VIII.—FRANCIS IMLACH, M.D.

DR. IMLACH, referring to the question which had been raised as to nephrectomy or nephrotomy in pyonephrosis and hydronephrosis, pointed out that Mr. Morris's success in the minor operation in cases of pyonephrosis told rather against his argument in favour of nephrectomy in the first instance. His own experience in four cases was in the same direction. No doubt where the kidney was riddled with pus it was best to remove it, but this was not a common condition. In hydronephrosis, where the kidney grew as large as any ovarian tumour, it was customary to remove the organ. It was an easy and safe operation, but emptying and drainage might be sufficient. A large proportion of the renal tissue remained healthy though it was spread out, and such a kidney was by itself an efficient excretory organ.

He had experience of a case in which the other kidney was no bigger than a bean. Drainage might leave a useful kidney; and he thought the disastrous effects of the ancient practice of drainage of ovarian tumours had no analogous lesson.

CASE OF GASTRO-ENTEROSTOMY WITH THE AID OF DECALCIFIED BONE PLATES.

By T. KILNER CLARKE, M.A., F.R.C.S.,

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ONE of the most interesting and, from a practical standpoint, probably the most valuable of the reports made to the Scientific Grants Committee of the British Medical Association is the Report on Intestinal Surgery by Mr. Frederick B. Jessett. It is given at full length in the BRITISH MEDICAL JOURNAL of July 27th, 1889, and consists mainly of the results and experiences Mr. Jessett has gained in investigating the mode of operation suggested by Dr. Senn.

Gastro-enterostomy, by means of approximation plates, is there so lucidly described and illustrated that I would refer the reader to that paper for the full details of the operation. I wish rather, in recording my own case, to dwell on the points where it is possible to go wrong. According to the tables published by Mr. Herbert Page, gastro-enterostomy has been performed thirty-six times with twenty-one recoveries. Of the English cases, three in number, Mr. Barker's and Mr. Page's recovered, and lived some considerable time; Mr. Jessett's died on the tenth day, not from the operation, which was perfectly successful, as the *post-mortem* examination showed, but from kinking of the bowel occurring five days after operation.

The following case is the first, I believe, which has been done by means of the bone plates.

J. C., aged 48, pattern weaver by trade, an anæmic, emaciated, slightly built man, consulted me on September 17th. He stated that his illness began fourteen weeks before with pains in the small of the back, between the shoulder-blades and under the middle of the sternum; that he had vomited all solid food since the beginning of his illness, and had lost much flesh and strength. On examining the abdomen, I found a movable tumour, two inches and a half in the horizontal diameter by one inch and a half in its vertical, reaching as low as the navel, four-fifths of it being on the right of the middle line. Attached to it was the dilated stomach, stretching downwards to the left. This tumour existed in all probability before giving rise to any marked symptoms, as his medical attendant, Dr. Orr, had discovered it in the early part of his illness. Diagnosing the case as one of cancer of the pylorus, I advised an exploratory incision and further operation if the diagnosis proved correct. I operated on September 20th, assisted by Dr. Orr, Mr. Dyson, and Dr. Scougal, who gave the anæsthetic, which was one part chloroform and two parts ether.

Carrying my incision, three inches in length, in the middle line to the level of the lower edge of the navel, I came down at once on the thickened and enlarged pylorus. The next step, and the only difficult part of the proceeding, was to get hold of the jejunum. The way to make certain of this is to follow with the finger the gut from the duodenum downwards until it can be readily pulled out of the abdominal cavity. Pulling the bowel out of the wound I emptied by gentle pressure about four inches of it, and isolated this by means of two ligatures of rubber tubing passed through the mesentery at its attachment to the bowel. The gut was then opened to the extent of an inch, the opening washed clean, bleeding points stopped, and the decalcified bone plate slipped inside and fastened in position by its attached threaded needles. A

portion of the stomach was then pulled out of the abdomen, and the second plate was fixed in position, about one inch and a half from the pylorus and the same distance from the greater curvature. The two plates were now placed in apposition, and the corresponding threads of fine Chinese silk tied. A few Lembert sutures of catgut were introduced round the edges of the plates and the parts were returned into the abdomen. Before closing the abdominal incision, I carefully spread out beneath it a layer of omentum. No toilet of the peritoneum was needed, and cleanliness was the only antiseptic. The wound was dressed with Gamgee tissue, and a thick pad of towel bound firmly over it.

The patient's condition when put back into bed was good. An enema of beef-tea and brandy was given. The subsequent progress of the case was as follows:—

September 21st. Patient's condition very good; very little pain. Pulse 86; temperature 98.4°; is being fed by nutrient enemata.

September 22nd. Removed the thick pad, and began feeding by the mouth with wine, whey, and veal broth. Pulse 84; temperature normal.

