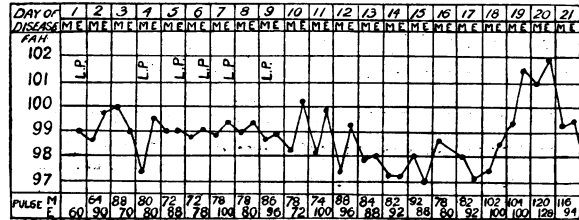


both hands was very weak, but the legs moved normally. No sensory abnormality to pin-prick or light touch could be found. His systolic blood pressure was 140 mm. of mercury. Morphine and hyoscine were given repeatedly for the pain and restlessness.

On the following day he had improved, but he had retention of urine for twenty-two hours; catheterization was not necessary.

From May 26th to 29th lumbar puncture was performed daily. The pressure and the proportion of blood were less on each occasion. On May 30th his reflexes were as before. The reaction of the pupils to light was sluggish, and the left disc appeared to be paler than the right. The next day lumbar puncture produced only a few drops of opalescent fluid. The patient still needed morphine.

Epistaxis occurred on June 1st, after which his blood pressure came down to 115. The reducing substance was by this time absent from the urine. From then until his discharge on July 4th recovery was steady with the exception of a relapse from



L.P.=Lumbar puncture.

June 9th to 11th. On these days his temperature rose to 102°-103°. The patient vomited and complained of severe headache. The pulse, which had previously been varying between 60 and 96, increased during the fever to as much as 123. The attack subsided without a lumbar puncture.

On discharge the central nervous system appeared to be normal, except for the increase of the left plantar reflex and the left pupil being larger than the right. Three weeks later the same signs persisted. Headaches were still present on exertion, but less severe.

Commentary.

Previous cases seen at necropsy or during operation have been found to have an aneurysm which has ruptured into the subarachnoid space at the termination of the internal carotid artery. The aneurysms have been considered to be congenital in origin.

Typically there is no evidence of syphilis, no history of trauma, the blood pressure is not necessarily high, and the patient is younger than the usual victim of a vascular intracranial lesion.

Features at the time of the attack to which Symonds draws attention are:

1. The sensation of something snapping at the base of the skull.
2. Brief initial loss of consciousness followed by a dazed "wandering" state.
3. Intense pain at the back of the neck associated with stiffness.

The case recorded in this note is that of a young healthy patient. The cerebro-spinal Wassermann reaction was negative. The highest blood pressure recorded was 140 mm. of mercury, but this was, of course, after the haemorrhage. The patient had a definite history of trauma; but this was eight years before and he had been perfectly well in the interval.

The attack began with sudden severe pain at the back of the neck and with sudden collapse. The period of unconsciousness was brief. Possibly this was due to early lumbar puncture. The patient subsequently complained of severe occipital headache and stiffness of the neck. The pain and stiffness of the neck were very marked; and his refusal to grip with his hands and the pain on movement of his shoulders are further evidence of irritation in the cervical region.

That the haemorrhage was not intracerebral is shown by the absence of localizing signs at the outset and the almost complete absence of residual lesions. The proportion of blood in the cerebro-spinal fluid leaves no doubt that the haemorrhage must have been extensive. Had it been intracerebral a haemorrhage of this size would almost certainly have left more definite residua. The only residual sign was the slight inequality of the pupils, which

may reasonably be attributed to organization of blood clot round the third nerve at the base of the brain.

It is interesting to note the rise in temperature during the relapse, and that it was associated with increased pulse rate, not with the slow pulse of increased intracranial pressure.

Summary.

1. A case is reported of extensive intradural haemorrhage with sudden onset accompanied by collapse and signs of increased intracranial tension and of irritation at the base of the brain.
2. The lesion occurred in a young and healthy man, and is not attributed to trauma, infection, or heart or kidney disease.
3. Recovery occurred without appreciable residual lesion.
4. The diagnosis made was rupture of an intracranial aneurysm into the subarachnoid space.

My thanks are due to Dr. J. V. C. Braithwaite for permission to record this case.

