

Repair of Ventral Hernia

Open Component Parts Separation

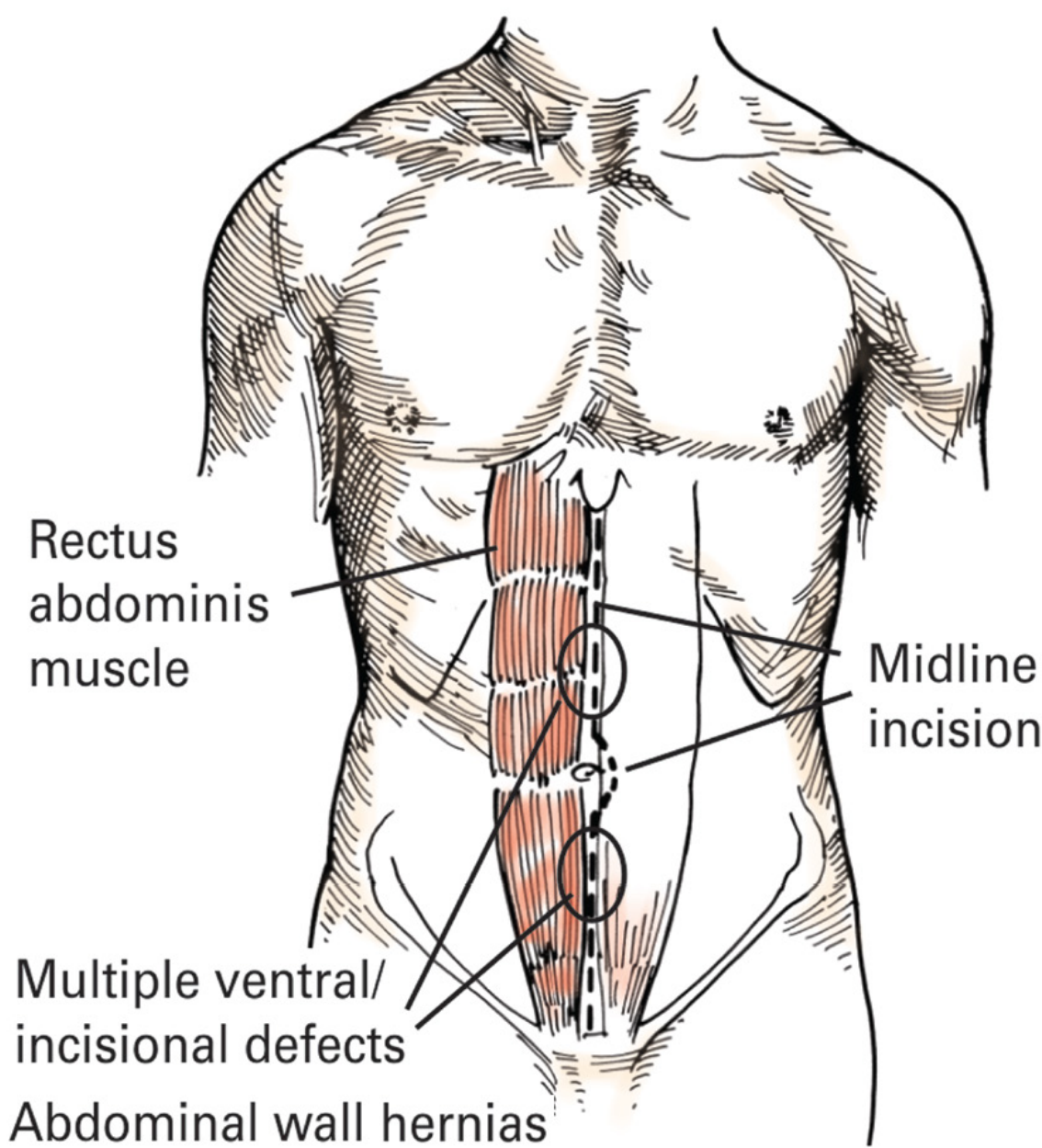


Figure 1: The incision may extend from the xiphoid to the pubis or be shorter and tailored to the size of the defect undergoing repair. Adequate length of the incision is necessary to insure appropriate exposure of the abdominal wall musculature above and below the hernia. The incision is carried down through the subcutaneous tissue onto the hernia sac in the midline and the unadulterated fascia.