September 24th, 10 A.M. Abdominal wound healed, stitches removed. Pulse 84; temperature 98.4°. Passed a good formed motion; taking plenty of fluid food. 3 P.M., attack of dyspnoea. I did not see him till 10 P.M., when I found his temperature 101° and pulse 120, and the heart's action feeble and intermittent. There was dulness of the lower half of the right lung and tubular breathing at the base. I ordered poultices and ten drops of tincture of digitalis, with acetate of ammonia and nitrate of potash, every two hours.

September 27th. Much better; says he "feels a young man again." Sputa offensive; ordered carbolic acid to be sprinkled all over the room.

September 29th. Pulse 72; temperature 98.4°; less sputa; cough troublesome at night. Wound gaping somewhat. Ordered egg and stale teacake.

October 2nd. Doing well. Cough slight and sputa scanty. Has taken during the last twenty-four hours—milk two pints, beef-tea one pint, with Valentin's beef-juice; fish, bread and butter, an egg, and bitter beer.

October 11th. Feels to be gaining strength; complains that solid food causes flatulence and discomfort; no vomiting since the operation, very little sputa or cough.

October 29th. Doing very well, and gaining flesh and strength.

The points to be more especially remembered and those in which it would be most easy to err in doing this operation are: (1) to bring plenty of stomach outside the abdomen, so that the assistant may grasp it easily and without stretching it, behind the plate when the latter is *in situ*; (2) to have some six inches of intestine outside when making the connection; (3) not to make too large incisions into the stomach and intestine; and (4) to be careful to tie the rubber tubing very loosely round the bowel. It is, I think, a needless expenditure of time to tie all the bleeding points. A spouting vessel may be tied; the pressure of the plates will stop the rest.

The plates, kindly sent me by Mr. Jessett, were of the following dimensions—namely, two inches and a half long by one inch wide and one-eighth of an inch thick, having an oval opening in the centre three-fourths of an inch long by half an inch wide. It would be a convenience if Messrs. Maw, Son, and Thompson, of Aldersgate Street, who keep the bone plates, would send them decalcified and fitted with Chinese silk.

ENTERECTOMY FOR ARTIFICIAL ANUS: RECOVERY.

By THOMAS SINCLAIR, M.D., F.R.C.S.ENG.,

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SINCE the publication of a short account of a jejunal enterectomy in the BRITISH MEDICAL JOURNAL of June 2nd, 1888, another opportunity has been afforded me of resecting the intestine for artificial anus, again with a satisfactory result.

Fifteen months before the operation, the patient, a young man, aged 20, states he had a severe illness, and, from his description of it, there can be no doubt that he suffered from strangulated inguinal hernia on the right side. Admitted into another hospital, he declined herniotomy until he had endured a week. The bowel, a portion of the ileum, was found gangrenous at the time of the herniotomy, and his surgical advisers of that time left it

to form an artificial anus in the groin, discharging him from hospital in seven weeks. A distinct spur had formed, and the angle of flexion being fairly acute, it was only by the use of a flat pad in the recumbent position that the contents could be made to traverse the lower bowel. Attempts were made throughout the year by other surgeons to close the opening by strapping, by refreshing the edges, by pad and bandage, by truss pressure, and by the wide rubber tubing method suggested by Banks.

The use of the truss in the recumbent position had the advantage of improving the general health, which had somewhat declined, by diverting the intestinal contents into the distal bowel. The opening, however, showed no disposition to close, even after the most patient trials of the milder means; a couple of fingers could easily be thrust into the two ends of the gut. Resection was then undertaken in the Royal Hospital.

As the success of the operation depends, to some extent, on careful preparation of the patient and on the subsequent alimentation, he was kept in bed for one week before operation, and had four castor-oil purges during this time. The diet was such as to leave little residue on the two days before operation, consisting chiefly of beef-tea. A hypodermic injection of morphine before the chloroform rendered the exhibition of much chloroform unnecessary. A limited parietal incision, obliquely made across the artificial anus, admitted to the abdomen, and six inches of the liberated coil were condemned, owing to the matting, and to the existence of a kink and a stricture caused by the earlier strangulation. Warm boracic acid lotion was the antiseptic employed for cleansing the coil. Simple tubing clamps were used, the bowel being sliced obliquely to its long axis and the mesentery divided close to the intestine. Twenty-five fine Chinese silk sutures were introduced in one row after Lembert's method, care being taken to narrow the base of the inter-mesenteric triangle on each side, as well as to suture the edge of redundant mesentery, and thus afford support to the intestinal seam. The parietal wound was closed entirely as regards the abdomen by silver sutures, but a drain tube was inserted in its more superficial part. The temperature was subfebrile throughout, the highest point reached being 99.6° F. The dressings were not disturbed for eight days, when most of the silver sutures were removed.

