

Physician - Aortic (Thoracic) Pathologies and Surgery/Endovascular Interventions

[MEP-41]

Management of Diaphragmatic Dehiscence and Wound Infection After Open Repair of Thoracoabdominal Aortic Aneurysm

Aysen Yaprak Engin, Dilek Erdinli, Ümit Kahraman, Emrah Oğuz, Hakan Posacıoğlu, Anıl Ziya Apaydın

Department of Cardiovascular Surgery, Ege University Faculty of Medicine, İzmir, Türkiye

Turk Gogus Kalp Dama 2024;32(Suppl 2):MEP-41

Doi: 10.5606/tgkdc.dergisi.2024.mep-41

E-mail: yaprak.engin2009@gmail.com

Received: September 13, 2024 - Accepted: September 29, 2024

Herein, we presented a case of thoracoabdominal aneurysm that was surgically treated and was complicated with diaphragmatic dehiscence and wound infection. Management and treatment methods of this challenging complication were discussed. A 59-year-old male patient with a history of renal operation underwent an open surgical treatment for thoracoabdominal aortic aneurysm. After extubation, the chest radiograph revealed left pneumothorax, and diaphragmatic dehiscence was detected on computed tomography. In the reoperation, steel wires attaching to the arcus costarum were broken off, and the diaphragmatic dehiscence and eventration of organs were observed. Diaphragmatic defect was closed with a Dacron patch, as it was very large for primary closure. Chylothorax was noticed and treated by somatostatin infusion. Vacuum therapy was applied as a purulent discharge started, and necrotic tissue was observed with evidence of infection when debridement was performed. Antibiotic therapy was started according to antibiogram. Vacuum therapy of thoracic incision was stopped as granulation tissue was observed, and the wound was closed by retention sutures. The wound in the abdominal region was closed with an advancement flap by subcutaneous detachment by plastic surgery, and a hemovac drain was placed. Since purulent discharge persisted, the Dacron graft was replaced by bovine pericardium for the diaphragmatic defect. The wound in the abdominal region was closed with retention sutures. The skin was closed primarily. When the infection resolved, the patient was discharged with peroral antibiotics. In open surgical repair of thoracoabdominal aortic aneurysm, rapid diagnosis and surgical intervention in case of diaphragm dehiscence, closure of the wound with appropriate treatment methods, reduction of the wound size with vacuum assisted closure, and initiation of effective antibiotic therapy by taking serial cultures are important in the treatment process.

Keywords: Diaphragmatic dehiscence, thoracoabdominal aortic aneurysm, vacuum therapy, wound infection.

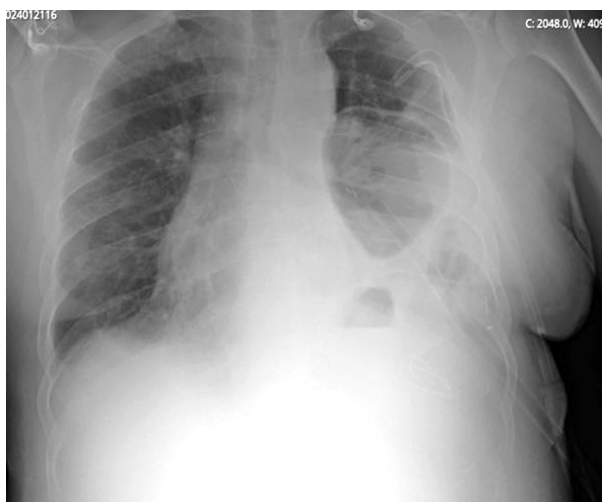


Figure 1. Chest radiograph on the second postoperative day.



Figure 2. Chest radiograph on the second postoperative day.

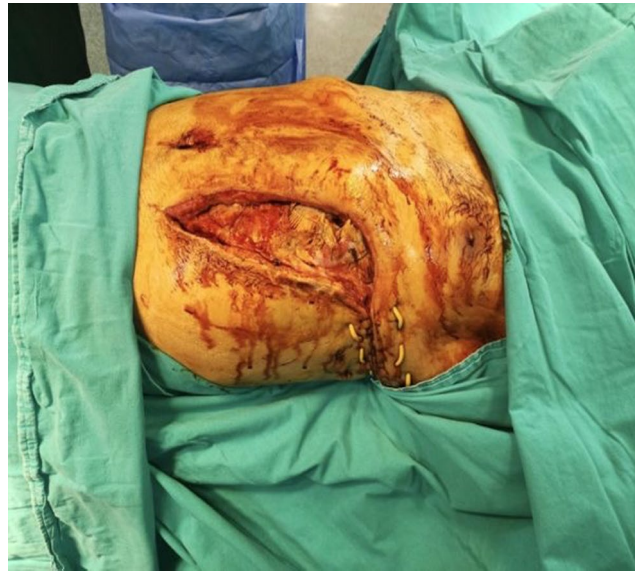


Figure 3. Chest radiograph on the second postoperative day.