A RAPID METHOD OF TREATMENT IN PERFORATED DUODENAL ULCER.

BY

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SURGICAL intervention, in so grave an emergency as the perforation of a duodenal ulcer, demands a variety of operative technique which combines speed and simplicity so that the degree of shock already existing shall not be made more profound by prolonged manipulation or anaesthesia. At the same time it must be remembered that a crisis has been reached in the history of the ulcer, and that, successfully treated, it may now undergo a spontaneous cure, relieving the patient of all his previous symptoms. Bearing this fact in mind, it is important that the operation shall be carried out in such a manner as to cause a minimal degree of narrowing of the duodenum, so that the necessity for performing a gastro-jejunostomy, either immediately or at a later date, shall seldom arise.

The method adopted by most surgeons when closing a duodenal perforation consists in the application of a purse-string suture or of a number of Lembert's sutures in the vicinity of the crater with a view to infolding its margins completely. With this aim accomplished, the operation is concluded, commonly, by the application of an omental graft. If the lesion is of some chronicity, it is also necessary either to excise the friable margins of the ulcer or to insert the sutures at least one-half to three-quarters of an inch from the actual gap, so as to prevent the catgut, when it is tied, from cutting through.

The main criticism which attaches itself to the above procedure is the degree of constriction of the duodenum which it necessarily engenders, and which is a much more fertile cause of a permanent stenosis than the fibrosis and contraction of the ulcer. I have proved to my own satisfaction that a higher percentage of successful results is obtainable when constriction of the duodenal lumen is reduced to a minimum.

The method of operation about to be described has been employed on fifty-one occasions during a period of three and a half years. It can be performed with greater rapidity and has yielded uniformly satisfactory after-results, since in only one instance among forty-two successful cases has a subsequent gastro-jejunostomy been found necessary.

The abdomen is opened by an incision three to four inches in length, situated above the umbilicus and about one inch to the right of the middle line. The stomach is identified and grasped by a protected clamp, applied over a saline towel. The clamp provides an opportunity for gentle traction, which is usually capable of bringing even an awkwardly situated perforation into comparative proximity with the edges of the wound.

Varying with the size of the perforation, some four to six sutures (catgut size 000 on a 30 mm. half-circle Souttar needle) are now rapidly inserted. All coats of the gut are invariably penetrated, and at least two sutures traverse the

floor of the aperture, entering and leaving the serous surface approximately a quarter of an inch from the margins of the ulcer. The remaining sutures occupy positions a little to the gastric and duodenal sides of the ulcer, and in each case the ends of the stitches are grasped by a pair of light forceps. The effect produced is that of an archway of sutures placed in the long axis of the gut and extending on each side for at least three-quarters of an inch beyond the ulcer cavity.

A long omental strand, of not too slender proportions, is now sought out and a fine suture passed through its extremity. Forceps readily draw the suture and omentum through the archway, and the tip of the strand is finally anchored by a couple of stitches to the serous and muscular coats in the region of the pyloric antrum. The sutures forming the archway are now tied off; those beyond the margins of the cavity are firmly knotted, whilst quite a fair degree of tension can be placed upon the stitches traversing the crater since the omentum behaves as a soft resilient cushion, which prevents the catgut from cutting through the rigid tissues.

When it has been established that the new attachment of the omentum has left no loop which might strangulate a segment of the intestine, the gastric clamp is removed and the abdominal contents are replaced. The peritoneal cavity is gently swabbed until it is fairly dry, and if perforation has preceded operation by a longer period than twelve hours suprapubic drainage is instituted, otherwise the incision is simply closed in layers.

On theoretical grounds it might be argued that this method should not succeed, since it strangulates the omentum over an area where infection is distinctly liable, and hence that sloughing and reopening of the crater should be the outcome of the procedure. In no instance, however, has this accident occurred, and an opportunity was given for observing the late results of the operation when a patient, who had been operated on two years previously, underwent laparotomy for cholelithiasis. In this case the ulcer seemed to be completely healed, the duodenum exhibited little evidence of scarring, and was merely thickened somewhat over the portion of the outer wall where the omentum had been applied. Local adhesions were conspicuous by their absence.

