THE SURGICAL TREATMENT OF HERNIA.

Remarks made before the Ontario Medical Association
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Dr. Marcy regretted his inability to exhibit to the association a series of screen pictures illustrative of the anatomy and pathology of hernia, and consequently devoted the time at his disposal to the discussion of the methods best adapted to its cure. After referring to the exceptional history of operative measures which in preceding centuries had been advocated, only to fall into disuse and be forgotten, Dr. Marcy briefly sketched his own personal experience. Fortunately his first cases were operations for strangulated inguinal hernia in woman, and he used buried catgut sutures as an expedient for the retention of the abdominal contents and closure of the wound. He did this as an induction, based upon the experimental studies of Professor Lister in the ligation of arteries, from whose clinic he had just returned to America in 1870. He instituted a long series of histological researches upon the changes which supervene when aseptic animal tissues are buried aseptically in healthy animals, and demonstrated that a remarkable series of proliferative cell-changes ensue about the buried foreign material; *pari passu*, as the connective tissue cells of the implanted structures are absorbed, the exudative cells are transformed into newly-developed connective tissue, which replaces the dead material, and thus forms a living band marking the site of the buried suture, enclosing and re-enforcing the parts. Although this proved a discovery of fundamental importance in the co-aptation and closure of all aseptic wounds, its value is especially apparent when applied for the re-enforcement of the parts involved in the cure of hernia.

The *bête noir* in the cure of hernia for the centuries has very naturally been the inguinal variety in the male, and too much emphasis cannot be made upon the wise distribution of nature in the arrangement of the structures for the retention of the abdominal contents and the allowing of the escape of the spermatic cord and vessels without pressure or interference of function. This fact has been singularly overlooked by the authorities, and its importance will be readily appreciated in the attempt at restoration of the parts. The obliquity of the canal is very similar to the entrance of the ureter into the urinary bladder, and, in the normal condition, the intra-abdominal pressure is ever maintained at a right angle to the line of the canal.

This is of fundamental importance in the attempt at restoration of the parts in order to effect a permanent cure, a procedure impossible without the use of buried sutures, since in no other way can the internal ring be closed, the cord lifted to a higher point of escape, the obliquity of the canal reformed, and the underlying parts re-enforced.

Although a seeming heroic measure, in the hands of an experienced surgeon the operation is not essentially severe or difficult. The section is freely made until the canal is opened, the cord gently lifted until its exit from the abdominal cavity is plainly apparent. The peritoneal sac is usually resected after having been sutured to its very base, in order that its internal surface may no longer afford lodgment for an abdominal viscus. The posterior structures are carefully approximated with a deep double buried tendon suture, and the internal ring is closed quite upon the cord; thereby, as in no other way, reforming the obliquity of the canal. The cord is replaced, and the external tissues are rejoined by uniting in a similar manner Poupart's ligament to the conjoined tendon, closing the parts evenly in apposition upon the cord. A third and sometimes a fourth layer of buried continuous sutures are applied for the more careful coaptation of the divided structures. The skin itself is coapted by a layer of fine tendon sutures, taken in a blind running stitch through its deeper portion only, without the addition of a single external suture.

The incision through the skin having thus been reduced to the dimensions of only a line is hermetically sealed with iodoform collodion, reinforced by a few fibres of cotton, and this is the only dressing applied. It is needless to remark that Dr. Marcy is one of the most careful of aseptic operators, since upon these conditions alone, most rigidly enforced, is it safe to apply buried sutures. "An *aseptic* suture *aseptically* applied in *aseptic* structures." . . . "Scrotal œdema and tenderness of the wound is almost entirely wanting; the patient is con-