

## HERNIA—INCISIONAL AND UMBILICAL

by

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IN THE ANNALS of December 1955, Mr. Eric L. Farquharson considered some problems in the treatment of hernia. In speaking of umbilical hernia he referred to the overlapping repair of Mayo and the fact that, in this, recurrence is "all too common." With reference to the common upper abdominal incisional hernia he says that "operative repair may be a matter of the greatest difficulty." These two comments in the course of such a careful article suggest that a method of repair which I have been employing for many years with excellent results (which I am not, at present, prepared to support with statistics!) may not be generally known. I have not found a reference to the method in the literature; nor has Mr. Farquharson. Hence this brief annotation.

### Epigastric incisional hernia

This hernia most commonly follows a mid-line incision. In such cases the sac is exposed and skin flaps are cut back on either side to display two-thirds of the anterior sheath of the rectus muscle on each side. A vertical incision is there made through the anterior sheath for the whole length of the hernia extending well up on to the costal margin and generally to below the umbilicus in most cases. The medial two-thirds of the

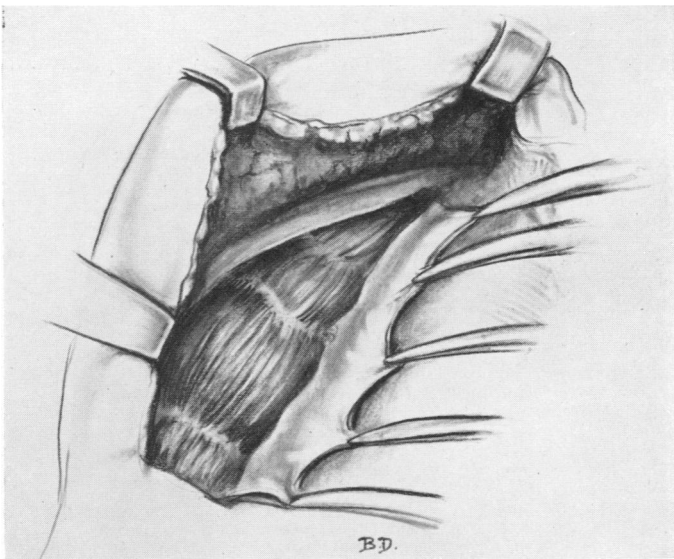


Fig. 1. Epigastric incisional hernia. Reflection of the medial two-thirds of the anterior rectus sheath.

anterior sheath is then reflected inwards towards the middle line, being hinged at the medial border of the rectus where the anterior and posterior sheaths blend in the linea alba. The posterior sheath of the rectus on one or other side of the hernial deficiency may need to be cleared of peritoneum a little, but as a rule overlap of these two flaps of rectus sheath does not reach to beyond the opposite margins of the original hernial sac and this undercutting is, therefore, unnecessary when the next step is carried out. This step consists of an under- and over-lapping of the two hinged anterior rectus sheaths. An overlap of an inch or two is usual and the repair can be made with nylon, chromic gut, wire or whatever other material is favoured by the operator. Meticulous haemostasis is then carried out and stab wounds are made for drainage, either two or four in number, at the base of each skin flap which may be as far out as the nipple line. Through these stabs, suction drainage of the wound is maintained for about forty-eight hours after which the drains are removed.

When the overlap has been sutured, it will be seen that the fibres of the rectus muscle on each side have been spread out to cover a much wider area. There is, of course, no anterior sheath.

I have had to re-open the abdomen more than once, years after this type of repair. An adventitious anterior sheath appears to form very satisfactorily and later closure, again by overlap, has not proved difficult and has not on these few occasions resulted in a further recurrence of herniation.

### **Umbilical hernia**

The same principle is employed. After all preliminary steps have been carried out the rectus sheath is exposed on either side of the hernial orifice. Incisions are then made through the rectus sheath on each side laterally and with slight divergence so that the free margins of the flaps when raised are slightly broader than the attached margin at the edge of the hernial orifice. Once again the repair is made by the under and over method which results in the umbilical hernial orifice being stoutly repaired with a double layer of living anterior rectus sheath aponeurosis.

