often set down as gastro-enteritis or English dysentery, sometimes as typhoid or paratyphoid; in all these cases the characteristic signs of colitis soon develop.

When it commences with profuse melaena there is usually a *s* mucus in the stools, pointing to acute colitis.

Greater difficulty in diagnosis arises when the disease comes on gradually with headache, diarrhoea, and pyrexia simulating typhoid fever; but in colitis the headache is less severe and persistent than in typhoid; the pyrexia does not increase in the same step-like manner, the tongue does not become dry, the abdominal detension is limited to the colonic area, the stools are different in character, the spleen is not enlarged, there is no cutaneous eruptions, and the breath has a characteristic odour. Melaena may occur in both diseases, but in colitis melaena may occur much earlier than the tenth day, but not in typhoid. Vidal's test may also assist the diagnosis.

Of all the distinguishing points, there is none, I think, so important as that in colitis there is often acute abdominal pain, which is unknown in typhoid, and there is leucocytosis.

Tuberculous abdominal disease, like colitis, leads to pyrexia, diarrhoea, and melaena, and if there chance to be the physical signs of consolidation of lung, as arose from an infarction in Case iv, the resemblance may be increased. But tuberculosis so acute as to simulate acute colitis will not fail to yield some more distinctive evidences of itself than those common to it and acute colitis.

Typhlitis and Appendicitis.—Typhlitis is colitis limited to the caecum, and it and appendicitis are distinguishable from acute colitis by the persistent limitation of the local manifestations to the right iliac region. Appendicitis is sometimes met with in association with colitis.

Treatment.

Treatment should be directed to lessening the amount of toxic substances in the colon, which may be readily absorbed by its ulcerated mucous membrane. Innumerable substances have been employed as intestinal antiseptics; probably but a small proportion of any of them, when given by the mouth, can exercise any *direct* effect so far down the intestine as the colon, but they may, nevertheless, be beneficial by their antiseptic effect on the contents of the small intestine before they pass into the colon. Of all the antiseptics none is so useful in acute colitis as mercury in some form—as blue pill, or grey powder, or calomel, combined, if it produce diarrhoea, with opium. Where the colon has been opened by operation the antiseptic powers of the mercury are very readily observable. It is surprising for how long—weeks or months—mercury may be taken in small doses in colitis without producing “mercurialism.” Possibly mercury has a beneficial effect in colitis in other ways than by its antiseptic power, and certainly appears to control the disease to some extent. Intestinal antiseptics may be assisted by antiseptic enemata, peroxide of hydrogen, or chlorinated liquors, or sanitas, added to the enema. But on no account must an enema be introduced with any force, or if it produce much pain. Weak solutions of nitrate of silver are useful in some cases.

Diarrhoea may be checked by enemata with or without opium, or by bismuth salicylate, etc., given by mouth. As a rule, even though several liquid motions are passed daily, there is a tendency to retention of faeces in the bowel, probably owing to an atonic condition of the colon; and this requires occasional enemata. Purgatives, even simple ones such as castor oil or salines, may greatly aggravate the symptoms. But, after the acute stage, gentle laxatives, such as part of a sulphur lozenge, which is also a good antiseptic, are allowable.

Melaena may become so severe as to be a grave danger; enemata of adrenalin control this best, but in one case an opening of the caecum was made, and stopped the melaena after all other measures failed.

Hiccough.—Of the numerous drugs and modes of treatment tried, opium is the only one which has any effect at all, enabling the patient to get some sleep, but even it has little effect on the hiccough.

The Nutrition of the patient must be carefully attended to, as the illness tends to be long and exhausting. Liquid foods seem best, and a mixed diet is advisable. The tendency to anaemia must be anticipated, and a little fruit or lime juice is useful. Alcohol, ether, gumbul, and

other diffusible stimulants may be required. In one case in which the inflammation was intense and phlegmonous I gave large doses of perchloride of iron with seeming benefit.

