gastric ulcer, one in cancer, whilst in four the abscess commenced outside the stomach, but afterwards perforated its coats. This termination of perigastric abscess is extremely rare, and many seem to have been placed on record only because they are so uncommon. I find the following example in our post-mortem books, but I have been unable to obtain any history of the patient during her life.

CASE 5.—The patient was a female, aged thirty-five, admitted under the care of the late Mr. Maunder. "An incised wound to the right of the umbilicus communicates with a large sinus-like cavity. Beneath the left lobe of the liver, and in front of the stomach, is a quantity of reddish grey, juicy substance, which looks like encephaloid cancer. On a level with the incised wound the abdominal wall is adherent to the omentum, and this firm adhesion encloses the liver, stomach, and upper part of the duodenum in one cavity. The colon is empty and does not communicate with it. The small intestines are normal. A bougie is seen to pass from exteriorly into the stomach at the pyloric extremity, and this fistulous opening admits the introduction of a finger, so that the contents of the stomach must have escaped out of the abdominal walls. The pyloric end is invaded by cancerous masses, its surface being irregular and ulcerated. Close to the pylorus, at the greater curvature, the walls of the stomach are absent, having been completely destroyed by the cancerous ulceration, and it is here that the external opening communicates with the organ. A little to the right of the opening the stomach is contracted by firm fibrous thickening, and only admits two fingers. The glands along the spine are cancerous."

The foregoing is a good illustration of the terrible destruction often wrought by gastric cancer; but, as a rule, the formation of an abscess is not common, the morbid growth tending to invade and consolidate the neighbouring structures, instead of inducing suppuration. Still, you must remember that the formation of pus does occasionally occur, for I lately diagnosed tubercle of the peritoneum chiefly on the ground of the presence of an abscess under the abdominal walls, but post-mortem examination showed I was wrong, and that it was the result of malignant disease.

Perforations are noted as having occurred into most of the neighbouring hollow organs; thus in one instance the stomach, duodenum, and colon communicated with the same abscess, in seven there was an opening into the colon, in one into the small intestine, and in one into the gall-bladder. In eleven there was more than one ulceration in the stomach, and in some instances more than one ulcer opened into the same abscess. The sex was recorded in forty-one cases of perigastric abscess arising from ulcer, and of these twenty-five were females. Dr. Brinton concluded from his inquiries that females were twice as liable as males to gastric ulcer, so that if we can trust to so small a number of cases as I have collected, males are more apt to have epigastric abscess than the weaker sex. The ages are given in thirty-seven cases of perigastric abscess, and I have compared in the following table the percentages at different ages with those given by Dr. Brinton of 226 cases of gastric ulcer.

	Under 20.	20 to 40.	40 to 60.	Above 60.
Percentages of gastric ulcer	9	37	31	23
Percentages of perigastric abscess	19	56	19	6

You will here see the greater proportion of cases of perigastric abscess in the earlier period of life, when the vital powers are strongest, and when there is, therefore, the chief tendency to adhesive inflammation, the greatest number occurring between twenty and forty, and very few presenting themselves after sixty years of age. It seems to point to the same conclusion at which we before arrived—viz., that the main predisposing cause of the disease is the formation of adhesions which, in case of perforation, prevent the escape of the contents of the stomach into the general cavity of the peritoneum.

(To be concluded.)

COLONIAL LEGISLATION FOR THE HABITUAL DRUNKARD.—In his address as chairman at the British and Colonial Temperance Congress, at the Princes Hall, this week, Dr. Norman Kerr stated that in Canada, South Australia, Victoria, and New Zealand, the habitual drunkard could be placed under care and treatment and restraint against his will. In this respect the Colonies were far ahead of the mother country. Colonial legislation was permanent, and not temporary, as at home.

EXCISION OF THE COCCYX.

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THE following two cases which have recently occurred in my practice illustrate the advantages under certain circumstances of excision of the coccyx.

CASE 1.—X. Y——, aged fifty-nine, male, has for the last twelve years suffered from distressing pain in the seat. He has consulted various surgeons both in London and in the provinces, but without obtaining relief, and his various advisers had failed to diagnose any sufficient cause for his symptoms. I was asked to see the case with Dr. Livy, of Bolton, the patient's private medical adviser, who told me that the case was one of ischio-rectal abscess suspected to be associated with some diseased condition of the coccyx. An examination confirmed this opinion, and I determined to cut down upon and investigate the condition of the parts. This I did two days after first seeing the patient. An opening which had been previously made into the abscess, above and just within the right tuber ischii, was freely enlarged, and a sinus leading into the rectum just above the internal sphincter was laid open. A second sinus was now found, which, on exploration with the finger, was ascertained to lead to a necrosed coccyx. An incision was then made immediately over that bone in the middle line, and through it were removed the last three segments. The wounds were thoroughly scraped so as to remove all unhealthy granulation tissue, and they were then plugged with iodoform gauze. Immediately after the operation, the temperature, which had previously ranged as high as 105°, fell to the normal, and never again rose above 100°, at the same time the general health of the patient improved rapidly. The pain from which he had previously suffered disappeared at once, and has not returned, and the wound healed well and rapidly.

