encouraged by some statements in the last of the Erasmus Wilson lectures on Adenoma and Adeno-carcinoma of the Rectum, by Sir Charles Ball.

The third lecture, which dealt with treatment, was published in the *BRITISH MEDICAL JOURNAL* of March 7th, 1903, a little more than a week after the operation I have described was actually done.

In this lecture Sir Charles Ball strongly supports the "abdominal excision." He says this can be completed by bringing the sigmoid to the anus if the sigmoid mesocolon at its greatest length is 6 in. If decidedly less than this, he thinks the operation should be terminated by the formation of an inguinal anus.

His method differs from that I have described in this important particular—namely, that he divides the bowel after tying it above and, if possible, below the growth, from the abdomen, and only then turns to the perineum, which would seem to give greater risk of soiling the peritoneum, though doubtless this can be obviated to a large extent by careful use of gauze wraps and pads.

The fact that so great an authority on rectal disease states that "many cases which have been treated by trans-sacral excision would in his opinion have given a better result by this (abdominal) method" encourages me to hope that the operation I have described may prove a useful one.

REFERENCES.

- ¹ *Rev. de Chir.*, August, 1898. ² Fourth German Edition, 1902. ³ *Deut. med. Woch.*, August 24th, 1899. ⁴ *Soc. de Méd. d'Amiens*, July, 1892.

THREE CASES OF GASTRIC ULCER PERFORATING ACUTELY.

By C. W. SMEETON, M.R.C.S., C. C. SMITH, M.R.C.S.,
AND J. G. E. COLBY, F.R.C.S.

CASES of acute perforation of the stomach may not be common in general practice, still they occur, and when they are twenty miles from a hospital must be dealt with on the spot, in spite of difficulties in obtaining immediate help and of time lost in travelling. The chief object in publishing these notes is to encourage the general practitioner to undertake cases which would otherwise be almost certain to have a fatal issue, and to remember that there is some compensation in his patient not having been moved, and that he is not working in the air of a large hospital.

CASE I.—E. P., a married woman, aged 30, who had often been treated for anaemia and symptoms of gastric ulcer, was suddenly seized on the morning of September 11th, 1899, before breakfast, with vomiting and acute pain in the epigastrium. She was a strong-looking woman in good condition, and when first seen two hours later was in a state of collapse, with a small pulse of 120, temperature 99° F., and repeated vomiting. The liver dullness could be made out, but the respirations were shallow and there was no movement of the abdominal walls. She had been given a pint of arrowroot with brandy. Five hours from the onset the abdomen was tense and the liver dullness gone. The abdomen was opened by a median incision above the umbilicus, when gas and fluid immediately escaped, and the latter kept welling up in large quantities. The stomach was covered with flakes of recent lymph, and there were numerous old adhesions round the perforation, which was on the anterior surface close to the cardiac end and the greater curvature. The opening itself was large enough to admit the end of the thumb, and the edges were rounded and worn as if it had been there some time before the acute symptoms came on. Access was difficult, and the silk cut readily, but closure was ultimately thought to be effected by two rows of Lembert sutures. The remaining fluid was sponged out as well as possible and one gauze drain left in. The patient bore the operation well, but an increasing peritonitis proved fatal after forty-eight hours.

CASE II.—L. S., a general servant, had occasionally during some months been treated for pain in the stomach and vomiting after food. There was never any haematemesis or melaena. On January 24th, 1903, she had supper at 9 p.m., consisting of a poached egg, toast, and tea; at 1 a.m. on January 25th she awoke with acute pain to the left of the epigastrium, and vomited some greenish fluid. When first seen at 3.30 a.m. she was found in great pain, collapsed, with a pulse of 120, and great tenderness in the left hypochondrium. There was no dullness in the flanks, and the liver dullness was normal. She was given a hypodermic injection of morphine and atropine. At 9 a.m. the patient was free of pain, the abdominal movements were not much restricted, the pulse was 120, respirations 32, and the liver dullness could still be made out, but at noon it had gone, the respirations being 40 and the temperature 100° F. The abdominal walls still moved and there was no distension. For unavoidable reasons nothing could be done till 9 p.m., when the abdomen was opened by a median incision, afterwards supplemented by one at right angles to it. A little gas escaped at first, and subsequently

much fluid. There was lymph all along the lesser curvature and much more round the hole, which was the size of a slate pencil, near the cardiac end, and on the anterior surface. Though the actual hole was small—the ulcer could be felt the size of a florin, and so thickened and hard that it could not be infolded. The greater part was therefore removed by an elliptical incision, and then good approximation was obtained by interrupted silk sutures, and complete closure secured. The peritoneum was wiped dry, and the external wound closed without drainage. No food was given by the mouth for 14 days, only boiled water, the patient being fed entirely on nutrient enemata and suppositories. Recovery was absolutely uneventful, and most satisfactory.