An immediate mortality of 17.6 per cent.—nine cases out of a group of fifty-one—has already been admitted in an earlier section of this paper, and calls for some further explanation. In one instance only did death occur when operation followed within twelve hours of perforation. In two cases from sixteen to eighteen hours had elapsed, whilst in two others there was an intervening period of more than twenty-four hours. The remaining fatal cases were not operated upon until more than forty-eight hours after perforation, when well-marked peritonitis was already established.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

FRACTURE OF ANTERIOR ILIAC SPINE.

The following case seems to be worth recording since I can find only one reference to this condition in the literature at my disposal—namely, in Wilson and Cochrane's *Fractures and Dislocations*, 1929.

A strong young man, aged 19, had been practising for some sports, and had taken part in putting the weight and high and long jumping. He then tried a hundred yards sprint, but after travelling some seventy-five yards he felt "something give," and had severe pain in the groin, causing him to fall. He was raised to his feet, but could not flex the right thigh.

When examined he was found to have perfect passive movement of the knee and hip, but hyperextension of the thigh produced slight pain in the right groin. On walking he had to drag the right limb forward, being unable to lift the foot off the floor, unless by great effort. On deep palpation over the anterior part of the iliac crest, something was felt to slide backwards and forwards, and as the anterior superior spine was ill defined, the diagnosis of avulsion of the anterior superior iliac spine by the sartorius muscle was made. This was confirmed the following day by an x-ray examination, when the spine was found to be lying about one inch below its normal situation with the patient in the recumbent position.

The interest of this case seems to lie in the fact that the patient was using the sartorius to a less extent while running than while long jumping, etc., and secondly in the comparative rarity of a fractured anterior superior spine by indirect violence.

Gravesend.

JAMES CRAWFORD, M.B., Ch.B.Ed.

CERVICAL SUBLUXATION FOLLOWING ANAESTHESIA.

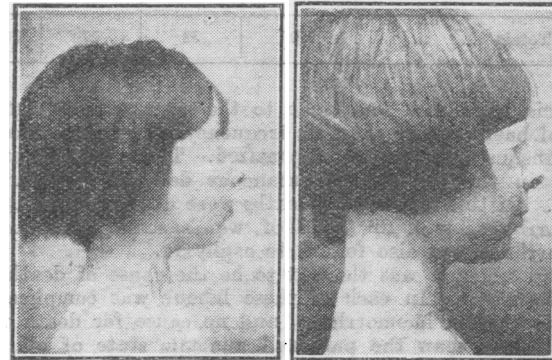
The following case seems of sufficient interest to warrant recording.

Last February the patient, a girl aged 9, was operated on in hospital under general anaesthesia. When her parents took her home they stated that her head was twisted and "stuck to one side." She was taken to one of the Royal National Orthopaedic Clinics (operated in conjunction with



Before operation.

After operation.



Before operation.

After operation.

local authorities) and on examination it was seen that her head was bent towards the left shoulder and the face twisted towards the left side. The right scalenes were prominent and spasmodically contracted, the right and left sterno-mastoids prominent, though relaxed, and the child could not move her head. She complained of a dragging pain radiating towards the left shoulder. Stereoscopic x-ray photographs were made, but they afforded no help in diagnosis. A tentative diagnosis of a subluxated cervical vertebra was made, and the child admitted to the country branch of the hospital at Stanmore.

At the operation, which was performed six weeks after the onset of the symptoms, the head was found to be fixed in the deformed position, a transverse process on the left side being unusually prominent. On palpation of the pharynx, a hard bony mass was felt projecting posteriorly and to the left, at about the level of the top of the left tonsillar fossa. Reduction was attempted by extension and manipulation, with apparent success. There was no "click," probably owing to the presence of adhesions and to the length of time that had elapsed, but after the manipulation the bony mass felt in the pharynx was median in position and no longer prominent. The child has regained a full range of movement without deformity.

I have to thank Dr. C. W. Durward for excellent photographs of the patient, taken before and after operation.

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