

Infrarenal Abdominal Aorta Approach through Median Minilaparotomy

G.V. Pătruț¹, L.P. Jiga¹, G.P. Tăranu¹, A. Rata¹, C. Neamtu², M. Ionac¹

¹Department of Vascular Surgery and Reconstructive Microsurgery, Clinical Emergency County Hospital, Timișoara, Romania

²Department of Anesthesiology and Intensive Care, Clinical Emergency County Hospital, Timișoara, Romania

Abstract

Classically, infrarenal aortic exposure is achieved by xypho-pubic or xypho-infraumbilical laparotomy, in transperitoneal approach, or through a left abdominal incision, in retroperitoneal approach. The transperitoneal approach is associated with longer intestinal activity resumption time and incisional hernias on long term, due to intestinal extracavitary mobilization and long incision. These disadvantages disappear in laparoscopic approach, but this method is extremely laborious, requires an extended period for dissection, and elicits increased difficulty in performing the anastomosis on the aorta. The purpose of the study is to evaluate the infrarenal abdominal aorta approach through median minilaparotomy, a method that combines the excellent exposure of xypho-pubic incision with the low morbidity of laparoscopic approach. Between 07.01.2010 - 07.01.2011, we performed 37 revascularization surgeries in 36 patients with aorto-iliac occlusive disease (one patient required reintervention due to graft thrombosis), approaching the infrarenal aorta through median minilaparotomy. The sex distribution was 35 men and one woman. The average age was 61.1 years. There have been 25 aorto-bifemoral bypasses, 11 aorto-unifemoral bypasses, and one aorto-biiliac bypass. The mean aorta clamping time was 15 minutes. Average operating time was 150 minutes. We used 26 bifurcated Dacron prostheses and 11 linear ePTFE prostheses. The average intestinal activity resumption time was 32 hours. All patients included in the study were mobilized 24 hours after surgery. The average length of hospitalization was 7.7 days. 5 patients experienced complications during hospitalization and 3 patients suffered long term complications. Infrarenal abdominal aorta approach through median minilaparotomy is a viable alternative to conventional surgical techniques used in aortoiliac occlusive disease.

Key words: median minilaparotomy, abdominal aorta, bypass

Corresponding author: George V. Pătruț, PhD

Department of Vascular Surgery and Reconstructive Microsurgery,
Clinical Emergency County Hospital, Timișoara, Romania

E-mail: georgepatrut@yahoo.com