



Percutaneous Revascularization Could be A Feasible Option For Complex Aorto-Iliac Occlusive Disease With Fair One-year Outcome

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Aorto-iliac arterial occlusive disease (AIOD) is one of the commonest pattern of systemic atherosclerosis that often patients present with a spectrum of chronic symptoms from intermittent claudication to critical limb ischemia; endovascular therapies are becoming an attractive option for treatment even in complex aorto-iliac artery diseases, especially in patients with considerable risk for open surgery. Both short and long-term success make endovascular-first approach now is widely accepted for TASC A, B, and C lesions as first line treatment strategy.



- 55 Years old male patient, chronic heavy smoker with SI 30 pack-year history, IHD with EF 52%, COPD, ABIF bypass 5 years ago.
- With gangrenous patch at medial aspect of lt. foot with disarticulated 2nd toe in association of sever disabling claudication (Rutherford grade III cat. 5).
- Incisional ventral hernia repair with mesh infection.
- Duplex showed marked decrease of ABI Rt. 0.49 and Lt. 0.41

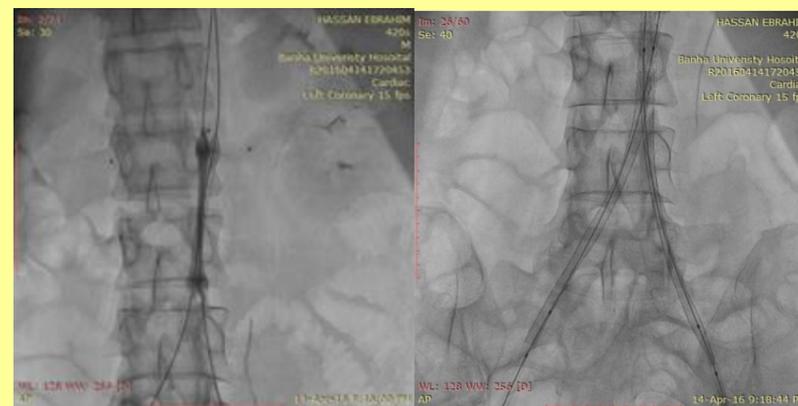


- CTA showed totally occluded aorto-bifemoral graft
- Infra-renal aortic occlusion in flush with renal arteries
- markedly attenuated tibial vessels

- Bilateral brachial access
- Bilateral retrograde femoral access
- Fluoroscopic guided Lt. Pedal sheathless access



- Bilateral renal arteries protection by selective cannulation and balloon inflation technique



- Stenting of the proximal aortic segment using balloon mounted stent graft
- Stenting of distal aorta and both iliac arteries with BMSES



- Completion angiogram
- Restoration of aorto-iliac perfusion
- Adequate renal perfusion
- Attenuated tibial vessel



- Completion angiogram with adequate opacification of tibial arteries
- Wound healing 4 months after procedure

Discussion: As aorto-iliac occlusions become longer and more complex, the challenges and potential risks of endovascular intervention can evolve beyond those of the infra-inguinal territory. According to TASC II, surgery should be the treatment of choice for infra-renal occlusions (D category) due to more durable outcomes. However, significant perioperative mortality and morbidity have been described. Many patients with PAOD may be unsuitable candidates for this major operation; these patients may even pose high risk for less-invasive, extra-anatomical bypass. In experienced hands, even challenging TASC II C and D lesions can be treated successfully in more than 95 % of the cases.

Results and conclusion: This case is one of our series that assess the feasibility of endovascular therapy for TASC D aorto-iliac lesions treated by endovascular therapy with 95.5% technical success rate in crossing TASC D aorto-iliac occlusion with immediate angiographic success 91%. 12 months' primary patency rate was 85% for TASC D lesions. Stent grafts had significantly higher 1-year patency rate 91.7% in comparison to bare metal stent 75%. Utilizing more than one access with antegrade crossing the lesion through brachial access was the paramount for technical success.