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.

By T. CLAYE SHAW, M.D., F.R.C.P.,

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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

has he had any of the convulsive epileptoid attacks to which, before operation, he was very subject. He reads the paper daily, is free from headache, eats and sleeps well, and is able to hold his urine. I pointed out the case to Dr. Clifford Allbutt on the occasion of his recent visit here, and he agreed that the man could no longer be considered insane.

I consider, then, that the operation has been justified by success, inasmuch as the mental signs of exaltation have disappeared together with the convulsive attacks; and though the prominent bulbar symptoms remain, they have to some extent been benefited, beyond which we expected nothing. My object in reporting this case is that I believe it to be the first that has been done with the distinct object of introducing surgical measures into the early treatment of general paralysis; at any rate, I am not aware of any other reported case, nor have I before heard this mode of treatment suggested.

Little can, of course, be postulated from one operation, but the results of this case have been so satisfactory, that I feel encouraged to go on, and I shall hope to be able to report additional successes from time to time. Much of the success attending this case is due to the very careful manner in which Mr. Cripps conducted the operation, and I was very fortunate in obtaining the valuable opinion of Dr. Ferrier as to the advisability of doing an operation which might or might not be creditable to brain surgery.

SURGICAL MEMORANDA.

AMPUTATION AT THE HIP-JOINT.

IN the JOURNAL of November 9th is described what is called "a new method of operating" for amputation at the hip-joint. The writer, Mr. Myles, of Dublin, states that of the three sources of danger—shock, hæmorrhage, and infection of the wound from its proximity to the anus—the two latter are obviated by the new method. May I be allowed to point out that this method is not a new one? It has been taught in the class of surgery at the Edinburgh University for years past, and I remember in June, 1883, being present in attendance at an operation where amputation at the hip being regarded as likely to prove necessary, the skewer was placed among the instruments. My notes taken in May, 1885, contain a full description of the operation with the use of the skewer, with the comment that it is an operation "preferable to others because of the efficient control of hæmorrhage." The flaps were also described to us as planned to avoid the danger of the wound being infected from the perineal region. The detail of the mode of passing the skewer and of getting the flaps was, however, very slightly different from that in Mr. Myles's operation, but the objects aimed at and means used were essentially similar. J. C. VAUGHAN, M.B., C.M. Edin.

Royal Victoria Hospital, Netley.

IN the JOURNAL for November 9th Mr. Myles described a method of amputation at the hip-joint which he has practised on the dead, but not on the living, body, and in connection with it he suggests the use of a skewer for the prevention of hæmorrhage. Having already successfully employed this mode in a recent case of amputation at the hip-joint for sarcoma extending high up in the thigh, I can vouch for its efficiency, the loss of blood having been extremely slight, the femoral artery having been so thoroughly compressed between the skewer and rubber band that not a single drop of blood escaped from it.

The mode of amputation which I adopted was that of Furneaux Jordan, the skewer being passed from without inwards, between the bone and the soft parts in front of it, through the upper end of the vertical incision with which Mr. F. Jordan's operation commences.

The use of the skewer did not originate with me, but was proposed and employed by the late Professor Spence, of Edinburgh, for some time before his death. The combination of Mr. F. Jordan's procedure with the addition of Professor Spence's skewer is a most admirable one, and really leaves nothing to be desired, for it is simple, easy, bloodless, well adapted for efficient drainage, while the presence of unbroken skin on the inner side of the thigh is a matter of not inconsiderable moment.

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ON THE NON-RETENTION OF URINE IN WOMEN.

IN one of your short articles under the head of "The Week" you allude to the above subject, quoting the treatment adopted by Dr. H. Marion Sims. At the end of the article you say "that Dr. Sims admits that Braxton Hicks has recorded one case of treatment in a young subject by mechanical dilatation with warm water, but in what quantities Dr. Sims could not find out." I do not know from what source Dr. Sims had his information, but he will find in the *Lancet*, July 4th, 1868, in "The Mirror," the report of two cases of simple kind, together with another following cystitis. The quantity retained is given. Remarks are given as follows: "A cause of incontinence of urine is indicated in the following cases, which is not generally recognised. The treatment which Dr. Hicks applied was very successful, and we have no doubt that the record of it will be of great service to practitioners who have patients suffering from this very troublesome condition." Again: "Dr. Hicks remarked that the constant evacuation of urine permitted by some mothers to their children allowed the bladder to become so constantly empty that after a time the muscular power of the sphincter was not sufficient to counteract the contractility of the organ. In recent cases, no doubt, this could be voluntarily overcome by adults; but in old-standing cases, although we might do much by lessening the sensibility of the bladder, yet we might proceed at once to overcome its resistance by mechanical force, so that further treatment would not be required." "Dr. Hicks suggested the applicability of this treatment to both sexes. He thought it possible that in some cases there were congenitally small bladders."

I think that by these quotations it will be granted that so long ago as 1868 I had not only treated cases, but that I was the first to do so, and to lay down the principles of the treatment and its applicability to other conditions. J. BRAXTON HICKS.

George Street, Hanover Square, W.

IN an annotation upon the above subject, in the JOURNAL of November 9th, attention is directed to the value of expanding the contracted bladder by means of forcible gradual dilatation with warm water. I have been accustomed for some years to treat contracted bladders in this way, with varying success, and I believe a very important distinction must be drawn in the method of treatment between the inflammatory and the non-inflammatory types. The liability to rupture upon dilatation is very much greater in the former, and the utmost care and patience is necessary to avoid splitting the rigid, inelastic wall. *Festina lente* is as sound a motto in the dilatation of the bladder of diminished capacity as it is in the dilatation of an old-standing stricture of the urethra. It has not, I believe, been pointed out that in some cases a distinct rise of temperature marks each step in the reaccession of vesical capacity (? absorption markings). Thus, in one case sent me by Dr. Jackson Cummings, of Cork, in which there was at first complete incontinence, no vesical capacity—the bladder feeling like a flattened prostate *per vaginam*—and no sphincter power, each drachm capacity gained by dilatation was marked by a temperature of 100° to 101°, or even higher; in fact, on one or two occasions the treatment had to be suspended until the temperature fell. To control this observation on one or two occasions I merely irrigated the bladder without pressure, and the temperature remained low. E. HURRY FENWICK.

Old Burlington Street.

TWO SUCCESSFUL CASES OF LITRE'S COLOTOMY.

ON February 18th, 1889, with the assistance of Dr. Starling and Mr. Watson, I operated upon Mrs. L., a much-emaciated patient, with extensive deposit and great contraction in her rectum, which extended beyond the line which I could reach with my index finger.

In every detail the method of Mr. Allingham was carried out; the large intestine was quickly found; the skin was stitched to the parietal peritoneum; the bowel was pulled out, and the direction of the axis of the mesentery was apparently found. A double silver suture passing through the mesentery and the skin edge at each side then made the spur, two-thirds of the protrusion being arranged for the upper aperture, one-third for the lower, and the bowel stitched through peritoneal and muscular coats to the skin all round. On the third or fourth day the anterior wall of the bowel was cut away, and, during the next few days, beyond some troublesome protrusion of the mucous membrane and a decided