friends were at first amused, and did not realize that it was not part of the entertainment. They then came to his help and gave him a glass of water, which he was unable to swallow, the fluid regurgitating through the nose. This was followed the next day by paralysis of the left leg, left arm, and left side of the face, including the upper part, and for a month he had to be fed with a tube. This happened in Japan; the doctor treated him by inunction, and after a month he was able to swallow and speak. He was sent to me on his return from Japan suffering with the remains of a left-sided paralysis, including the upper facial muscles, and there was also paresis of the left vocal cord and soft palate. He attended my practice for some years without further symptoms, and gradually improved.

I do not believe there is any reasonable ground for questioning the syphilitic origin of my case, as it occurred as one of a series of syphilitic phenomena which yielded rapidly to specific treatment, and the patient's condition at the present time is not in favour of its being a manifestation of that curiously irregular disease—disseminated sclerosis.

REFERENCE.

¹ *A System of Syphilis*, Power and Murphy, vol. iv. Syphilis of the Nervous System, p. 92.

THE IMPORTANCE OF A LEUCOCYTE COUNT IN DOUBTFUL CASES OF APPENDICITIS.

BY

GEORGE F. ALDOUS, F.R.C.S. EDIN.,

SURGEON TO THE SOUTH DEVON AND EAST CORNWALL HOSPITAL;
CONSULTING SURGEON TO THE EAST CORNWALL HOSPITAL,
BODMIN, AND THE TAVISTOCK HOSPITAL,
SOUTH DEVON.

THE cases here recorded illustrate in a marked degree the importance of taking a leucocyte count in doubtful cases of appendicitis. This weapon of diagnosis is without doubt daily used, and is, in my opinion, of paramount importance in elucidating vague symptoms referable to the appendix region; it tells whether we may temporize, or whether, on the other hand, we have no time to spare. It is on these cases with a high leucocytosis, and with the constitutional symptoms masked, often both pulse and temperature below 100, that I wish particularly to lay stress; it is these cases which, if watched, so often end in the tragedy of acute suppurative peritonitis; it is, moreover, more common in a first attack, where adhesions do not exist to shut off an appendix distended with infected contents, with usually a stercolith, gradually burrowing its way through the muco-muscular wall of some portion of the appendicular canal; if, in these cases a count shows a leucocytosis of anything between 15,000 and 30,000, the appendix should be at once explored, and the picture usually presented is a semi-gangrenous appendix, the serous coat of which is intact, the lumen distended with foul pus, with one or more stercoliths, but no adhesions, which renders the operation of removal easy and safe.

CASE I.

R. C., aged 14 years, had had no serious illness, but had suffered occasionally from attacks of indigestion.

He was quite well at school on November 13th. He was seen by Dr. Leslie Watt at 9 a.m. on November 14th, when he complained of pain in the right iliac fossa, increased on pressure; he had vomited several times during the night. The pulse was 84, the temperature 98.4° F.; there was no rigidity of the right lower rectus abdominis. He was seen again on the same day at 8 p.m., when he looked flushed, the pulse was 104, and the temperature 100.8° F. There had been no vomiting since the early morning. Hot belladonna fomentations were applied. He was seen again at 8.30 a.m. next day, November 15th. He had had a comfortable night, and looked much better; the pulse was 84, the temperature normal, and pain slight. I was asked to see him at noon; his general appearance was good, and did not in any way suggest the necessity for an operation; pulse and temperature were normal. I took a specimen of blood, and Dr. Pethybridge reported a leucocytosis of 25,000. Immediate operation was urged.

The appendix was found lying free, without adhesions; it was of large size, 1 in. in diameter at about the centre; towards the base it appeared normal, and this was clamped, the stump buried in the caecal wall, the meso-appendix tied off, and the parietes closed in layers without drainage. On opening the appendix it was found tightly distended with foul pus, and there was a large stercolith; the anterior two-thirds of the mucous and submucous coats were gangrenous. Recovery was uneventful.

I have not the slightest doubt that, but for the blood

count, this case would in twenty-four hours have become an example of a fulminating appendicitis.

CASE II.

T. L., aged 46, seen in consultation with Dr. George Hillyar. On November 19th he played golf; at night he had pain in the right iliac fossa. I was asked to see him next day (November 20th). There was some tenderness in the right iliac fossa, but no rigidity of the rectus; the patient did not appear very ill. I was doubtful whether the appendix was at fault, as he had previously suffered from attacks of pain referred to the region of the gall bladder; a specimen of blood was taken: Dr. Pethybridge reported a leucocytosis of 14,800.

He was at once removed to a nursing home, and, assisted by Dr. Hillyar, I made an incision over the right rectus; the appendix was found much swollen, coiling round, and plastered to the fundus of the caecum; the parietes were sutured without drainage. The appendix contained a stercolith and 2 drachms of foul pus. This body had a marked resemblance to a gall stone, but it proved to be a stercolith. The patient made a good recovery and left the nursing home in seventeen days.

CASE III.

D. T., aged 8, seen in consultation with Dr. W. L. Hodge. On August 30th he was watching a cricket match; when he returned home at 7 p.m. he complained of abdominal pain; he vomited during the night and had several loose motions; the pain, which was paroxysmal and extended over the abdomen, subsided. At 8 a.m. next day (August 31st) the temperature was 100.6°, the pulse 120; acute abdominal pain returned at noon and continued till 4 p.m. and was more localized in the right iliac fossa; his condition then improved. The temperature was 100° and the pulse 98; the tongue was moist. A leucocyte count was made by Dr. Pethybridge, who reported 22,000.

Immediate operation was performed and I found the appendix of large size and gangrenous, and the gangrene had invaded the serous coat, although rupture had not taken place; infection of the fossa was evident, necessitating drainage. The base of the appendix was divided and buried in the caecal wall. The patient left the nursing home in four weeks and rapidly regained health.

In this case the symptoms were apparently improving and the patient's father, a medical man, was in favour of delay before the blood count was made. I am of opinion that with delay of twenty-four hours the result would probably have been different.

OBSERVATIONS ON THE FUNCTIONS OF THE COLON, WITH SPECIAL REFERENCE TO THE MOVEMENTS OF ENEMATA.

BY HAMILTON DRUMMOND, F.R.C.S. EDIN.,

SURGICAL REGISTRAR, ROYAL VICTORIA INFIRMARY,
NEWCASTLE-UPON-TYNE.

A STATEMENT by Professor Rutherford Morison to the effect that enemata will travel along the whole of the large intestine and that succussion of the fluid injected can be obtained in the caecum, directed my attention specially to the subject and led to the following observations. He made this remark before x-ray apparatus was in use, and therefore before the method of examination by bismuth enemata was carried out as an aid to diagnosis of disease, and at the time, I believe, its truth was generally doubted.

It has now been definitely proved that in animals as well as human beings an enema will travel through the whole course of the large bowel, and the object of my paper is to illustrate this and to record some interesting observations, the result of personal experience with the fluorescent screen, in investigating a large number of cases when bismuth and barium enemata were employed for diagnostic purposes.

Cannon¹ has shown experimentally that in cats enemata will not only find their way into the caecum, but when injected in large quantities will travel through the ileo-caecal sphincter into the small intestine; and on one occasion he observed that the enema injected entered the stomach, for the animal actually vomited a portion of it. He found, however, that the ileo-caecal sphincter remained competent when small enemata were employed, and that to pass the caecum an enema had to be injected under considerable pressure.

Gruttyner's² observations, published in 1894, seemed to prove that a salt solution containing powdered charcoal when injected into the rectum was carried up the whole