFERENCES.

¹ Bellingham Smith, *Guy's Hospital Reports*, vol. ix, p. 238. ² Bellingham Smith, *Journ. Obstet. and Gyn.*, August, 1905.

FOREIGN BODIES IN THE VERMIFORM APPENDIX.

By SIDNEY BOYD, M.S., F.R.C.S.

SENIOR ASSISTANT SURGEON TO THE BELGRAVE HOSPITAL FOR CHILDREN; SURGEON TO THE MILDAY HOSPITAL, BETHNAL GREEN; LATE SURGICAL REGISTRAR, CHARING CROSS HOSPITAL.

THE comparative infrequency of foreign bodies in the vermiform appendix makes the following case worthy of record:

A boy, aged 14, had a mild typical attack of appendicitis in June, 1911. Since then he had frequently had pain in that region, necessitating his being away from school on several occasions for a day or so. At the operation on December 15th I found the appendix considerably thickened and about four inches long. It lay to the inner side of the caecum, below the mesentery. There were a fair number of adhesions around it. The appendix was not of the infantile type. On slitting it up at the conclusion of the operation, the lumen was found to be unusually large, but uniform throughout; there was no ulceration or stricture. Near the distal end was a small piece of wood, about a third of an inch long and an eighth of an inch in the other two diameters. It was irregularly shaped, but being somewhat macerated its points were not sharp. The colour suggested that it had originally belonged to a cedar-wood pencil, but the boy, on being questioned afterwards, denied that he was in the habit of biting his pencils. There were also two hairs about three-quarters of an inch long, the nature of which was confirmed by microscopic examination. There were also several threadworms present, but these, in my experience, are not by any means uncommon. Nothing else was present except some soft faecal matter. No concretions had formed around the foreign bodies.

According to Kelly and Hurdon¹ the commonest foreign body met with in the appendix is a pin. These authors give a list of 46 cases in which this was found. All the cases were complicated by peri-appendicular suppuration, and many of them were fatal. Bullets and shot have also been met with, in most cases derived from eating game.