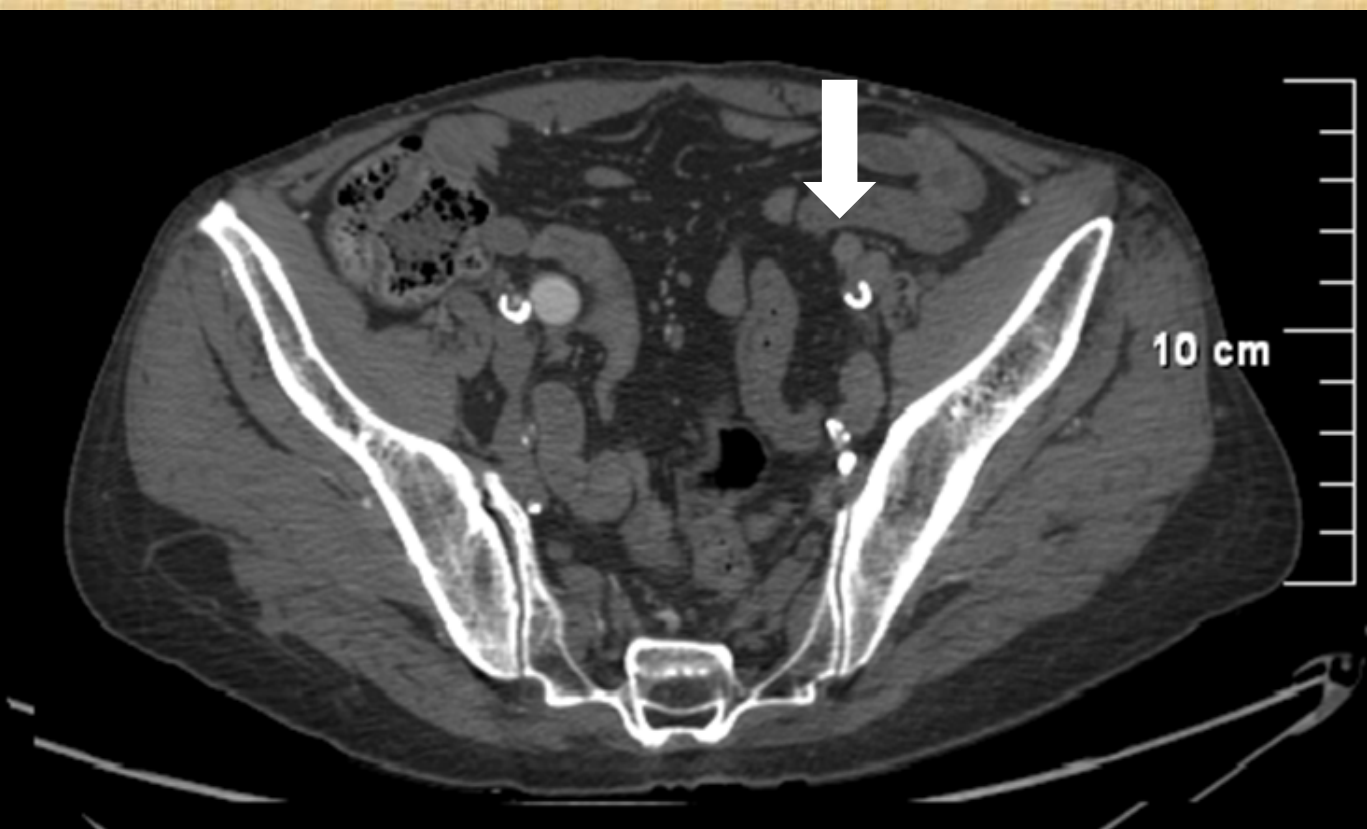


Recanalization Of Chronically Occluded Aorto-femoral Dacron Grafts - Techniques And Results

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Background: Thrombosis is the most frequent late complication of aorto-femoral bypass grafting. Timely thrombectomy combined with runoff procedure usually provides graft salvage. In rare cases patients are presented with chronic graft occlusion (graft thrombosis has undergone organization and fibrotic transformation) and redo aorto-femoral or extraanatomic bypass is required.