Future investigations may provide effective treatment by “vaccines,” but cases of colitis recorded in which this has been tried are not yet sufficiently numerous to give definite conclusions.

Operative Measures.

Colotomy or caecostomy have been performed, sometimes for the purpose of promoting recovery by diverting the passage of faeces from the part affected, sometimes in order to lessen dangerous haemorrhage, and in one case under my own observation it had to be done to avert the dangers of acute obstruction. Colotomy has been thought to cut short the disease, and very possibly it may do so sometimes, but this cannot be assured, and in one case acute colitis continued for months after performance of caecostomy; in another a bad relapse occurred while there was still an opening in the caecum. When ordinary measures fail in arresting melaena, opening the colon may be efficacious. In one case the patient's life was in extreme danger from haemorrhage, which greatly lessened after opening the caecum.

REFERENCES.

- ¹ *Muco-membranous Enterocolitis*, p. 31. ² *Path. Soc. Trans.*, 1892, p. 72.
³ *Ibid.*, vol. xlvii, p. 109. ⁴ *Ibid.*, 1889, p. 109.

CASE OF TUBERCULOUS MENINGITIS IN BOY TREATED WITH TUBERCULIN: RECOVERY: RECURRENCE AND DEATH.

By ALEXANDER DON, M.A., M.B., C.M., F.R.C.S. EDIN.,
SURGEON TO THE ROYAL INFIRMARY, DUNDEE.

I MERELY record the following case as I am not aware that any similar case has been published, and in such a hopeless disease as this one is glad of any line of treatment offering any improvement in the prognosis.

I have put down the notes of this case as they were entered in my notebook during my visits. They are not very complete, as I did not feel very confident that any benefit would result from tuberculin treatment.

J. M., aged 8½ years. No tuberculosis in family. Suffered at Christmas from sore throat, which was probably diphtherial, as a younger sister was at the same time suffering from diphtheria. The throat symptoms cleared up after an injection of 2,000 units of antitoxin. A week after the injection he began to complain, and was feeling so ill that during the first week of the present year he voluntarily took to bed, complaining of feeling tired. The pulse was then about 120, and occasionally missed a beat, and I attributed his feeble condition to his late throat trouble. No cardiac lesion could be made out and there was no temperature. He did not at first complain of headache, and even when he first vomited I thought he had just upset his stomach as the Christmas and New Year festivities were delayed by the diphtheria in the family. Head symptoms, however, gradually developed; persistent vomiting; fever up to 101° at night, headache, fast pulse, and aversion to light; the abdomen was retracted. He gradually got worse, though the temperature and pulse seemed to improve, and by January 20th the headaches were confined to the frontal and temporal regions—mostly frontal. There was occasionally paresis of left side, including face and leg, but more especially of arm, which at times became completely paralysed. The pulse-rate was now 48, weak and irregular; temperature in the mouth 97.9°. The headache was paroxysmal in character—bad yesterday, January 19th, less severe to-day. Appetite good.

January 21st. Left side still paretic, but arm now completely paralysed; sensation in arm apparently unaffected, but tested only by touch. Later in the day I saw him, in consultation with a colleague specially skilled in children's diseases, and he agreed that the disease was probably tuberculous meningitis, and gave the parents a bad prognosis. With his concurrence, I resolved to try tuberculin, and gave 100 mg. of Messrs. Meisters and Lucius's T.R. The pulse was now 60, irregular; and temperature in the mouth 96°.

January 22nd. Very bad headache during the night. Pulse 58, temperature 97°. Leg still moved voluntarily; complained of pain in left side over the lower ribs.

January 23rd. Slightly less headache; pulse 68, regular. Gave for headache a powder containing sod. salicyl. gr. ii, phenacetin and caffeine aa gr. j.

January 24th. Had taken two of the powders, and headache was a little better. Had slept for three hours.

January 28th. Has improved during the last four days.

