



Acute Limb Ischemia after Aortic Stent Graft for the treatment of PAU type of Para-renal AAA

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Abdominal Aortic Aneurysm

- Required intervention when diameter is critical or the type of AAA is vulnerable (Penetrating Atherosclerotic Ulcer/PAU)
- Access (diameter and tortuosity of ilio-femoral artery) and relations with aortic branch is critical in deciding the type of intervention (surgical vs. stent graft)

Current Practice

AAA Repair With Stent Grafts

82% of Endoluminal AAA Repair in US is still performed with General, 16% with Regional Anesthesia & surgical FA access and repair



Device	Total complications	Vascular complications
*AneuRx (n=190)	32 (16.8%)	17 (8.9%)
**Zenith (n=200)	40 (20%)	22 (11%)
**Excluder (n=801)	153 (19.1%)	43 (5.3%)

*Zarins et al, J Vasc Surg 1999;29:292-308,**Greenberg et al. J Vasc Surg 2004; 39:1209-18



SMALL PROFILE DELIVERY SYSTEM



- Easier to introduce
- Negotiable to vessel tortousity (iliacs)
- Less likely to arterial trauma
- No need surgical exposure (arteriotomi)
- No need general anesthesia



Percutaneous Separate Stent-Graft

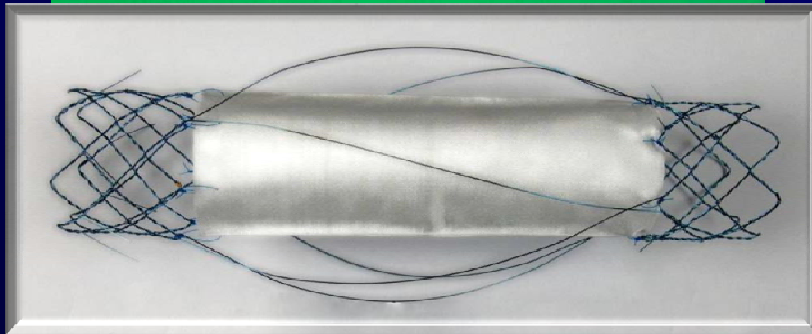


Introducer Size

12 F



10 F

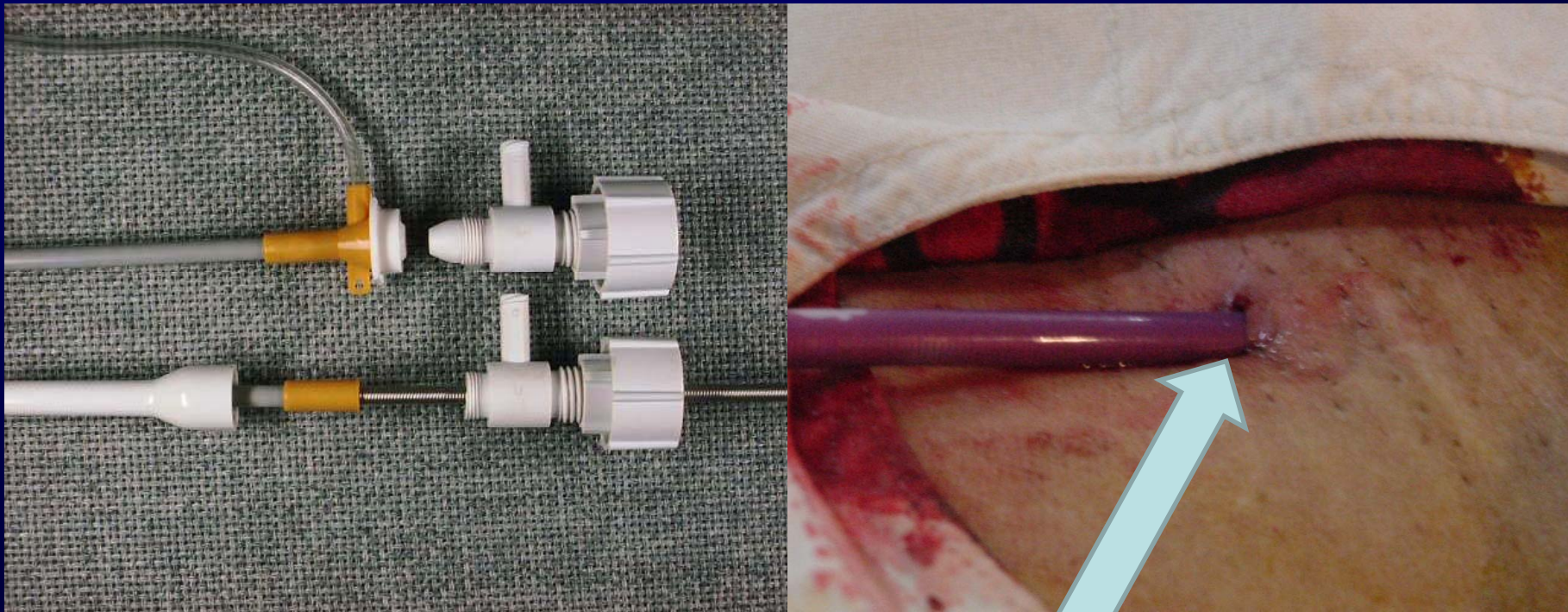


Low profile - no need to surgical cut down

No migration - no need to lower the Blood Pressure during deployment

Radiology 2001; 220:533-539

Introductory system for new design

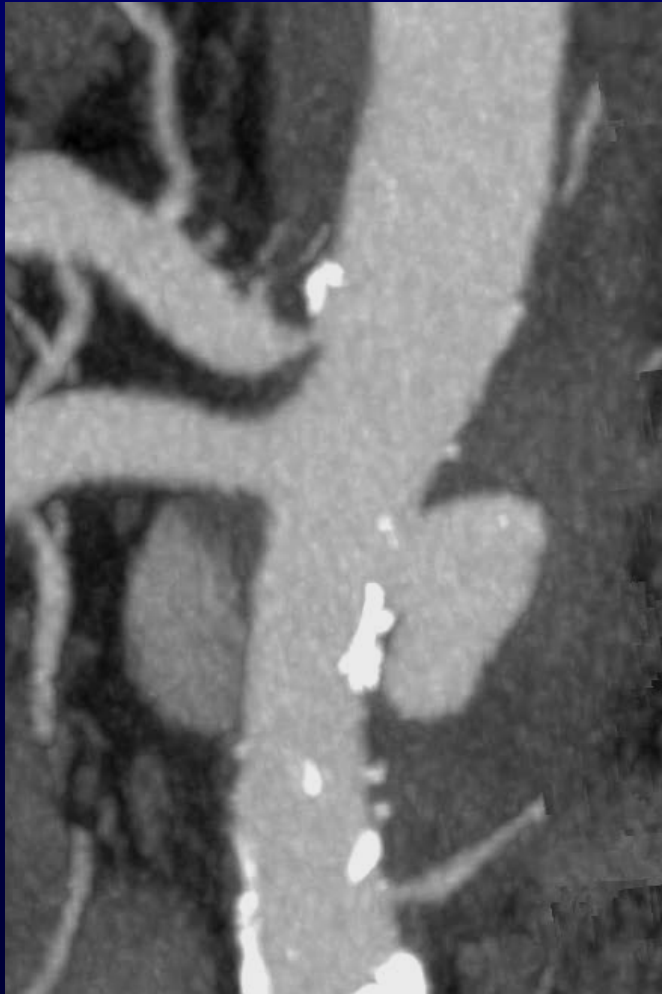


12 F System without arteriotomy

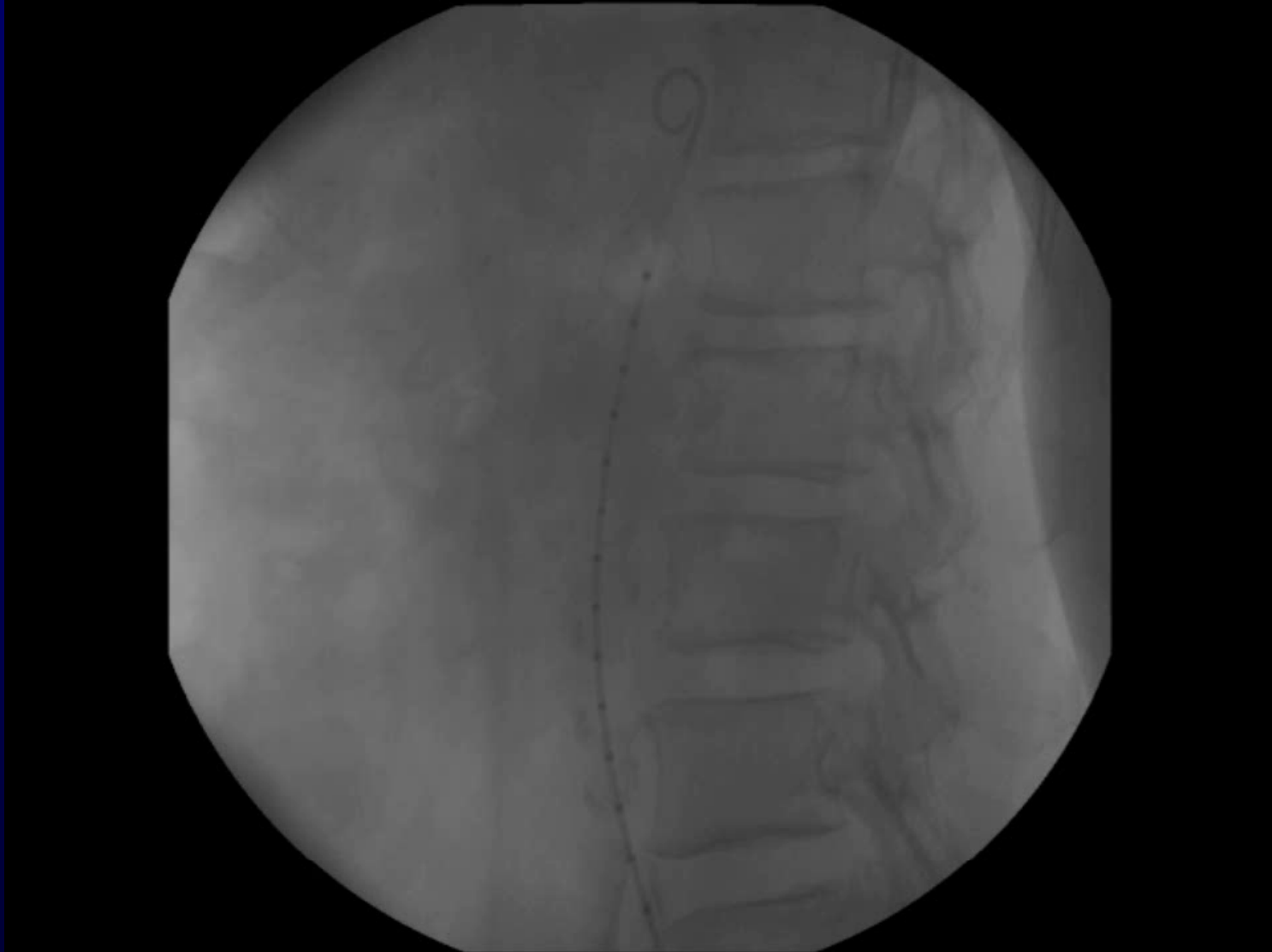
Mr. TSK

- 67 years of age
- Hypertensive, Diabetic, Smoker
- Penetrating Atherosclerotic Ulcer AAA para-renal artery
- Refused surgery
- Customized aortic stent-graft

