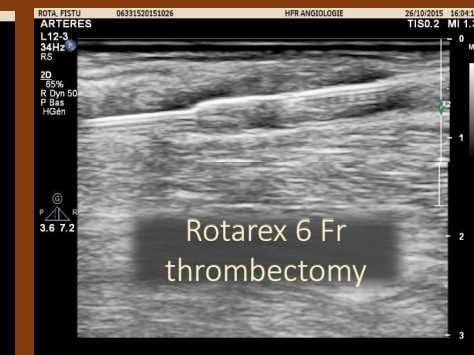
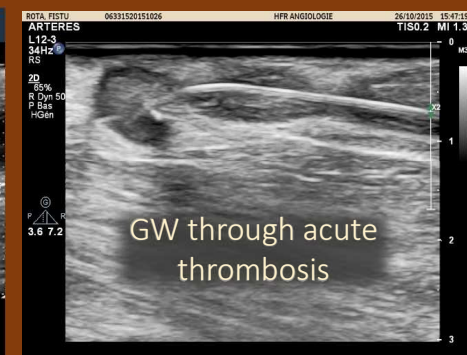
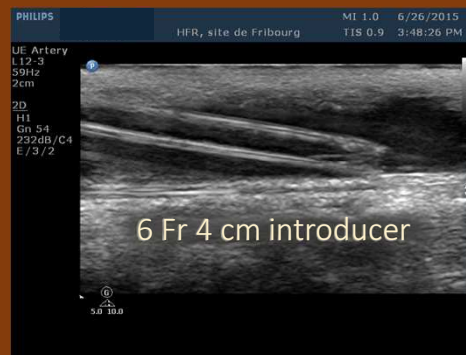


Dialysis access angioplasty / stenting / thrombectomy under sonographic guidance (without fluoroscopy): a pilot study

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Standard practice:

Cathlab
Fluoroscopy
Contrast medium
Personal (3 to 4)
Ambulatory bed

Rational for ultrasound guidance:

Image resolution
Measure of flow and vessel size

No irradiation, No contrast
Simple examination room
Reduced personal (2)

Inclusion criteria :

patient with any type of dialyse access, requiring endovascular PTA, stenting, cutting B, thrombectomy, endoprosthesis, sealing of pseudoA

Exclusion criteria:

Suspected or known central vein stenosis (sub-clavian vein or proximal)

Inclusions: current status

From 09/2011 to 12/2015
55 interventions (25 patients)
Age 64 ± 12 (mean \pm SD)
Mean 1.5 (1 to 3) stenosis/patient



PTA after Rotarex thrombectomy

Results

Primary success: 94.5 %
No severe adverse event/ no pain/ no discomfort
Mean flow before: 458 ± 251 ml/min
after: 828 ± 258 ml/min
PSV of the most severe stenosis:
before: 6,1 m/s
after: 3,2 m/s
Survival without any intervention:
median 12 months
mean 15 months
Next intervention: US-guided in 86 %

Conclusions:

US-Guided fistula interventions are:

Feasible, safe and efficient
Much more simple and comfortable

limitations:

Interventionists must be trained with US
Patients with central venous stenosis must be excluded