Pulse 63, regular. Less headache, and is doing without the powders. Leg, arm, and side in same condition, but left leg very painful. Ordered syrup of senna as an aperient, the bowels not having acted since 22nd inst.

February 1st. Improvement continues. Still slight frontal headache. Is very hungry, and takes light nourishment greedily. Pulse 84, regular; temperature normal.

February 2nd. Has had a bad night; pulse 60, regular, intermittent. "His eye aches," he says, and he is constantly whining with pain. Has had two of the headache powders. Temperature not raised. Has been very sick and vomiting during the night.

February 3rd. Headache still very severe, and complains of want of breath at times. Pulse very irregular.

February 4th. Asleep and much quieter. Some numbness in right hand—"can't feel things properly," he says, and has dropped things unconsciously.

February 5th. Pulse 85, regular; temperature 98.8°. Feels better, but still has headache, more acute on left than right side. Injected 1000 mg. T.R.

February 6th. Pulse 70; temperature 98.8°. Has had a fair night, but is restless, and complains of his head at times.

February 7th. Not so well; more headache. Pulse 65; temperature, 98.2°.

February 8th. Pulse 50, regular; temperature 98°. Has had a very bad night. Headache severe, and constant vomiting. Has taken no food by mouth.

February 9th. Pulse 60, regular; temperature normal. Very wakeful; no vomiting, but no appetite. Pain in right ear and in back; headache much less severe.

February 10th. Pain all along the back from neck to sacrum; no retraction.

February 11th. Pulse 58; temperature subnormal; has had a good night. In early morning became very excited, and could not talk properly. Is at times to-day quite delirious, but there is no retraction of the head.

February 13th. Improved considerably yesterday and to-day. Pulse 84; temperature normal. There is difficulty in passing urine, especially at the start. Has had a good night.

February 15th. Still improving. Pulse 72, regular. No complaint of any kind except left arm paralysis, which is still complete; sensation to touch still perfect.

February 18th. Pulse 70, regular; temperature normal; not quite so well as before; was very restless during the night, and perspired profusely.

February 20th. A little frontal headache at roots of hair; can flex elbow jerkily and raise his shoulder. Pulse 90, regular; temperature normal; appetite not so good as yesterday.

February 22nd. Improvement still gradual, but perceptible.

February 27th. Left arm is flexed more readily and raised at the shoulder; cannot be extended; leg also improving; face seems quite better; examination of leg for reflexes painful, but knee-jerk is present on both sides, though exaggerated on left side. Patella reflex also exaggerated, and there is well-marked and painful left ankle clonus. Cremasteric reflex absent on left side. No headache now, nor other complaint; is playing with toys, and anxious to get up.

A small dose was given on both occasions, but still I think the dose was too large, as the patient's state was distinctly worse during the three days following each injection, and this was so marked on the first occasion that it made the parents very unwilling to consent to the second one.

Probably the disease may break out again, but I should now have less hesitation and more hope in proposing injections of tuberculin in tuberculous meningitis in this or any other future case. I am aware that an error in diagnosis is quite possible and that the paralysis may be called post-diphtheritic, though I have never seen so extensive a paralysis following diphtheria.

There is a history, too, of his head having been bumped against a wall some weeks previously, but though he says this pained him at the time there was no continuous pain up to the beginning of the present illness, and he has recalled the bumping incident only since his recovery.

Flexion of fingers is now slight, but there is at times a little indication of the paralysis on the left side of the face, for example, when he smiles. At the time of writing, March 4th, there is no complaint of pain anywhere except when the reflexes are being tested.

This improvement continued for the next ten days, and he was sitting up and improving in every way. He was quite free from pain on March 14th, but on March 15th I was again called, and here my notes are continued.

