

TOPIC: ABDOMINAL WALL HERNIA - Abdominal wall closure

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AN EASY PROCEDURE TO RETRIEVE LARGE NEEDLES USED WITH U REVERSE STITCHES IN LAPAROSCOPIC VENTRAL AND INCISIONAL HERNIA DEFECT CLOSURE

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Introduction: Hernia defect closure diminishes the risk of seroma formation, minimizes the risk of mesh migration into the cavity, and results in better functional reconstructive anatomy. The “U reverse stitches”, the laparoscopic transperitoneal suturing defect closure technique with non-absorbable monofilament threads, is useful. However, it is very difficult to retrieve large needles through trocars. For an easier retrieval of the needles, the 12mm trocar should be enlarged to 15mm. However, an enlargement of it may cause a trocar-site herniation post operatively. So, we present a modified technique to retrieve the large needle used with U reverse stitches easily from the intraabdominal space.

Methods: We performed ventral and incisional hernia repairs laparoscopically for 90 patients from April 2002 to October 2014. Since August 2013, we started the hernia defect closure. Novafil™ no.2 (1/2 circle 48mm GS-25, Covidien) is used for the closure of the defects. Originally, Chelala et al reported the U reverse stitches procedure: after a U reverse bite is made on the bilateral edge of the defect, then cutting the thread intracorporeally, and retrieving it with the EndoClose device (Covidien). The large needles are retrieved through a 12mm trocar from intraabdominal space. We modified the procedure to retrieve the needle; after a U reverse bite is made, pull the thread with the EndoClose without cutting it and retrieve the needle through the small skin incision directly from the abdominal space, and cut the thread extracorporeally.

Results: We performed hernia defect closure for six patients and we used Novafil for three patients with this technique. There was little resistance and no difficulty during the extraction of the needle through the abdominal wall.

Conclusion: This is a new technique used in our hospital. This Procedure makes it easier to retrieve large needles without enlargement of the incision and very useful for achieving the U reverse stitches.