Figure 2: Exposure is facilitated by elevation of subcutaneous flaps laterally overlying the abdominal wall musculature. These flaps extend to the anterior axillary line just lateral to the insertion of the external oblique fascia onto the more medial rectus sheath.

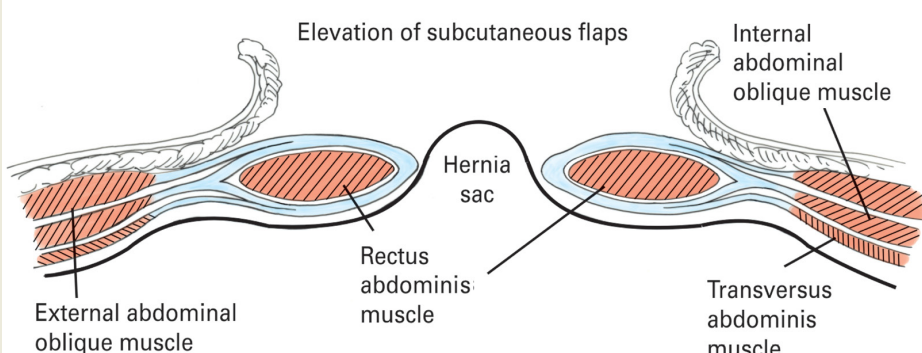


Figure 3: Once the incision and subcutaneous flaps are complete exposing the insertion of the external oblique on the rectus sheath, the external oblique fascia is incised on its anterior border just laterally to its insertion on the rectus sheath.

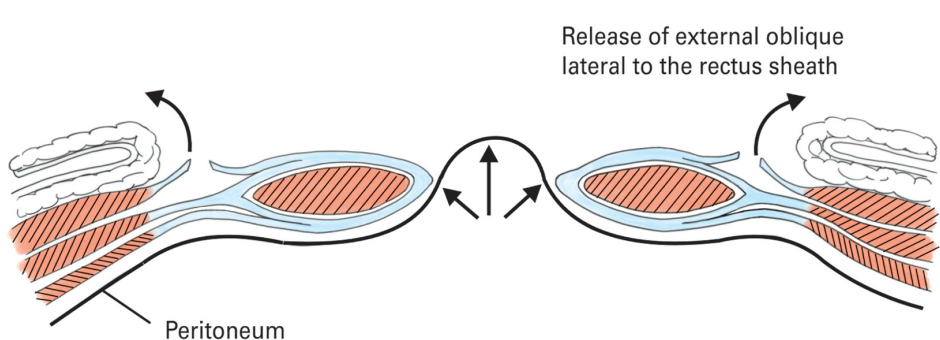


Figure 4: Once the external oblique is incised a plane is created laterally between the external oblique aponeurosis and internal oblique aponeurosis effectively lifting the external oblique musculature off of the internal oblique aponeurosis and allowing for advancement or "medialization" of the rectus sheath into the midline for primary closure.

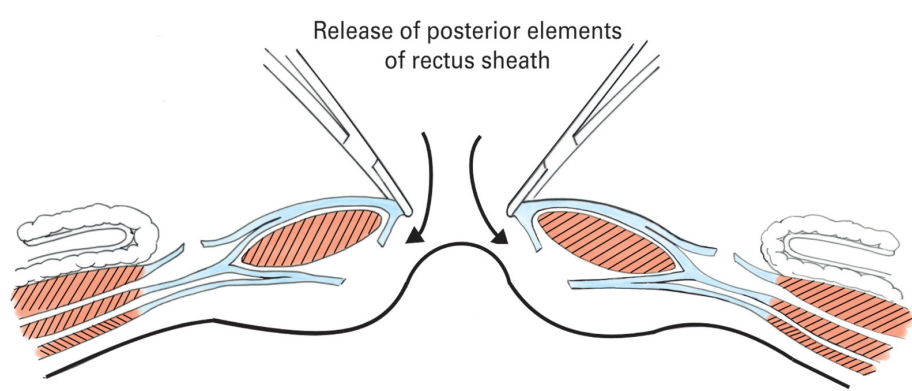


Figure 5: Full mobilization of the external oblique aponeurosis and the posterior rectus sheath can be expected to allow for 3 to 5 cm advancement in the upper and lower abdomen and 8 to 10 cm of advancement at the waist.