March 15th. During the night he complained of headache on top of head and then over the occiput which finally came to the front. He cried very much, "blubbered," his mother says, and is still hysterical. He began to vomit at 6 o'clock and this continued till 9.30. It seemed spontaneous at first, not as if he were sick. He had the old feeling of "punching" in his stomach and it came away at once. This is his birthday, and he was very excited over his presents. There is no error of

diet that I can find out, except that he had a great thirst for cocoa. I ordered milk diet. Temperature, 98°. Pulse, 100, regular. I tested the reflexes a few days ago, the ankle-clonus was less marked and less painful. Left patella clonus present; other reflexes as before. This was a decided improvement in left arm though only the flexors respond voluntarily as yet. Slept a little this morning from 9 o'clock to about 11.

March 16th. Had a good night, slept a few hours, still complains of slight frontal headache. Had a rigor this morning when mother was washing him. Pulse to-day 89 regular. Temperature normal. No vomiting nor sickness; tongue dirty.

March 19th. Has been complaining much more of his head these last three days, and to-day it is particularly bad. He had a fairly good night, did not awake, but says his head has ached—more in front than at back since afternoon. Pulse 90 regular, good volume. Temperature, 98.8°. Has been perhaps too free with playing and reading. He asked for a T.R. injection which I gave—having brought it with me for that purpose.

March 20th. Pulse 88, slightly irregular, not missing but slowing over some of the beats. Slept well all night. Not much headache and appetite much better. Temperature, 97.9°.

March 22nd. Pulse 83 per minute; temperature normal. He had headaches occasionally, and pain in eye but not steady. Complained of pain in right wrist. No more spint nor interference with sensation or movement.

March 23rd. Pulse 108-84, fairly regular. Still complaining of headache (intermittent); was groaning at night while asleep. Temperature normal.

March 30th. Still improving. Has had a little headache, and pain in back opposite lower dorsal; also difficulty in breathing, and heart at times, his mother says, was irregular. In the morning he recovered and is to-day much better and lively. He had senna and is taking his food well.

April 2nd. Gave another 1000 mg. T.R. solution. He has to-day no temperature, and other symptoms are much the same. Headache is fairly constant. There seems to be a sort of firm contraction of biceps and flexors of the fingers, as if there were some cerebral irritation, and hand and arm can be extended with difficulty and tend to close soon but gradually.

April 3rd. I saw him late in afternoon. Has had intense headache since midnight and is very depressed. Pulse 90°. Temperature normal. About every half minute there is a clonic spasm in the left leg lasting about three seconds. It is twitched up at knee and gradually subsides again on to the bed.

About 8 p.m. his father telephoned me to say that patient was much worse—still quite unconscious, but very low, with heart intermittent and sometimes almost inaudible. I advised half a teaspoonful of brandy in warm milk and water.

April 4th. Is very low to-day, pulse irregular in rate, but not missing—about 80 to 100 beats per minute; temperature normal. The clonic spasm of the left leg is not so bad, but the right leg is affected. He cannot pull it up, and when it is put up he cannot push it down. It inclines to clonic movement too. The whole of the symptoms seem to point to intracranial fluid tension, and the question of lumbar puncture has been considered and put off, as probably there would be only temporary benefit.

April 5th. Is feeling much better to-day and taking a little milk. Pulse regular—87 per minute; temperature normal; still a little headache. Right leg has improved, and so has right arm. Left side is still inclined to extreme flexion, but can be straightened without pain if done slowly.

April 6th. Is quite free of headache and extremely lively to-day. Abdominal and cremasteric reflexes are almost absent on right sides and quite gone on the left—clonus, patellar, and ankle, well marked on left. Patellar clonus elicited for short time once on right, but no ankle clonus. Patella reflex exaggerated on left—normal on right. Not so acute flexion of arm to-day; legs lie quite straight; is very constipated. This last injection has produced by a long way the most acute symptoms of cerebral tension, but there has been no loss of intelligence unless on 5th, when he was unwilling to be roused. The effects of the tension were well shown in the affection extending to the right leg. During the last fortnight he has wasted considerably, and I am a little anxious about his present condition. There is evidently a lull in the activity of the disease, but I am not so sanguine now that he will recover the use of his left arm and leg. As I have not taken the opsonic index it may be that this last injection was given before the positive phase was quite established, and I have found this a drawback to the T.R. treatment in other tuberculous lesions.