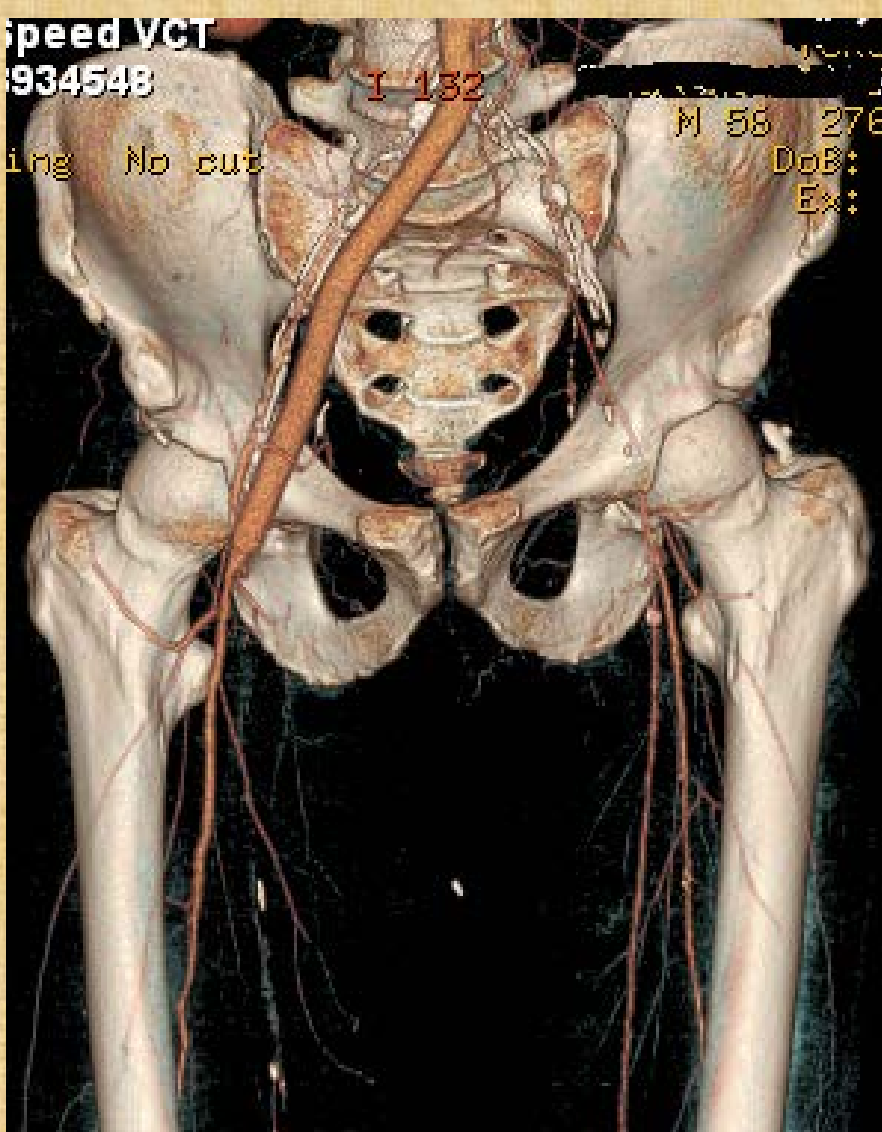
Results: all four grafts were successfully recanalized without any complications. Stents were used in areas of the graft with inadequate lumen after balloon angioplasty. All the grafts remained patent for the follow-up period.



Aorto-bifemoral graft with patent right branch(11mm) and chronic occlusion of the left one(6mm)- white arrow

Patients & Methods: From 08.2009. to 11.2014. four patients with chronically occluded grafts in aorto-femoral region, with documented or suspected graft thrombosis for over one year, were treated with a hybrid technique.

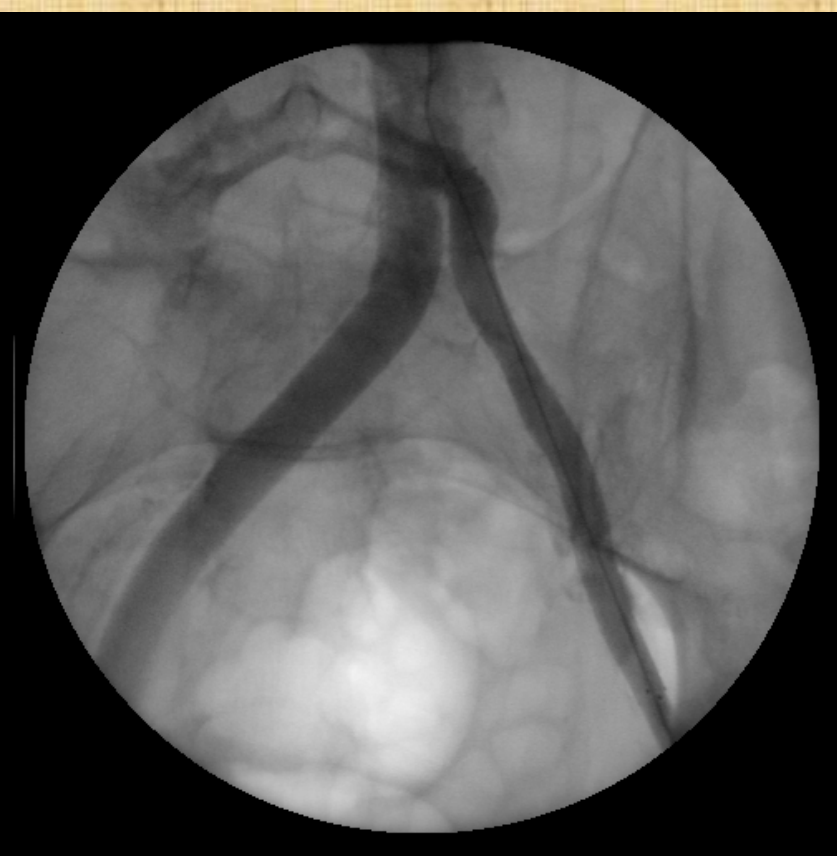
Patient No	sex	Age	Clinical stage	Graft	Time from bypass (y)	Time from occlusion(m)	Successful recanalization	N and type of stents	Distal reconstruction	Follow up (months)
1	M	57	IV	Ao-bifem	2	? >12	Yes	1- SES	Patch	72
2	M	23	III	Ao-bifem	5	13	Yes	2- SES	Patch	21
3	M	65	IV	Ilio-fem	8	24	Yes	1- SES	Interposition	13
4	F	58	IV	Ilio-fem	1.2	12	Yes	2- BES+SES	Interposition	12