CASE III.—E. G., 23, a waiting maid in a country house, who had been anaemic and had complained of ill-defined pain in the body, was suddenly seized, soon after rising on March 27th, 1903, with very severe pain in the epigastric region, but in spite of it went on with her work for an hour or so, till she was compelled to return to bed. She was first seen at 10 a.m., and was then lying on the left side, and complaining of agonizing pain to the left of the epigastrium and under the left shoulder. The pulse was good, the abdomen rigid, and the liver dullness easily made out. Two hours later this had gone, the pulse was rapid and small, and the facial expression quite altered. There was no vomiting, and the patient had had nothing by the mouth save a little milk since supper time the previous night. At 7 p.m. a median incision was made above the umbilicus, and gas and fluid escaped on opening the peritoneum. More fluid, with small curds, welled up from the left hypochondrium, and the perforation was found midway on the anterior surface and near the greater curvature. It would admit a lead pencil, and was surrounded by thin flakes of lymph. Closure with fine silk was easily effected in two rows of Lembert sutures, the abdominal cavity was wiped out, and the external wound closed without drainage. No opiate was used at all. The patient was fed by the rectum for a week, a little hot water only being allowed by the mouth on the third day, with the addition on the fourth of some grape-sugar. With the exception of an attack of influenza on the tenth day, the patient made an excellent recovery and left for her own home five weeks after the operation.

Case I was peculiar in the size of the opening, and though operated on in five hours was most difficult to deal with on account of its position and surroundings, while the large amount of food taken did not help matters. Case II, bad as it was, showed that the abdominal walls may continue to move freely in spite of the active mischief beneath, but the trouble with it lay not in the size of the opening, but in the extent and depth of the induration. Case III presented the symptoms which have been pointed out by Mr. D'Arcy Power as indicating operation—namely, acute localized pain with rigid muscles and a rapidly-increasing pulse-rate. It was very easily dealt with.

THREE CASES TREATED BY THE "X" RAYS.

By F. OSMUND STEDMAN, M.B., B.S. LOND.

Hong Kong.

THE following three cases seem to be sufficiently interesting to be worth recording, both because of the rapidity with which a cure was obtained, and because, in two of them at any rate, sufficient time has elapsed to make it appear probable that the cure is a permanent one.

CASE I.—Ulcer on the right side of the bridge of the nose. The trouble was first noticed two years ago as a small wart-like growth, of which the centre used to come out, leaving a small, excavated ulcer; the whole growth was then about the size of a pea. The case, that of a man of 68 years of age, was first seen by me in January, 1902. There was then a deep, excavated ulcer situate towards the right side of the bridge of the nose, at the level of the inner canthus; the ulcer is three-eighths of an inch in diameter, nearly round in shape, the edges are raised three-sixteenths of an inch above the surrounding skin, the edges are hard, and present the rolled-out appearance typical of a rodent ulcer; the patient complains that a good deal of smarting pain is felt from time to time. Various remedies had been tried to induce the sore to heal before he came under my care, but without any success. The growth has every appearance of being a rodent ulcer. Treatment by exposure to the x rays was commenced the same day, January 11th; in all fourteen exposures were given between this date and February 3rd, on an average about four a week; the duration of each exposure was ten minutes. The focus tube was placed about three inches from the patient, in fact as near as it was possible to keep it without sparks coming off from the tube on to the patient. The face was protected by a sheet of thin lead, such as is used to line tea boxes, a small hole being cut out slightly larger than the diseased part. The focus tube was rather a soft one, giving from three to four inches spark-gap, the coil one capable of giving a twelve-inch spark. The first effect of the treatment was to increase somewhat the area of ulceration, the surrounding thickened edges gradually breaking down. By February 3rd the raised edges had become level with the surrounding skin, and in consequence of the red irritable appearance of the skin round about from burning by the x rays it was not thought prudent to give any more exposures; from this time healing commenced, and within three weeks the ulcer had entirely closed. Now over fourteen months have elapsed,

and there has been no recurrence of any kind; the scar is smooth, level with the surrounding skin, soft and supple, and, except that it is whiter than the rest of the nose, is almost imperceptible.