April 9th. Temperature and pulse normal. He is lying quiet on his side with legs and arms extended. Patellar clonus is well developed on the right side now, and there are occasionally very severe cramp-like spasms. He cannot raise his head or turn himself, but he complains of no pain, unless he is moved or touched. Right arm is now flexed at elbow, but he can move the fingers; faeces and urine pass unconsciously; complains a little of headache, but not much, nor so much cramp in limbs to-day as yesterday and the day before when he complained much of these pains. There is patellar clonus on right side well marked and freely elicited, but not so long as on the left side. Pulse 105, regular, but his mother says it is irregular at times, and that he is short of breath. He eats and sleeps well and feels quite happy and comfortable.

April 10th. Feels fairly easy to-day, and moves his hands and legs, but not voluntarily. He draws up both legs together, not one at a time, and the same with his arms. He is taking his food very well, but still passing everything into bed. Is quite sensible and intelligent.

April 19th. There has not been much to report since my last note of the 10th. The disease has progressed in its usual way. Consciousness was completely lost two days ago. Previous to that there was complete paralysis of both legs and arms. Last night he was particularly bad, and although he had a little morphine he moaned for hours on end. Cheyne-Stokes breathing was noticed in the morning and he died quietly in the afternoon.

MEMORANDA: MEDICAL, SURGICAL, OBSTETRICAL.

AORTIC PRESSURE IN POST-PARTUM HAEMORRHAGE.

THE patient in the following case after her first confinement had a sharp haemorrhage. Her second labour took place on March 15th early in the morning. The pains were very weak and short.

When the head had been an hour on the perineum without making any progress, I gave chloroform, applied forceps, and delivered easily. The body followed shortly after. There was very little haemorrhage before the third stage was completed, but the uterus remained flabby and did not contract for about twenty minutes after the second stage. I held it firmly all the time.

An enormous gush of blood came away with the placenta, and was followed by a very copious flow. The handy woman who was assisting, and who is accustomed to attend labour cases among the working classes, fainted when she saw such an amount of blood, and I was left to my own resources, as there was no one else in the house.

I turned the patient on her back and pressed on the abdominal aorta, which at once controlled the haemorrhage. In about half an hour the uterus began to contract, and in one hour it was firm and hard. I gave her two or three grain tabloids of ergot when the placenta, which came away entire, was born.

REMARKS.—I recognize the efficiency in *post-partum* haemorrhage of this method, for which I am indebted to the recent articles in the *BRITISH MEDICAL JOURNAL*. There is no mention of it in Galabin (1893) or in Williams (1903). I do not think I could have saved the woman by any other means under the circumstances. Her puerperium was satisfactory, and she is now well but somewhat anaemic.

Belfast.

M. HENRY, M.B., B.Ch., B.H.O.

MUSCULAR SPASM UNDER ANAESTHESIA.

I HAVE read with much interest Dr. Campbell Stark's case of spasm under chloroform.

On April 26th I gave ether to a man, aged 50, suffering from epithelioma of the scrotum, and, after a violent struggling stage, the corneal reflex disappeared. But he was still rigid, and when an attempt was made to put him in the lithotomy position his legs resisted bending, and remained fully extended, but were thrown into violent jactatory convulsive movements, so violent that it was feared he might tear down the rods by which he was suspended. As he showed no signs of relaxation the lithotomy position was abandoned, and he was operated on in the supine position. He had still some sensation left, and showed it by clonic movements when stimulated, but they soon disappeared when he was fully under.