CT Scan - Customized Stent-graft



Customized Aortic Stent Graft



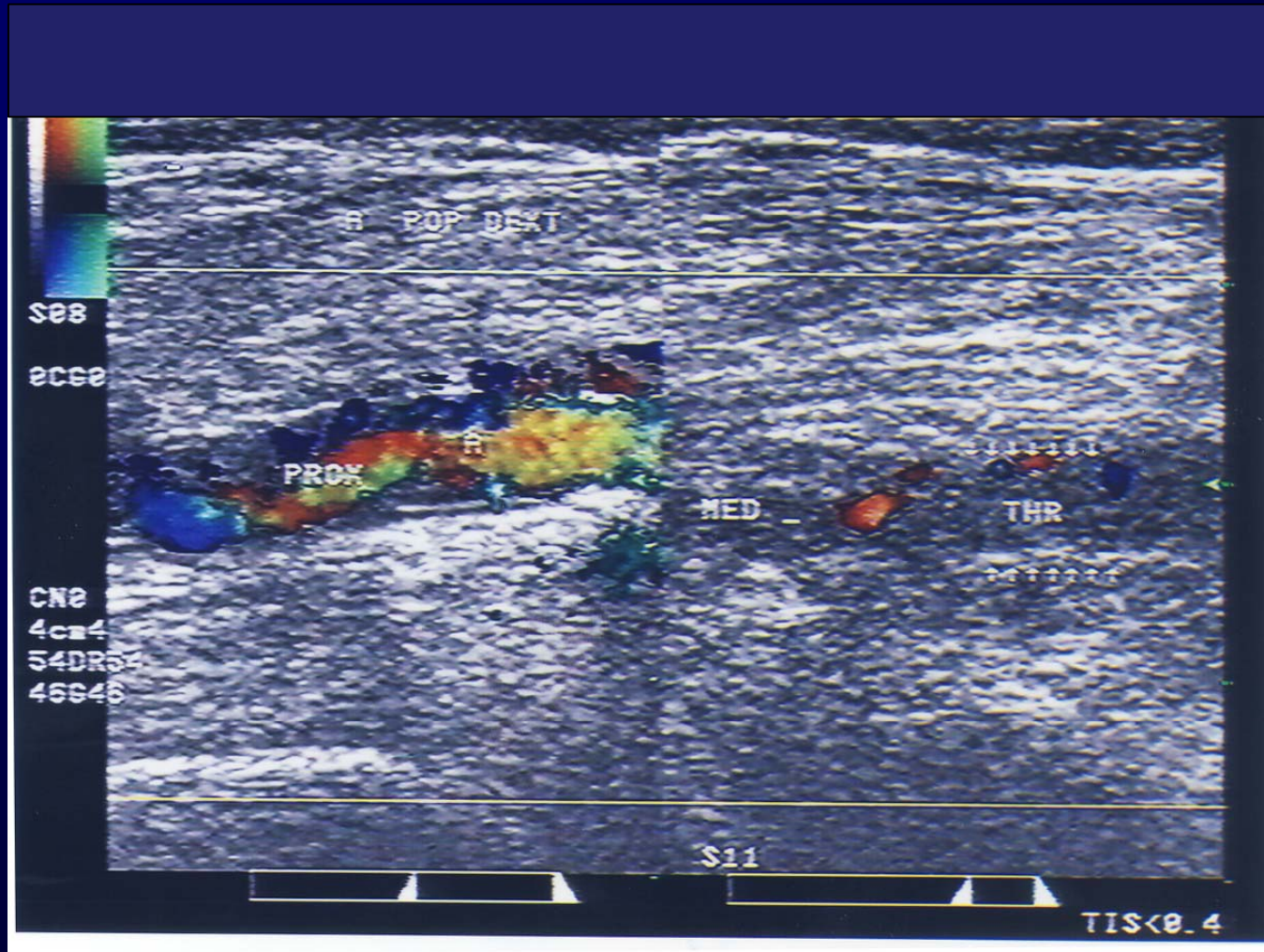
Post Procedural Management

- Manual compression
- Closure device not available

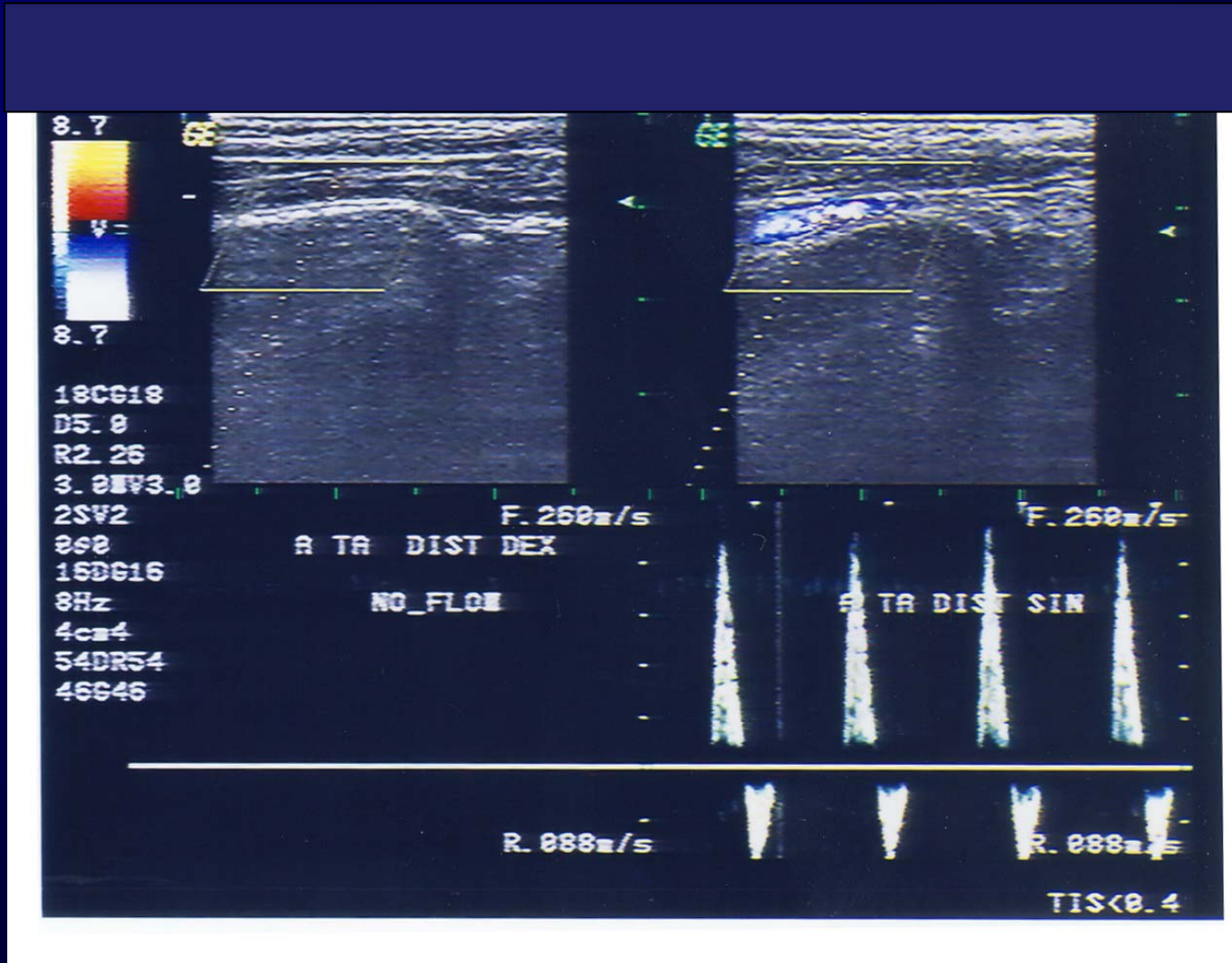
24 hours after procedure

- Leg pain
- Non-palpable anterior and posterior tibial artery
- Undetectable pulse on Duplex sonography
- Treatment:
 - Bolus heparin
 - Maintenance heparin
 - Clopidogrel 2 x 75 mg
 - analgetic

Duplex Sonography



Duplex Sonography



What should we do?

- Surgical Embolectomy?
- Intra-arterial Thrombolysis?
- Rheolytic Thrombectomy?

