Giant paraanastomotic iliac artery pseudoaneurysm

Dev paraanastomotik iliyak arter yalancı anevrizması

False aneurysms of iliac artery after prosthetic vascular reconstruction are considered to be rare complications with uncertain incidence.

An 82-year-old male patient with the complaints of flank pain and intermittent claudication was admitted to our clinic. He had had a bilateral aortoiliac bypass procedure 25 years before. On physical examination he had a transverse infraumbilical surgical incision scar and a pulsatile mass on his right lower quadrant of the abdomen with dermal bruits. On the contrast enhanced computed tomographic (CT) angiography, a right sided giant iliac artery paraanastomotic pseudoaneurysm of 13x12 cm was detected (Fig. 1).

Under spinal and epidural anesthesia with right flank incision and retroperitoneal approach, after proximal control of the graft with nylon tape (Fig. 2) and intravenous anticoagulation the graft was clamped and the aneurismal sac was opened. The iliac artery was ligated and the graft was extended with an end-to-end anastomosed 8-mm Dacron tube graft. The distal anastomosis was done to the common femoral artery (Fig. 3). A total of 1000 ml of red blood cell was retransfused with the aid of cell saver. He had an uneventful recovery and discharged on the fifth postoperative day.

Anastomotic aneurysms, early after the operation has an incidence of 3%. The reported incidences of pseudoaneurysms assessed by life-table analysis are 20% and 22.8% at 15 years. Paraanastomotic aneurysms can be complicated by rupture, thrombosis, embolism, and pressure on or erosion into adjacent structures. Surgery of ruptured paraanastomotic aneurysms has mortality rates ranging from 24 to 70% and morbidity rates ranging from 70 to 83%. Mortality rate for elective open repair of paraanastomotic aneurysms is 3 to 17%. Infection is the most common etiologic factor. Suture deterioration and pathologic prosthetic dilation, hypertension, poor outflow vessels, progression of distal disease, local endarterectomy, healing complications, type of suture material, type of graft material, postoperative anticoagulation, the type and location of anastomosis, and tension on the suture line are other factors. The delay of occurrence of iliac false aneurysms ranges between 6 to 10 years. Therefore it has been proposed to perform a systematic follow-up with CT examination every 5 years. Blood loss may be high enough to endanger the life of the patient in such a big pseudoaneurysm if the open surgery is preferred. Even as in our case the aneurysmal sac blood content loss may be life threatening. Therefore, red blood saving measures prior to intervention are of critical importance.

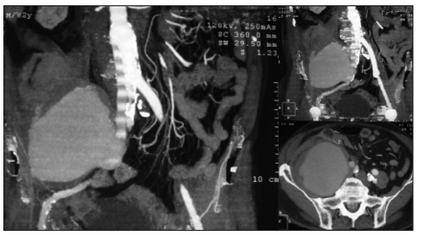

Figure 1. Contrast enhanced computed tomography angiography of the patient

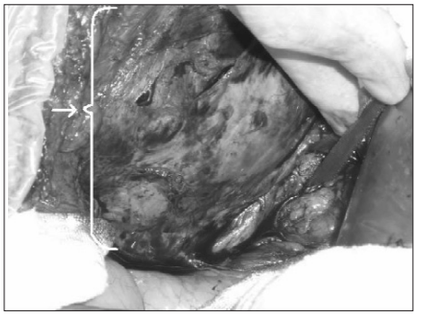

Figure 2. The pseudoaneursym indicated with the arrow and the proximal control of the previously implanted graft with nylon tape

Figure 3. Extended graft with a Dacron tube graft and distal anastomosis to the femoral artery

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Posttraumatic pneumopericardium and bilateral pneumothorax

Travma sonrası gelişen pnömoperikardiyum ve bilateral pnömotoraks

A 38-year-old man presented with dyspnea and massive subcutaneous crepitation after a traffic accident. Chest computed tomography (CT-scan) showed pneumopericardium, bilateral pneumothorax and massive subcutaneous emphysema (Fig.1) confirming the same findings as the chest X-ray, except the poorly visible pneumopericardium. After bilateral insertion of a chest drain, the patient was transferred to the intensive care unit. Electrocardiography and echocardiography were normal. Fiberoptic esophagoscopy and bronchoscopy demonstrated an intact mucosal pattern without any sign of perforation. The patient was uneventfully discharged on the 12th day as a control chest CT-scan showed complete resolution of the pneumopericardium and the bilateral

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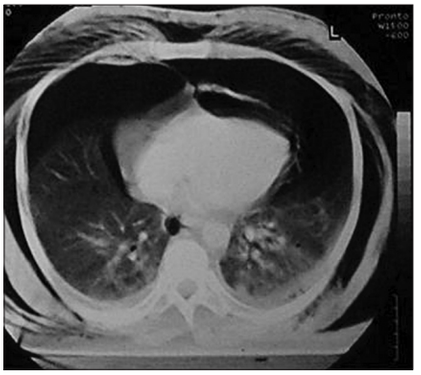

Figure 1. Chest computed tomography showing pneumopericardium, bilateral pneumothorax and massive subcutaneous emphysema

Figure 2. Computed tomography scan before discharge demonstrates only some residual subcutaneous emphysema

pneumothorax (Fig. 2). In blunt chest trauma bilateral pneumothorax is not uncommon but accompanying pneumopericardium is rarely seen. This case is a good example of the high sensitivity and specificity of chest computed tomography in patients with blunt thoracic trauma.

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