Apart from the difficulties mentioned, he was not an easy case to anaesthetize properly, as one eye had been removed and an iridectomy had been done in the remaining eye. The operation lasted two hours, and towards the close, as his breathing did not seem very good, I gave him a short rest from the anaesthetic, but he soon showed that he was beginning to come round by the return of the jactatory movements in the legs. When he was coming round after the completion of the operation he again had the jactatory movements.

I have seen the same kind of clonic movements, in a patient who was being slung up in the lithotomy position for operation on anal ulcer, during the administration of ether.

I have also given ether to a patient who began to have

clonic movements of the arms and legs and the body generally before the corneal reflex had disappeared.

In several cases after an anaesthetic I have elicited ankle clonus.

The cases in which I have noted these jactatory movements have been alcoholics who have had a good deal of struggling in the initial stages, and in whom the inhibitory powers of the upper motor neurones, weakened by the alcoholic habit, have been cut off, while the lower motor neurones still retain their irritability, the spastic and clonic condition being analogous to that seen in disseminated sclerosis.

JOHN M. MACPHAIL, M.B., Ch.B. Edin.,
House Physician, Cardiff Infirmary.

ASTHMA CAUSED BY IMPACTED TOOTH.

THE following facts cannot, I think, fail to be of interest:

The maid of one of my patients went, in January, 1906, to have some teeth extracted. She informed me that she took the gas very badly, choked a good deal, and was advised never to take it again.

Directly after this visit she began to "wheeze," and, in short, to suffer from the canonical symptoms of asthma, which were undoubtedly relieved by a mixture of potassium iodide and tincture of belladonna.

The general conditions, however, persisted in a greater or less degree until a few days ago, when, after a fit of coughing, the maid expectorated a fairly large portion of a tooth, and with it the asthma, for she has been quite well since.

One is sorry to have to add one more to the already too long list of the causes of asthma.

London, W.

A. J. RICE OXLEY, M.D.

DESQUAMATION AFTER SCARLET FEVER.

I HAD a girl aged 5 brought to me a fortnight ago, with a temperature of 99.4° F., no rash, throat inflamed, and a typical "strawberry" tongue. I advised perfect isolation, and the patient was taken home, put in a hot bath, and to bed, on ordinary light milk diet; the room was stripped and every precaution taken. The patient has gone on favourably, no discharges, no rash, and up to now, eighteen days after the commencement, there is no sign of desquamation. I am convinced the case has been one of scarlet fever of an abortive character, but owing to the absence of hyperaemia of the skin there will be no peeling of the epidermis. I look upon the peeling as being caused by congestion between the epidermis and the cutis vera raising the former until nutrition is cut off and the epidermis is thrown off as dead tissue, thus prolonging the convalescent stage. I have not seen the question discussed as to why the skin peels off after an exanthematous disease, and the above appears to me the explanation. We know the blood vessels do not pass through the layers of the epidermis, therefore its attachment will not be considerable.

In the absence of peeling, and more particularly of any discharges at the end of a fortnight, there does not appear to me any reason why further isolation should be kept up. This is a matter of very great economic importance, a whole month of convalescent separation being spared. I often hear of cases of scarlet fever being kept indoors for a week or two, then discharged as free from infection, and up to now I have not known the reason. After twenty years' practice, this is the first case of undoubted scarlet fever I have seen of such short duration and not followed by desquamation. It would be interesting to know the real cause of the skin peeling, and why it is considered so infectious as to necessitate prolonged isolation.

F. G. HAWORTH, M.B., C.M., D.P.H.,
Darwen. M.O.H. Darwen.

THE NORMAL ERUPTION OF THE FIRST MILK TOOTH.

HAVING been impressed by the remarkable variations that normally occur in the date of eruption of this tooth, and thinking that an analysis of the same may prove of interest from the medical and anatomical standpoints, I have been making inquiries as to the exact date of eruption of this tooth through the gum in the case of 200 healthy breast-fed Manchester infants—100 boys and 100 girls—born of healthy parents of the working class, whose dentition may be said to be normal, inasmuch as the teething in these cases has not been accompanied by any