Anterior Rectus Sheath Turnover Method for Abdominal Wall Reconstruction in Trauma Patient

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ABSTRACT

Trauma patients with massive hemorrhage requires extensive fluid resuscitation, resulting in massive edema of the bowel, the retroperitoneum and the abdominal wall. The authors present a case of anterior rectus sheath turnover method for abdominal wall reconstruction in a patient with difficult abdomen.

KEYWORDS:

CASE

Forty-nine year old female patient was presented with a large amount of hemoperitoneum, pelvic fracture and retroperitoneal hemorrhage caused by pedestrians TA. At the time of admission, the patient has unstable hemodynamics, was conducted laparotomy for decompression and gauze packing for bleeding control at emergency room. Damage control surgery was performed after moving into the operating room. The patient was performed nephrectomy, gauze packing and temporary abdominal closure. After 10 hours, second damage control surgery was performed due to ongoing hemorrhage. Two days after, the patient underwent gauze removal, total colectomy due to colon necrosis and temporary abdominal closure. Four days later, abdominal wall repaired by using anterior rectus sheath turnover method and NPWT (negative pressure wound treat) was applied to skin defect. (Figure 1-3) Skin defect was approximated gradually and complete skin closure was conducted after 13 days.
DISCUSSION

As in this case, trauma patients accompanied with massive hemorrhage often are not easy for abdominal wall closure because of large amount of fluid resuscitation. Most patients underwent primary abdominal closure after temporary abdominal closure using plastic bag, NPWT, or synthetic mesh. However if the defect is large, anterior rectus sheath turnover method can be a useful way for abdominal wall reconstruction as in the present case. Some reports had reported the use of the anterior rectus sheath turnover method for closure of large abdominal wall defect after liver transplantation, large hernias of abdominal wall or trauma patients with difficult abdomen.\textsuperscript{1-4}

This procedure allows the closure of large defects without synthetic materials.

Anterior rectus sheath turnover method for abdominal wall reconstruction is a viable surgical option for difficult abdomen in trauma patients.

# Conflict of Interest Statement

None of authors have a conflict of interest.
REFERENCES