CASE 2.—E. R——, aged thirty-seven, male, on consulting me, gave the following account of himself. His occupation is that of a piano dealer and tuner. For the last fifteen years he has been subject to attacks of pain, at first infrequent, at intervals of about a month, and not very severe; latterly these attacks have been as frequent as once or twice weekly, and his pain has been much more severe. The pain is always brought on by the commencement of the act of defecation and is in the region of the anus; when it occurs he has severe tenesmus and a desire to further empty the bowel, the pain meanwhile increasing in intensity, and often detaining him in the closet for two hours at a time. After such an attack more or less pain will remain throughout the day, and even during the whole of the following night. He can suggest no cause for the origin of these symptoms, except that he has always had a tendency to constipation. Some time since, however, he fell and struck the coccyx against a piano, but this appears to have been subsequent to the onset of the disease. He has hitherto found a certain amount of relief from the use of a warm sitz-bath, but this has not been of great efficacy, and all other measures have proved futile. On examination and especially on pressure over the posterior part of the rectum, pain is caused exactly similar to that induced by defecation. Finding that the seat of the pain was apparently the coccyx, and discovering that bone bent at a right angle, and having the history of an injury, I excised it by a median incision, without opening the rectum. The parts healed at once, relief from pain was complete, and there has been no return since the time of the operation.

In addition to these two cases in males, I had under my care, about ten years ago, five cases of coccygodynia in females, all produced by injury during parturition, and in all of which I removed the coccyx, with immediate and complete cure of the disease.

The treatment of coccygeal pain falls under three heads—viz.: 1. By means of rest and anodynes. 2. By complete or partial separation of the bone from its muscular connexions. 3. By excision of the bone. As in other cases, our method of treatment must always be guided by the nature of the case. Thus in those where the pain is due to hysteria or to reflected irritation, owing to uterine or ovarian disease, it would obviously be unsurgical to remove the coccyx. There are, however, a large number of other cases, in which surgical interference will probably be required, and which may be

arranged under the following heads: Old fractures and dislocations, in which the bone has become fixed in a faulty position, either that of flexion or of extension; congenital elongation of the coccyx; necrosis, whether traumatic or otherwise; tumours connected with the coccyx; and, finally, a large group of cases of obscure pathology, in some of which there appears to be periostitis of some or all of the segments, in others inflammation of the sacro-coccygeal joint.

In an old fracture or dislocation with displacement, we can hope for no improvement apart from operation, and here also Simpson's operation of separation of the attached muscles cannot be expected to succeed in relieving the patient. Skey[1] attempted to remedy an old dislocation backwards with consequent extreme flexion of the coccyx, by means of traction made by passing a loop of wire over the apex of the bone and connecting this loop with a splint attached to the spine; but the pain produced by this method was so great that it had to be abandoned. It might appear possible in such cases to separate the displaced bone at its abnormal angle, and endeavour thereafter to retain it in position by a plug introduced into the rectum, but the difficulty of preventing a return of the displacement must necessarily be great, if not insuperable. Hence in such cases I should advise excision of the bone.

Further, if congenital elongation be a cause of pain, removal of the part is clearly indicated. So also in cases of necrosis, as in the first of my patients, we are following the ordinary surgical method in removing the sequestrum. Cases of tumour involving the coccyx must be treated on general surgical principles. But it is in cases where there is no obvious lesion that there is the greatest room for diversity of opinion as to the method of treatment to be adopted. Here we would naturally try, before resorting to operation, the effects of rest and of the various anodynes. But if this treatment should fail, as it had done in my cases before they came under my observation, what is to be done? Hilton recommended separation of the fibres of the sphincter ani from the apex of the bone, and thus undoubtedly made possible more perfect rest. Simpson went further and completely divided the muscular connexions of the coccyx by means of subcutaneous section, and he was thus able to cure a considerable number of cases. But he himself admits that in some instances this operation was insufficient, and he then resorted to the procedure, which had long before been advocated by Nott, of removal of the coccyx. In nearly all cases the latter method seems to have effected a cure, and I should therefore be inclined to adopt it at once, instead of running the risk of wasting time by the subcutaneous isolation. The operation of excision of the coccyx is sufficiently simple and without danger: it is more easily performed than the subcutaneous division of muscles; its result is apparently universally good, providing that the diagnosis be correct; and the loss of the bone does not seem in any case to have caused inconvenience. On these grounds, therefore, I would advocate excision in all cases of coccygeal pain where non-operative treatment has failed to give relief. unless the pain be due either to some constitutional condition as hysteria, or to some reflex influence as in uterine and ovarian disease.

Manchester.

SIXTY CASES OF SCIATICA TREATED BY GALVANISM.