The number of times I have performed this repair is insignificant and once again I have no statistics to offer. The operative repair, however, is manifestly satisfactory and there seems no reason whatever why recurrence should take place. Indeed it may appear sufficient to raise a flap from one side only and fix it by passing it under the opposite side.

### **DISCUSSION**

In the epigastric repair the method described provides local material for filling the gap and narrows the extent of the gap by releasing the tension of the anterior rectus sheath which is invariably greater than that of the posterior rectus sheath for some unexplained reason. In the

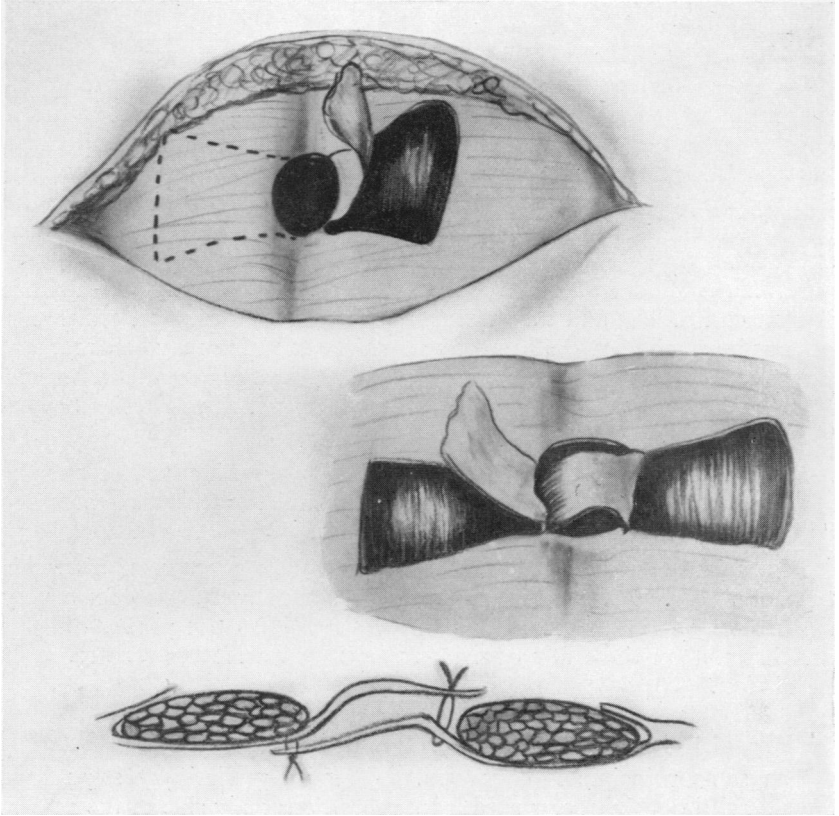


Fig. 2. Umbilical hernia. Preparation and fixation of the flaps of anterior rectus sheath.

umbilical hernia the method merely supplies material for the filling of the gap. In neither case is there any resultant weakness apparent.

On one occasion in an epigastric hernia where serum accumulated in the wound I formed the opinion that the repair had given way. Three or four days after the first operation I re-opened the wound and again repaired the separated edges of the flaps with a running suture of fascia lata from the thigh. This proved successful.

No doubt there is a place for prostheses of various kinds such as the polyvinyl alcohol sponge described by Schofield (1955) and the nylon mesh used by Stock (1954) but the use of foreign materials has its own objections and most surgeons would certainly prefer to use local tissues if possible. I do not know whether these techniques are original, but I have not seen them described elsewhere.

#### REFERENCES

- SCHOFIELD, T. L. (1955) *Brit. J. Surg.* **42**, 618.  
STOCK, F. E. (1954) *Lancet* **1**, 395.