Arteriography



Angiojet-thrombosuction



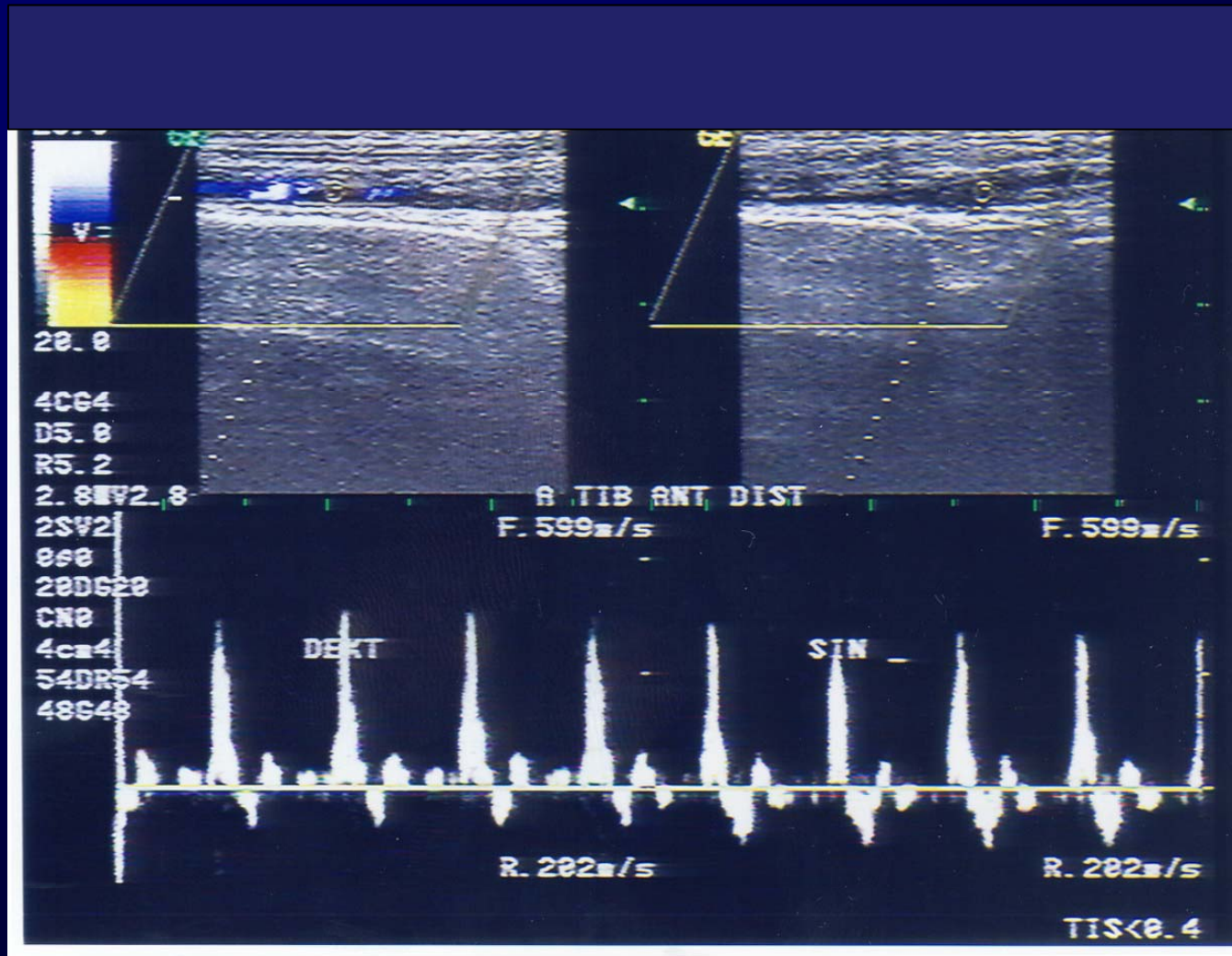
Angiojet-thrombosuction



Angiojet-thrombosuction



Duplex Sonography



Take Home Message

- Although Stent graft with smaller delivery profile system is safer, it is not completely free of vascular complication
- SFA thrombus complication can be avoided by using proper closure device
- Angiojet is the device of choice in patients with large thrombus burden vessel