CASE II. Male aged 50. Growth in the skin over the mastoid bone behind the lobule of the right ear. The first trouble was noticed a year ago, when a small pimple or wart appeared which used to catch the razor in shaving. Now, January, 1902, there is a thickened patch in the skin five-eighths of an inch long by half an inch in breadth. The patch seems to be about one-eighth of an inch thick, is slightly raised above the surrounding skin, and feels semicartilaginous not unlike the base of a hard sore. Down the centre of the patch there is a small scab; on removing this a narrow bleeding surface is left. It is not possible to say whether this condition should be classed as a rodent ulcer or as an epithelioma; it presented an appearance almost exactly similar to a case I saw some years ago, which after being excised several times finally infected the glands of the neck, after a total duration of over six years. Treatment by exposure to the x rays was commenced at once, and in all eleven exposures were given between January 10th and February 10th. The conditions were the same as in the last case, the focus tube being placed as close as possible, and the head and neck protected by a sheet of thin lead. As in Case I the first effect was to produce ulceration of the whole of the thickened patch, there was fairly free suppuration, and the raw surface became level with the skin, while the thickening beneath disappeared. A considerable amount of irritation was also produced in the surrounding skin, and also over the shoulder below the edge of the protecting metal sheet, which had been thought to be sufficiently out of the direct line of the rays to escape injury. The x-ray burn over the shoulder took place through the clothes, consisting of coat, shirt, and singlet. The appearances produced were exactly like what is seen when uncovered parts of the skin are burned by prolonged exposure to the sun; the skin became inflamed and felt sore, and finally desquamated. The further treatment by the x rays was stopped because of the irritation produced, and as soon as this had subsided healing began, and fourteen days later the ulcer had entirely closed, leaving a smooth soft scar scarcely distinguishable from the surrounding skin. Now, fourteen months later, the patient remains well: there has been no recurrence, the skin is smooth and soft, and, except that it is quite white in colour, would not be noticeable.

CASE III.—Male, aged 46. Ulcer on ring finger of left hand. The sore is situate at the base of the finger close to the palm at the junction of the anterior and ulnar surfaces. The history is as follows. Some three years ago he began wearing a diamond ring; the diamond, a single one, was set in an open setting and the lower point projected somewhat below the setting and so came in contact with the skin; the ring being somewhat large used to slip round, and so the point of contact of the point of the diamond was usually in the situation where the sore afterwards formed. The ulcer first appeared two years ago and remained open for two months, and healed up under a dressing of sulphate of zinc lotion. Some time later he began to wear the same ring again, and after doing so for three months an ulcer appeared again and has remained open ever since,—that is for a period of nearly twelve months. At first it was somewhat larger than it is now, but some slight healing took place under treatment, but although various means were used no further healing occurred. Now there is an ulcer about the size of a threepenny piece at the base of the ring finger between the anterior and lateral surface; the edges are slightly thickened, the surface of the sore is nearly level with the skin and covered with red dryish looking granulations. If the sore is allowed to get dry he feels some pricking pain in it, but if it is kept soft with either a wet dressing or some ointment, no pain or other inconvenience is felt. In view of the fact that most kinds of treatment available seemed to have been tried before the patient came under my care I determined to treat the sore by exposure to the x rays. The ulcer was exposed to the rays twelve times between January 2nd and 31st, at somewhat irregular intervals, as he was not always able to attend when required, the rest of the hand being protected as far as possible with lead foil, but, owing to the situation of the ulcer, this was somewhat difficult to accomplish. The exposures were for ten minutes at a time, and the focus tube was placed as near as possible to the hand. At the end of the month the sore had slightly closed in round the edges, but no very marked improvement had occurred: no burning or irritation was produced in the surrounding exposed skin. At this date he was obliged to go away for a time, and so further treatment with the x rays had to be stopped; however from this time healing steadily progressed, so that when he next came to see me, three weeks later, the sore was entirely closed, the scar being soft and smooth and hardly perceptible. At the date of writing, three months since healing took place, the scar remains sound and the disease appears to be entirely cured.