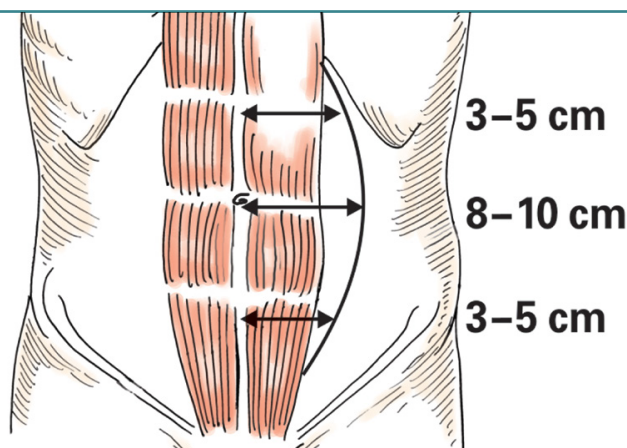


Figure 6: This technique insures at least two layers of abdominal wall envelope the intra-abdominal organs except in the midline which is closed in a single layer. Primary closure of the midline wound is often performed with interrupted nonabsorbable sutures.

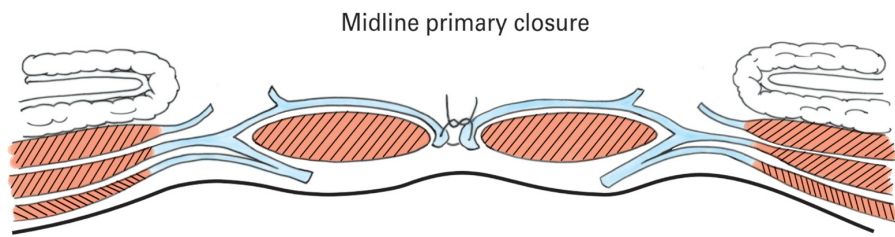


Figure 7: In an effort to prevent midline recurrences, many surgeons place an underlay of synthetic or biologic mesh to prevent a recurrence in the suture line. The mesh should overlap the fascial edges by 4 to 5 cm. Heavy number 0 or 1 nonabsorbable sutures are placed laterally about 2 to 4 cm from the fascial edge with the knots on top.

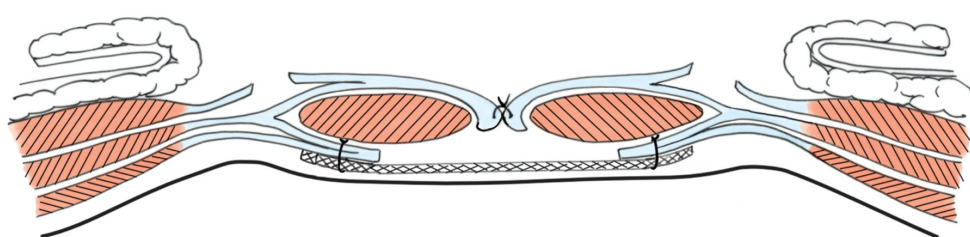


Figure 8: With the fascia closed, attempts should be made to reapproximate the subcutaneous tissue elevated off of the abdominal wall musculature in an attempt to eliminate the "dead-space." The use of 2-0 absorbable interrupted suture is desired. Often, the subcutaneous flaps create an opportunity for blood and/or fluid to accumulate and placement of two closed suction drains within the flaps collect fluid/blood and prevent postoperative seroma or hematoma from developing.

