



Limb Graft Occlusion Following Endovascular Aneurysm Repair for Infrarenal Abdominal Aortic Aneurysm - Rotarex™ Rotational Excisional Atherectomy System

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ABSTRACT

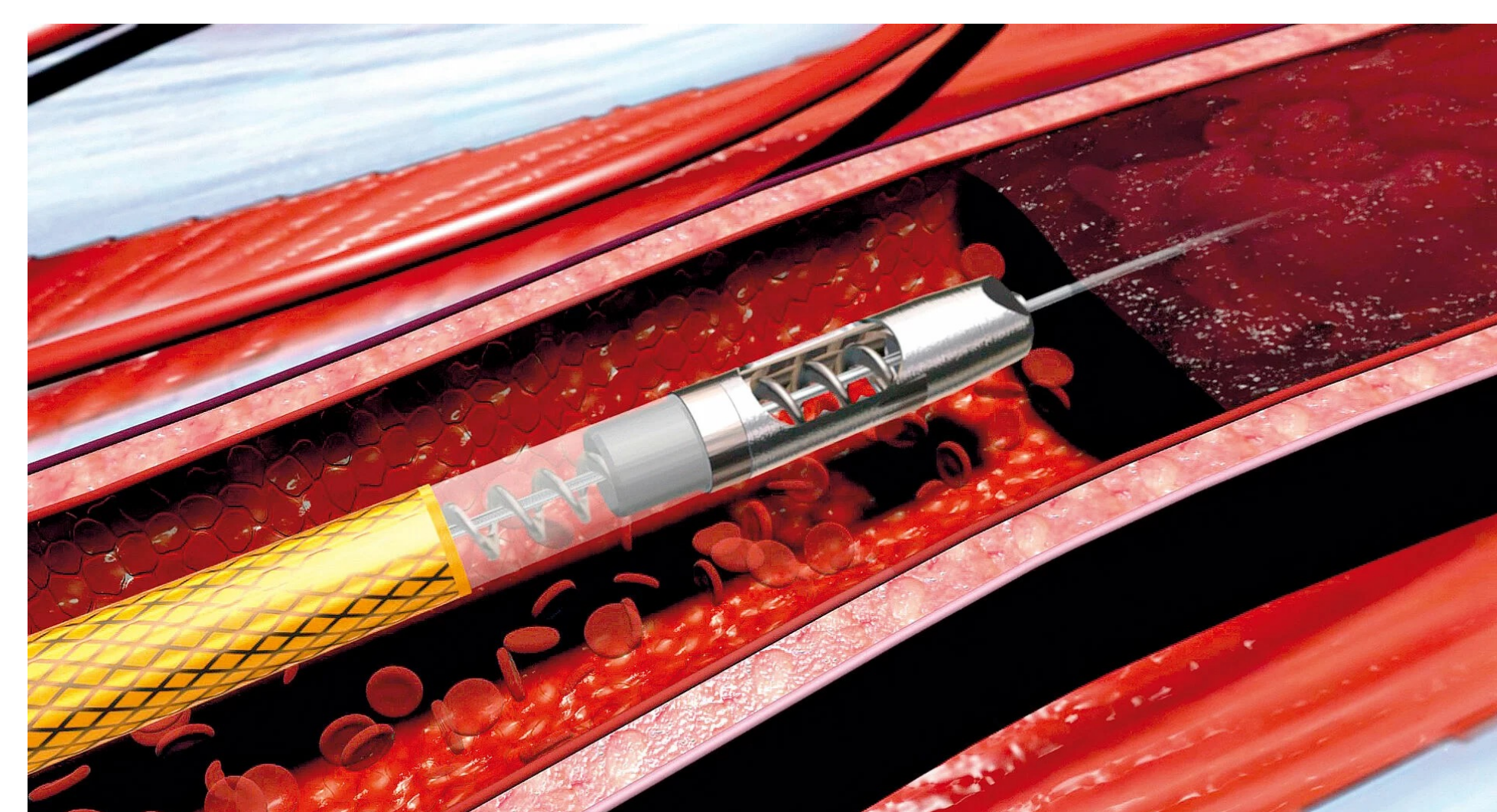
The rapid increase in the use of endovascular grafts to treat abdominal aortic aneurysm has inevitably increased the complications associated with the endovascular method, such as endoleaks or limb graft occlusion, which is a serious complication for the patient's health with the most frequent symptoms being either the appearance of ischemia of the limb or a restrictive type of intermittent claudication.

