

THE ACUTE ABDOMEN

other side at the same sitting, and a perfect wall will be left.

Displacement of the rectus outwards after incision of the sheath should be substituted in the early stage of many operations for those which were formerly carried out entirely through the middle line, e.g., the removal of fibroids, ovariotomy, tubal disease, etc.; exploratory operations generally, and operations on the stomach.

It is occasionally advisable to go through the substance of the rectus muscle in some operations, such as gastrostomy by the method of Senn, operations on the gall-bladder and bile-ducts, and for the treatment of acute suppurative peritonitis in children and young adults, for although such an incision may be followed by hernia, it is not so in every case, and there is less danger of its giving way during the immediate after-treatment than if it is made through the linea semilunaris.

If the anterior sheath of the rectus is not restored after these incisions going directly through the muscle, then there will be some bulging of the muscle with consequent weakness of the abdominal wall. It is sometimes mistaken for a paralysis, but the rectus cannot fulfil its functions properly without a sheath, and will act perfectly again when the defect is remedied.

In the majority of patients benefit is gained by a careful and regulated course of exercises after all abdominal operations; the danger is still that of keeping them recumbent or fettered by bandages and belts for too long a time. Abdominal hernia may be prevented by appropriate exercises, but it is not of much use prescribing a "course of Sandow" for an irreducible ventral hernia!

During an abdominal operation in which the linea semilunaris is exposed it is easy to observe the action of the external oblique, for should the patient make any effort to cough or vomit, tendinous fibres forming its insertion are pulled upwards and outwards, frequently forming parallel folds which are continuous with the anterior sheath of the rectus. The continued pull of the muscles in the lateral group is strongly backwards away from the middle line, and if an incision has left any weakness either at the linea alba or linea semilunaris the weak incision will be stretched, as these lines are really