those of duodenal obstruction. The fact of this obstruction being so high up was probably a factor in the excellent recovery made, as there was little chance of any septic absorption occurring.

2. *The Character of the Obstruction*.—This was also unusual, as there was no volvulus or twist, band or adhesion, but merely a flattened piece of intestine, which was not inflamed or kinked.

3. *The Cause of the Obstruction*.—As to this we can give no opinion, and it would be interesting to know from gynaecologists whether the uterus could be a factor in producing the obstruction.

TREATMENT OF APPENDICITIS IN CHILDREN.

BY
W. A. REES, M.D., F.R.C.S.,
SWANAGE.

FROM time to time one sees letters in your columns on appendicitis, and the various opinions expressed show how divided the profession is as to the line of treatment in acute cases—I mean especially as to the time to operate and how much should be done. I wish it were possible to get an expression of opinion from general practitioners on the question; the surgeons are practically all agreed that operation at once is necessary as soon as the diagnosis is certain, and the appendix must be removed if possible.

With regard to adults this may be the correct course, but in children (under 7 years of age, for example) I feel most strongly this is wrong, and have lately come across two cases that confirm my opinion—namely, that the less done in abscess cases the better. Children, especially of the better class, with excessive sensibility of the nervous centres, will not stand a long abdominal operation; even swabbing out an appendicular abscess is harmful, and removing a difficult appendix will be sufficient to turn the scale from life to death in many cases at this early age. Opening and simply draining an abscess cavity can often be done in ten minutes, while if a difficult appendectomy is done at the same time the operation is often prolonged to fifty minutes or so, with, I am sure, in the majority of cases, a fatal result. Surgeons may say that the case ought not to have been left to form an abscess, that it ought to have been operated on in the first twenty-four hours, but the fact is the majority of cases are not seen till after twenty-four hours have elapsed since the initial symptoms, and then it is best to wait till an abscess forms and simply drain. We hear a great deal about the necessity of removing the appendix in abscess cases, for fear of getting a recurrence, such recurrence being estimated at about 10 per cent.; but what is the danger of recurrence when compared with the danger of an immediately fatal result following the longer operation? Simple drainage of the abscess cavity is all that is required to relieve the little patient, and the appendix, in the great majority of cases destroyed by the inflammatory process, never gives any further trouble. This, I am sure, would be found to be the experience of the vast majority of general practitioners, who would be in the best position to know the after-history of their cases over a long course of years.

I think we are all agreed as to the treatment of these cases by starvation, avoidance of purgatives, and keeping the patient absolutely at rest in the recumbent position, using the rectal tube or glycerine suppository to help the expulsion of flatus, but in most cases avoiding enemata. Personally I generally allow small doses of laudanum to be given when the pain is bad, but not in big enough doses to mask symptoms. One correspondent who wrote a short time ago stated that in children appendicitis generally subsided with simple medical means; but my experience is that, given the same degree of acuteness of onset, in a child the case is more likely to go on to form an abscess than in the adult.

I believe Mr. Moynihan is quite right in his statement that in all these cases in which the appendix perforates and abscess results in children there will be found to be a history of a purgative having been given. To illustrate my point as to the treatment of these cases I will give notes of the last case seen.

A boy of 4½ years complained of pains in the stomach, but got about and took his food; in the evening he was given a purgative; he had rather a restless night, and the next day the pains were worse, and he was sick, but was still able to be up for a few hours. Later in the day he returned to bed, and was seen for the first time the same evening. He was then crying with pain, the temperature was 101° F., and the pulse 130; the abdomen was distended and tender everywhere, especially on the right side, and there was some rigidity of the right rectus muscle. He was put on the regimen stated above. He had a restless night, dropping off to sleep, but waking up with pains every half-hour or so. Next morning (third day of the attack) the temperature had come down to 99° F., and the pulse to 100, and he had had no more sickness; the abdomen was still distended, but he was able to pass some flatus and he micturated naturally. On the fourth day the pulse was still 100, and the temperature varied between 98.0° and 99°, tenderness was now present only in right iliac region, extending across to the left side of the middle line. On the fifth day there was no change; on the sixth day there was some dullness in the right iliac region and rigidity there was more marked; the temperature kept very near the normal. On the seventh day the temperature in the morning was still normal, but a definite lump was to be felt in the right iliac region, the size of half a cricket ball, very tender and dull to percussion.

Operation was decided on. The lump was cut down on, and an abscess opened directly under the abdominal wall, and in contact with it; it was well shut off; it contained thick, stinking pus. The abscess cavity was swabbed out and the appendix searched for, and after some difficulty found to the outer side behind the caecum; it was freed from adhesions, ligatured and cut off, and, with further difficulty, the peritoneum sutured over the stump. A large drainage tube was inserted into the cavity and some gauze plugs; afterwards a stitch or two was passed through the abdominal parietes. Before the operation the pulse was 103, and the temperature 100° F. After the operation, which took fifty minutes, the pulse was 130 to the minute, and he was very restless. Six hours later the pulse became very feeble, and in spite of transfusion, strychnine, brandy, infundibular extract, etc., it went from bad to worse, and the patient died three hours later, that is, nine hours after the operation, bringing up "coffee ground" vomit at the last.

I say that this result is alarmingly frequent, and I feel sure might be avoided in many cases if simple drainage of the abscess was alone employed, thus shortening the operation to the least possible time, and doing away with all shock. The practitioner, in charge of a case like this, can manage to get his wishes carried out in the matter by advising the parent beforehand to give his consent to the operation being performed on condition that the abscess is only opened and drained, and that nothing further in the way of an appendectomy shall be done.

PYOCYANEUS INFECTION IN DOGS AND ITS SIMILARITY TO RABIES.

BY
MAJOR W. F. HARVEY, I.M.S.

AND
CAPTAINS R. MARKHAM CARTER, I.M.S., and
HUGH W. ACTON, I.M.S.

SEVERAL variations from typical rabies have been described both in animals and in man. These have received such names as "chronic rabies," "abortive rabies," and so on. The question of the possible spontaneous cure of rabies has also received attention. Some authors in discussing these conditions have suggested the possibility of incorrect diagnosis and the idea of a bacterial causation. We do not directly deal with any one of the conditions mentioned above, but our own experience leads us to believe that the bacterial causation hypothesis is worthy of attention. In this paper we consider that we make out something of a case for the existence of a *B. pyocyaneus* infection occurring naturally in dogs, and that such infection may, both as regards symptoms produced and tests applied, lead to confusion with rabies. Of course, we are aware that *B. pyocyaneus* is a very ubiquitous organism, and we must therefore leave to our readers the judgement as to whether contamination has or has not been excluded in the case which we present to them. The diagnosis of rabies by animal experiment is often the only test at our disposal, and may be summed up as depending on the subdural inoculation in a rabbit of an emulsion of the brain of the suspected animal with subsequent onset of paralysis and death within a given period. Only exceptionally do