For seven days after operation nothing was given by the mouth save fifteen minims liq. opii. sedat., twice daily. Nutrient enemata, composed of four ounces of pancreatised milk with half an ounce each of beef-jelly and brandy, were given four times daily, the brandy being omitted after the second day. The rectum was occasionally washed out, and half a pint of tepid water was injected at intervals when thirst was complained of. A few pre-digested beef-tea suppositories were introduced with the water, after the fourth day, to supplement the nutrient enemata. Milk-whey in tablespoonfuls by the mouth was given on the seventh day, and some lemon-juice diluted; the opium was discontinued. Tea without bread was allowed on the ninth and beef-jelly on the tenth day by the mouth—all rectal feeding being abandoned at this period.

After the fortnight, ordinary diet was ordered. A natural motion from the bowels occurred at this time, and no purgative was given throughout. The patient was shown to the members of the North of Ireland Branch of the British Medical Association in Belfast five weeks after the operation, when he was discharged from hospital, the bowels acting normally, and the wound in the parietes having healed. Since then he has resumed his employment, merely wearing a flannel spica bandage to support the cicatrix for some time longer.

THE SURGICAL TREATMENT OF GENERAL PARALYSIS.

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THE hopelessness of remedies to stay the progress of general paralysis of the insane has led me to consider the advisability of trying surgical interference at an early stage of the disease, and I beg to submit the following case where trephining was performed with the result that the prominent symptoms disappeared. Whether general paralysis is a disease *sui generis* or not, it is certain that the pathological appearances point to irritative (probably inflammatory) processes in the upper layers of the

convolutions in the earlier stages, and to pressure signs from the presence of fluid in the later.

To modify these conditions is the object of the operation, but beyond suggesting that by producing an alteration in the existing state of the morbid process at work a new and reparative nutritive process may be set up, I do not at present offer an explanation. This, however, must be borne in mind that early headache of a tensile character is a very frequent symptom, and that trephining seems to be a more certain way of relieving the pressure than depletion by purgatives or medicines given with the view of lowering vascular tension. How nerve-stretching acts in ataxy is not known, though of its efficacy there is now no doubt. Why should not the same process have favourable results when applied to the brain? The only way of stretching the brain is by giving it more space in which to expand, by allowing it to relieve itself from the increased arterial tension which the sphygmograph has shown to be one of the early conditions in general paralysis. It is easy to see how surely trephining must relieve the later symptoms due directly to fluid pressure such as the paralyses, attacks of stupidity, loss of power of swallowing, talking, etc. To propose trephining in the early stage of a disease seems a formidable remedy, but the operation is nowadays attended with little risk, whilst the steady progress towards death if the disease is left to itself makes it imperative to consider the feasibility of any remedial measure however severe.

Occasionally we read of cases of general paralysis recovering in an unexpected manner; but without denying the correctness of the reported instances, it must be said that they are so few in number, and so obscure in the description of the manner in which the cure was effected, that we must put them out of the category of results most likely to happen. Acting, then, on the principle that the relief of tension and the endeavour to set up a changed nutritive process was to be the guiding one for treatment, and that to be of any value it must be done in an early stage, I communicated with Dr. Ferrier, and asked him to see with me the case of a man upon whom I proposed to operate. We agreed that the patient was rapidly approaching a condition of dementia of the paralytic form, and that the only hope of giving him relief was in the manner I am now indicating. The great difficulty that one has to contend with is in getting the consent of the friends for the operation to be performed, for the signs which have so fatal an import to those conversant with the disease are not especially striking to the uninitiated.

The main features of the case are as follows: W. H., admitted November 14th, 1888, a packer, in an excited, grandiose mental state, affection of speech, exaggerated reflexes, gait very unsteady, and retention of urine. On the certificate of admission, his delusions were described as very "large" in extent, and there was no doubt that when admitted he was in an elevated and happy frame of mind, altogether incompatible with a realisation of his true condition. It was probable that the man was suffering from a bulbar lesion, and that the mischief, which had probably begun there, was extending to the superficial parts of the brain. From time to time, W. H. had convulsive attacks and short periods of loss of sensation, chiefly in the left extremities, and his powers of deglutition and talking became more and more impaired, whilst his mental condition was fast approaching a well established dementia. On July 28th, the patient was trephined on the right side of the skull over the central sulcus, and about two inches outside the longitudinal fissure.

The operation, performed by Mr. Harrison Cripps, assisted by Mr. Bruce Clarke, consisted of making two holes with a trephine, cutting away the intermediate bone so as to make an opening about 1½ inch long by ¾ inch wide, cutting away the dura mater, and letting out a considerable quantity of subarachnoid fluid.

Strict antiseptic precautions were taken, and the after-course of the operation was very satisfactory, for at no time did the temperature exceed 99.5°; and by the tenth day healing was complete, and the patient was able to sit out of bed. With the exception of a little tingling in the fingers of the left hand on August 9th and 15th, there have been no cerebral symptoms since the operation. The present state of the patient is a great improvement upon what it was; in fact he is no longer insane, and I propose to discharge him. We did not expect him to show any marked improvement in the bulbar symptoms, although I think that even here his condition is better, and he certainly swallows and speaks more easily and distinctly; but in his mental tone the difference is most marked, for he is no longer optimistic in his ideas, nor