

Physician - Peripheral Artery Diseases and Surgery/Percutan Interventions

[MOB-04]

Demonstrative Thoracofemoral Extra-Anatomic Bypass: A Good Choice for Patients with High Risk for Laparotomy

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Extra-anatomic bypasses, known to have limited success rates for peripheral vascular surgery, are not the first choice of surgery. These surgeries have a wide range of configurations with different success rates. They are preferred in patients with high risk for abdominal approaches, such as those with adhesions or infections in the native area. We share a 50-year-old male thoracofemoral bypass patient with peripheral artery disease (PAD), claudication at 20 m, and a smoking habit. The patient described gastrointestinal symptoms such as constipation and distension. The patient was evaluated with contrast-enhanced computed tomography (Figure 1), which revealed that only the right renal artery was open after truncus celiacus in the abdominal aorta; the abdominal aorta and all other branches were chronically occluded. The patient had a history of abdominal surgery due to bladder stones and was diagnosed with moderate renal failure. It was observed that distal mesenteric bed perfusion was provided with collaterals, and collateral flow was provided to the lower extremity with epigastric arteries. A 10-mm Dacron graft was anastomosed to the thoracic aorta with a side clamp and tunneled from the left costophrenic sinus to the inguinal region. After the distal part of the left common femoral artery was sutured, a crossover bypass was performed with a graft of the same diameter (Figure 2). The patient's claudication complaints immediately disappeared after early postoperative mobilization, and the gastrointestinal symptoms began to regress after the first day. The patient was discharged on the fifth day. Contrast imaging was avoided due to the patient's renal dysfunction, but lower extremity pulses were palpable at the one-year follow-up. The thoracic aorta to femoral artery bypass approach is an easy and safe alternative solution for patients with peripheral arterial disease and high laparotomy risks.

Keywords: Extra-anatomic bypass, thoracofemoral bypass.

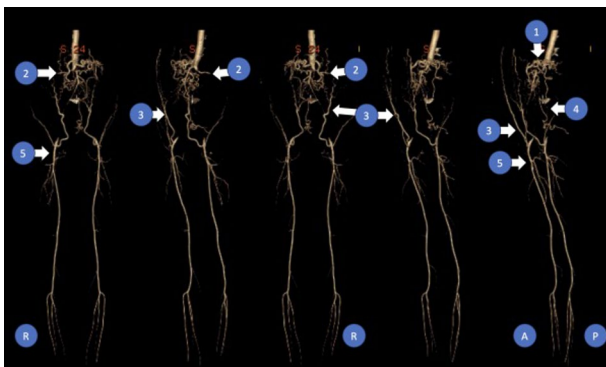


Figure 1. 1- Truncus celiacus, 2- Right renal artery, 3- Inferior epigastric artery - Anterior abdominal wall, 4- Mesenteric bed perfusion by collaterals, 5- Common femoral artery.

R: Right; A: Anterior; P: Posterior.

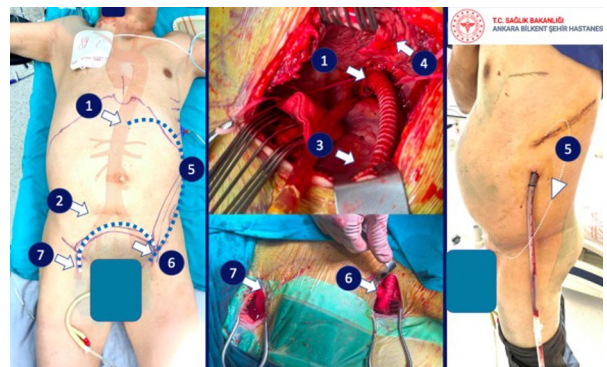


Figure 2. 1- Thoracic aorta end-to-side anastomosis with a 10-mm Dacron graft. 2- Suprapubic incision scar. 3- Left diaphragmatic surface. 4- Left lung. 5- Course of extra-anatomic bypass graft from the thoracic aorta. 6- Aortofemoral bypass. 7- Crossover bypass.

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