ENTEROSTOMY AS THE SOLE SURGICAL PROCEDURE.

Enterostomy without search for the obstruction is only performed by most surgeons in the very desperate cases, but it has been strongly advocated by Elsberg[2] as a normal procedure under a large number of circumstances. His argument is this:

Gangrene occurs in 15 per cent. of all cases of acute obstruction. If cases of intussusception and volvulus, which are usually diagnosable before the abdomen is opened, are excluded, gangrene only occurs in 5 per cent. The performance of enterostomy evacuates the gut above the obstruction. The removal of the distension may allow strangulated coils to recede from their incarcerated position, or may relieve strangulation from kinking. The operation can be performed rapidly, under local anaesthesia if necessary, and with very little shock. At a second operation the obstruction can be removed and the enterostomy opening closed.

The arguments against adopting this line of action are obvious. Statistics in this series give 6 per cent. of gangrene in such cases, and this agrees with those cited by Elsberg. But there is a fallacy here. In all these cases the obstruction was removed; if this had not been done it is fair to conclude that other cases, where strangulation was present, would have gone on to gangrene. If the enterostomy made be situated high up the small gut, then the patient will suffer from loss of nutrition, which, following the toxaemic condition the result of obstruction, brings him into a very unfavourable state for his second operation. This second operation has to be performed in the presence of infection and often through a septic wound.

RESULTS OF OPERATIVE TREATMENT.

Inguinal Hernia.—Resection was done in 6 cases with 2 deaths, one of which occurred on the fourteenth day after operation, from pneumonia, in a patient aged 75. Enterostomy was combined with resection in one of the fatal cases. The other three deaths occurred from paralytic ileus (enterostomy proving unavailing), from collapse, and from the inhalation of the septic vomit.

Femoral Hernia.—Resection was done in 8 cases with 4 deaths. In two cases an enterostomy only was performed and both died. In one case the perforated gut was freely opened but left *in situ*, whilst a lateral anastomosis was done from above between the afferent and efferent limbs of the strangulated loop. This patient also died.

Umbilical Hernia.—Resection of both large and small gut was done in one case with fatal result; two other cases died although no gangrene was present.

Ventral Hernia.—There was one resection, with death on the third day.

Intussusception.—Resection was performed 4 times with 3 deaths. The patient who recovered was 4 months of age. One of the resections was done in a case which recurred twenty-four hours after operation. Recurrence happened in one other case on the fourth day. It was successfully operated upon. Two other cases died although gangrene was not present and the intussusception was reduced. Appendicectomy was found necessary, in addition to reduction, in two cases, one of which was a fatal case.

Adhesions.—Resection was performed in 5 cases with no deaths. In one it was combined with enterostomy. An ileo-transverse colostomy was done in two cases of obstruction after appendicectomy with no deaths. Enterostomy alone was done 5 times with 3 deaths. In two other cases the obstruction was relieved, but death followed.

Bands.—Resection was only performed once; the patient recovered. Enterostomy alone was performed once, and the patient died.

Meckel's Diverticulum.—There were no deaths. Resection was performed once, but only for the closure of an enterostomy which was made twenty-four hours after the relief of the obstruction.

Gall-stone Impaction.—This patient died from leakage peritonitis from the adhesions between the gall bladder and the duodenum breaking down. The gall stone was removed by enterotomy.

Volvulus.—This case died without operation.

Stricture.—Enterostomy above the stricture only was performed. This patient died.

Mesenteric Thrombosis.—Resection was done in these two cases, but the patients died.

Obstruction of Unknown Origin.—In two cases the cause of the obstruction was not determined; enterostomy was done in both. They both died, but no *post-mortem* examination was made.

I have to thank the members of the surgical staff of St. Mary's Hospital for their courtesy in allowing me to add the records of their cases to those of my own.

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PITUITRIN IN POST-OPERATIVE INTESTINAL STASIS.

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IN the two following cases pituitrin was a valuable auxiliary to other measures for supporting vital power and overcoming intestinal torpor, especially as the cases were dealt with in a hillside cottage with no other nursing than that of a neighbour and the visits of an excellent district nurse.

CASE I.

The first case was that of a girl, aged 9, whose appendix was removed a week after the subsidence of an acute attack. Eight days after the operation the wound was reopened to ascertain the nature of a painful swelling in the right iliac fossa attended with abdominal distension and vomiting suggestive of obstruction. A deep abscess was found and drained. The distension increased and persistent vomiting of dark green fluid came on. Calomel given by the mouth was rejected, and turpentine enemata failed to bring away any flatus. On the night after the draining of the abscess the patient was actively delirious, picking at the bedclothes and stripping the paper from the wall at the head of the bed; the distension was increasing, the vomiting of green liquid was incessant, and she had a shabby pulse of 130; Parke, Davis's pituitrin 0.50 c.cm. was injected subcutaneously. An hour later the pulse had fallen to 115, was fuller and steadier and flatus began to be expelled per rectum. An asafoetida enema then caused the expulsion of much flatus. After this the dangerous symptoms subsided and the patient made a good recovery.

CASE II.

A woman, aged 43, was seen on April 1st, 1914, when she had the typical signs of acute appendicitis. Immediate operation was advised, but as there was no other woman in the cottage it was impossible to do anything that day. The next day the abdomen was markedly distended, and the acute tenderness in the right iliac fossa had given place to general abdominal tenderness. On opening the abdomen the same day serо-purulent fluid free in the abdomen and an acutely inflamed appendix, adherent to the side of the pelvis, but with no other limiting adhesions, were found. Near the end of the appendix was a perforation from which thick odourless pus was trickling into the abdomen. The appendix having been removed, a stout tube was passed down to the stump, and another into Douglas's pouch. The morning after the operation there was much serous discharge on the dressings and in the tube going to the appendix stump, but from the tube in Douglas's pouch thick grumous pus was sucked. No flatus had passed, and the bowels had not acted, though 5 grains of calomel had been given five hours after the operation. Three grains of calomel immediately, to be followed by a grain every hour till the bowels moved, were ordered. Next day the distension was worse, and green liquid was vomited, though nothing was being taken by the mouth. The bowels had not moved, and neither turpentine, asafoetida, nor claret enemata brought away either faeces or flatus. One c.cm. of Parke, Davis's pituitrin and $\frac{1}{30}$ grain of strychnine were given on the second morning after the operation. Within an hour some flatus was expelled per rectum. At night $\frac{1}{30}$ grain of strychnine and 1 c.cm. of pituitrin were given. In half an hour a free expulsion of flatus took place, followed soon afterwards by a copious liquid motion. The after-progress of the case was uneventful and satisfactory.

THE Royal County Hospital for Children, Heswall; the Children's Convalescent Home, West Kirby; the Liverpool Convalescent Institution, Woolton; and the St. Paul's Eye Hospital are among a large number of charitable undertakings each of which receives a bequest of £1,000 under the will of the late Mr. Septimus Brocklehurst of Sefton Park.