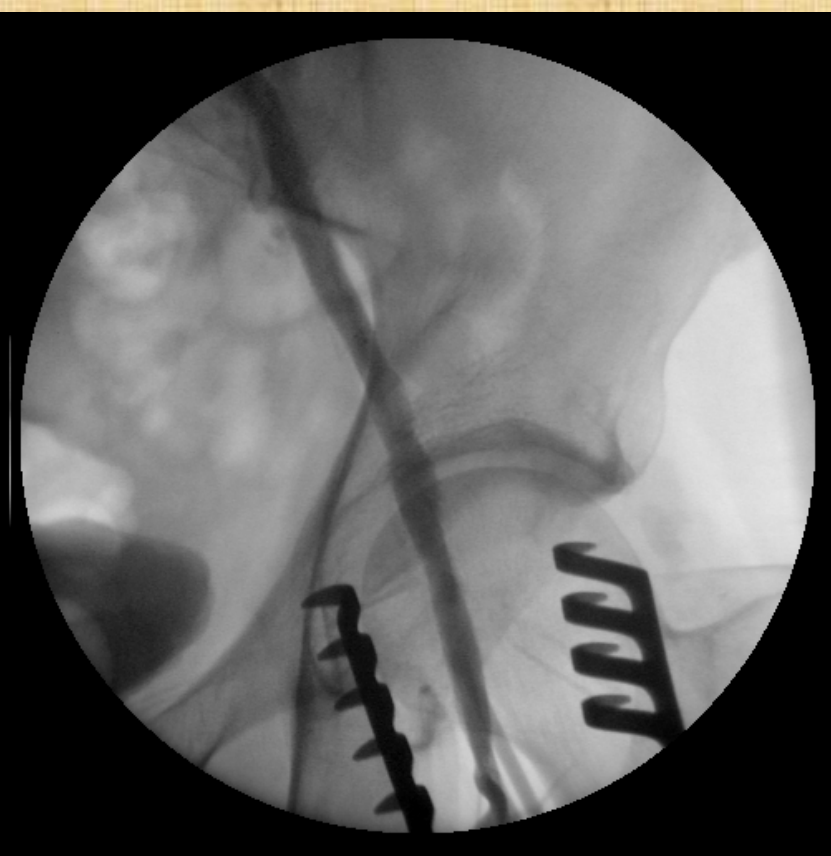
Case1



post 7 mm POBA



post 10x100mm SES



patch plasty



3-year follow-up

Discussion: The chronic dacron graft occlusion is a specific problem:

- The graft is non-thrombotic but fibrotic and shrunken
- It can be successfully recanalized with standard endovascular tools
- Open femoral access allows correction of the outflow problem, which is most often the reason for the graft thrombosis

Balloon angioplasty

Technique

Open femoral access under loco-regional anesthesia

Direct insertion of a wire and balloon catheter through a small incision in the graft

Angioplasty with increasing balloon diameter with or without stenting

Outflow procedure- patch angioplasty or graft interposition to CFA or DFA

Conclusion: Recanalization of a chronically occluded synthetic grafts in aorto-femoral region is feasible and is an alternative to either more invasive redo surgery or extraanatomic bypass. Longer follow-up of more patients and reproducibility of the results are needed.

References

1. Soulen MC, Bonn J, Shapiro MJ. Recanalization of an occluded aortoiliac bypass graft with Palmaz stents. J Vasc Interv Radiol. 1991 Nov;2(4):497-501
- 2.Kondo Y, Dardik A, Muto A, Nishibe M, Nishibe T. Primary stent placement for late complete occlusion after aortoiliac reconstructive surgery: report of a case. Surg Today. 2009;39(5):418-20