INTRODUCTION

Abdominal aortic aneurysm (AAA) is defined as a permanent and irreversible dilation of the abdominal aorta. Age, male sex, personal history of atherosclerotic cardiovascular disease, smoking and hypertension are all associated with the occurrence of AAA. Since the first stent graft system designed for endovascular aortic repair (EVAR) of AAA was approved by the US Food and Drug Administration in 1999, EVAR has been a major treatment for AAA. Complications such as rupture, endoleak, device migration and limb graft occlusion are usually found after EVAR

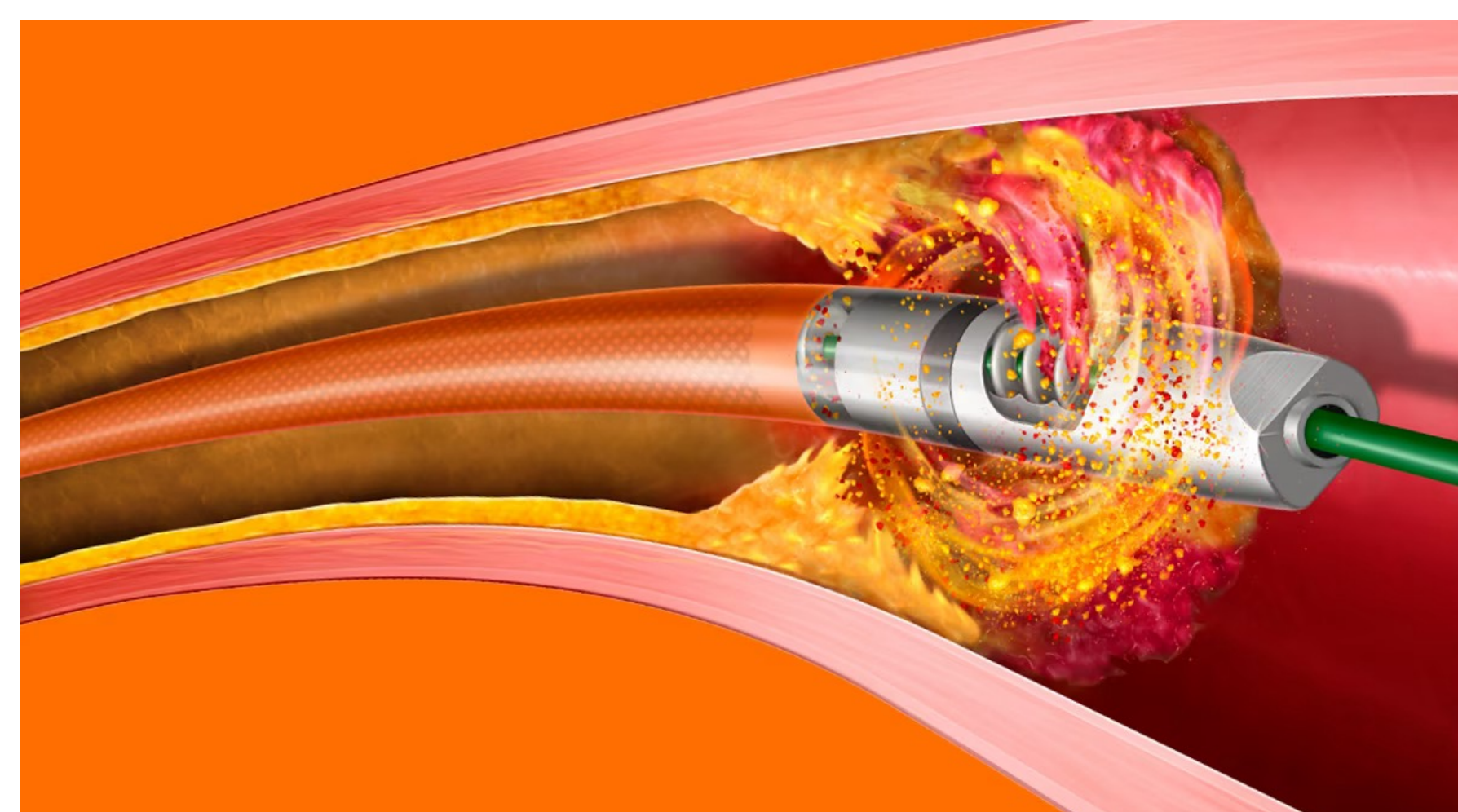
PURPOSE

The recent experience of the Vascular Surgery Clinic of the GNA "G.GENNIMATAS" with endograft limb occlusion after EVAR and the successful treatment with mechanical thrombectomy using the Rotarex™ device (Rotational Excisional Atherectomy System) in two patients in November 2022.



METHOD

A total of two (2) patients with endograft limb occlusion were treated in November 2022 and enrolled in the present study. Mechanical thrombectomy was initially performed using the Rotarex™ device, while the limb was then re-covered with stent grafts to ensure the patency of the iliac limbs. The GORE® VIABAHN® VBX Balloon Expandable Endoprosthesis (VBX Stent Graft) was chosen due to its flexibility and conformability. It is also the only stent graft with proven heparin bonding technology.



RESULTS

The technical success of the operation was evaluated as well as the patency of the iliac limbs both intraoperatively and one (1) month after the operation. Follow up CTA in both patients showed both iliac limbs and internal iliac arteries patent and the symptoms of intermittent claudication were fully reversed. No reintervention was needed afterwards.



CONCLUSION

Based on the international literature and the experience of the clinic, excellent results appear regarding the patency of the iliac limbs of the endografts after dealing with an occlusion of the endograft limb with the use of the Rotarex™ device without the occurrence of significant complications.



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