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SINCE publishing my paper in THE LANCET of Jan. 19th, 1884, on the Use of Galvanism in Sciatica, I have had sixty cases under treatment, and the results have borne out the hopes I then entertained as to its efficacy. I have therefore thought that the details of these additional cases might be interesting to the profession. I only purpose to give a very short account of each case, embodying the most important points. I gave a description of the mode of applying the current in my former paper.

CASE 1.—Jan. 24th, 1884. A lady, aged fifty, sent to me by Sir James Paget. Had suffered for five weeks. Galvanised eleven times. Was greatly relieved, but not cured. Had suffered from uterine displacement, and had been wearing a pessary up to the time of the commencement of the treatment for sciatica. This lady had a subsequent attack of sciatica, and was again relieved by galvanism after trying many other remedies.

CASE 2.—Jan. 26th, 1884. M. W——, female, aged thirty-five. An in-patient of the hospital. Had been ill for three months. Was galvanised about ten times. Cured.

CASE 3.—Feb. 11th, 1884. W. C——, male, aged thirty-three. An out-patient. Had been ill six months. Galvanised four times. Cured.

CASE 4.—Feb. 13th, 1884. M. M——, female, aged thirty-eight. An in-patient. Had been ill four months. Galvanised four times. Cured.

CASE 5.—Feb. 22nd, 1884. J. L——, male, aged fifty-eight. An in-patient. Had been ill six weeks. Galvanised five times. No improvement. On examination per rectum, a tumour was felt pressing on the side on which there was sciatica. After death necrosis of the tuber ischii was discovered. This was therefore not an ordinary case of sciatica.

CASE 6.—Feb. 28th, 1884. W. B——, male, aged twenty-four. An out-patient. Had been ill for ten weeks. Galvanised four times. Cured.

CASE 7.—May 12th, 1884. A. C——, male, aged twenty-three. An out-patient. Ill eight months. Galvanised four times. Cured.

CASE 8.—July 11th, 1884. L. W——, female, aged forty-two. An out-patient. First attack. Had been ill three weeks. Galvanised eight times. Cured. (Some of the out-patients do not return to report themselves when they are well. If no note has been made of their improvement we are doubtful as to the result. In several cases mentioned in this list I have had to go by the note last made. If to the effect "much improved," I have considered their ceasing to attend as evidence of being cured.)

CASE 9.—July 22nd, 1884. C. S——, male, aged thirty-one. An in-patient. The sciatic nerve was stretched on account of the man being subject to epileptiform convulsions. The operation was followed by sciatica and suppuration along the course of the nerve. Galvanised once. Improved.

CASE 10.—Aug. 11th, 1884. A. P——, male, aged twenty-three. An out-patient. Had been ill four weeks. After the third application of electricity he was much better. It appears by the register of cases that he was galvanised twenty-five times. He was quite well when I discharged him; how long he had been so I cannot say. Many of the patients continue coming twice a week for as long as they can. They say they feel so much better for the galvanising, and they think that it strengthens their nerves.

CASE 11.—Aug. 11th, 1884. C. H——, male, aged forty-five. An out-patient. Ill seven weeks. Second attack. Galvanised six times. Cured.

CASE 12.—Aug. 15th, 1884. E. C——, female, aged forty-one. An out-patient. Ill four months. Galvanised eleven times. Cured. The galvanising brought on menstruation.

CASE 13.—Sept. 2nd, 1884. Miss E. S——, aged thirty-one. Had had sciatica for two months, which necessitated deferring her wedding. Galvanised four times. Cured.

CASE 14.—Oct. 20th, 1884. J. O——, male, aged twenty-six. An out-patient. Ill five months. Had been in bed six weeks. Only attended once. Returned some few months afterwards (with another patient), and said that the first application of electricity had cured him.

CASE 15.—Oct. 27th, 1884. J. G——, male, aged twenty-nine. An out-patient. First attack. Had been ill five months. Only attended once. Came from Richmond.

CASE 16.—Nov. 16th, 1884. G. B——, a gentleman sent to me by Mr. Alfred Cooper, aged about fifty. Had been in pain for two weeks. Galvanised once. Cured. On the 15th of the following month he had a return of pain. Galvanised twice; cured.

CASE 17.—Nov. 18th, 1884. J. P——, a gentleman sent to me by Mr. Butlin, aged about forty-two. Had had sciatica for five months. Galvanised eight times. Not cured. (See subsequent note.)

CASE 18.—Nov. 21st, 1884. A. J——, male, aged forty-three. An out-patient. Had been ill for twelve months. Galvanised seven times. Cured.

CASE 19.—Nov. 27th, 1884. E. D——, male, aged forty-five. An out-patient. Had been ill two months. Second attack. Only attended once.

CASE 20.—Nov. 27th, 1884. T. N——, male, aged twenty-nine. An out-patient. Had been ill five weeks. First attack. Galvanised eight times. Much improved.

CASE 21.—Nov. 29th, 1884. C. S——, a gentleman, aged

[1] THE LANCET, 1861, vol. ii., p. 326.