REMARKS.

The first two cases of this series were no doubt rodent ulcers, and cure was obtained by exposure to the x rays, leaving an almost imperceptible scar; and since in each case over a year has elapsed since they healed up, and there has been no sign of recurrence, it seems probable that the cure will be a permanent one. The third case of the series is more difficult to classify; the ulcer was no doubt caused by the irritation of the projecting point of the diamond in the ring, but after the wearing of the ring was discontinued it showed no tendency to heal, and had remained open for twelve months; on the other hand, it did not extend any further, and did not present the excavated appearance or the thickened rolled-out edges characteristic of a rodent ulcer.

DURATION OF MEDITERRANEAN FEVER.

By P. W. BASSETT-SMITH,
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DR. HARTIGAN, of Hong Kong, in the *BRITISH MEDICAL JOURNAL* of November 14th, 1903, quotes a case of 95 days' duration, and states that the question is often asked by the patient "why the fever lasts so long." From experience at the Royal Naval Hospital, Haslar, 3 months is generally the minimum of a case, although sometimes in the Mediterranean the whole disease may be over in 1 to 2 months, but in the majority of all cases relapses are likely to occur for 4, 5, or 6 months; in certain cases the patient again and again comes into hospital with slight attacks of fever and rheumatic pains for years, during which he had been for some time at duty, but rarely feeling quite well, and often only able to do light duty, these cases generally being finally invalidated out of the service with a severe and pronounced cachexia; several I could quote having slight though almost continuous fever for 2 years, with a see-saw temperature which nothing seems to break, also an instance of an officer who after 3 years still has irregular attacks, though continuing at duty, who has not left England during this period, and whose blood reacts with well-marked agglutination in a dilution of 1 in 40 and over.

Thus the indefinite duration is very well demonstrated, and the prognosis as to time must therefore be very guarded. As to the causation of this very prolonged course, we have this positive fact to go on, that for a long period the micrococcus melitensis is present in the blood.

In the experimental research work carried out lately by Staff Surgeon A. E. Shaw, and Surgeon Gilmour, R.N., at Malta, and myself at Haslar, we have been able to isolate the micrococcus melitensis from the peripheral blood in cases actually suffering from the fever; not restricted as was expected to the early stages of the disease, but from my own personal observation found as late as the 58th, 84th, and 142nd day during relapses of the fever.

If therefore the organism can remain more or less latent in the spleen for long periods to be again and again let loose in the general circulation, causing an exacerbation of the fever, from any causes which decreases the "phagocytic" power of the leucocytes, which are, as I have already shown, feebly active and deficient in number in such cases, and as also the bactericidal action of the serum is also slight, then an explanation of the prolonged course of the disease is explicable; and, what is more important, the marked failure of drug treatment. This leads one to believe more and more that the only rational and effective curative agent will be found in the preparation of, and introduction into the body of an anti-germicidal serum which will attack the organism *in vivo*.

It is noticeable that from the point of drug treatment the most satisfactory—which are, however, very uncertain—results have been obtained from preparations of free chlorine (Burney Yeo's mixture) and other disinfectants, as salol, resorcin, and creolin, the latter of which, in Dr. Hartigan's hands, acted once so successfully.

REFERENCE.

¹ *BRITISH MEDICAL JOURNAL*, September 20th, 1902.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

HYOSCINE AS A SPECIFIC IN PARALYSIS AGITANS. THIS disease is generally put down in most textbooks as one that the physician can do little for by way of relief or cure. I wish in this communication to show that the symptoms can be much relieved and life prolonged by the alleviation of same.

One does not come across many cases of Parkinson's disease in general practice, and as I have had under my care for over three years a most typical one I should like to give my experience of that most potent drug hyoscine as an alleviative agent, if not a curative one, in that disease.

The patient, a woman, is now 69 years of age. Five years ago she became aware that her writing—usually a good hand—was getting shaky, and her right hand at times tremulous. She did not pay much attention to it until about a year afterwards, when the other hand began to quiver, and both arms became much fatigued on the least exertion. She