IMPROVING EVAR OUTCOME FROM PLANNING TO LIVE USING NEW GENERATION OF AZURION PLATFORM

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Disclosure

Speaker name:
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I have the following potential conflicts of interest to report:

Research support of Philips medical,
Independent research grant W.L. Gore & Associates
Our hybrid room, a Philips Azurion 2.1 with FlexMove
(Complex) EVAR workflow

Procedure Planning

Procedure

Final check

New Generation of Azurion Platform
Procedure

AVA on Flexvision

VesselNavigator

SmartCT

Marker tool

Quick measurement

US integration

DoseAware

Full APC
Pt. V, female, 70 years

Medical history: deep venous thrombosis 2006 (left), 2016 lung carcinoma

Previous smoker

2017: BEVAR (4-branch) because of Crawford TII thoraco-abdominal aortic aneurysm 69 mm

Problem: type 3 endoleak in 2020, disconnection of SMA stent graft
Procedure Planning with Advanced Vessel Analysis (AVA)
Plan is to reline the SMA with Viabahn BX 8mm from femoral access
Intuitive workflow

Fully automated segmentation, vessel centerlines, wall contours

Planning everywhere

Integration with Azurion
Intuitive workflow from planning to surgery

Integration of all video sources needed during the procedure

VesselNavigator

SmartCT acquisition guidance
Procedure Planning with Advanced Vessel Analysis

Advantages
- Easy to use: fully automated segmentation, vessel centerlines, lumen and wall contours and stent size selection.
- Planning everywhere
- Integration with Azurion
Recall AVA planning to the hybrid OR

AVA integration: Check AVA measurements
Using SMART-CT direct postoperatively

• For evaluation of the procedure: kinking, endoleaks
• Arterial and late venous phase
• No need for the patient to return for CTA
Final check
Use SMART-CT platform Pre-operatively

• When during the procedure unexpected access problems occur → detection of problems

• Planned, using the SMART-CT for **LIVE GUIDANCE** and **LIVE MEASUREMENTS** on the hybrid OR
Example: Occluded right common iliac artery + stenoses leftside: kissing balloon technique
Navigation on SMART-CT
Determine diameter of stent graft needed on SMART-CT
Overlay on live X-ray + SMART-CT
How can we use it?

- Planned CT on the hybrid room
  - For specific branch cases → no earlier CTA necessary
- SMART CT use to identify or detect endoleaks on the hybrid room
- Use SMART CT roadmap to treat the endoleaks or reline the branch
- Use SMART CT for control after procedure of complex vascular procedures (no CTA follow-up necessary)
Advantages of Azurion platform supporting better outcomes

Better visualization
Accurate planning, navigation, confirmation
Reduced contrast and radiation
Ease of use

Better clinical decision making
Staff and patient safety
Focus on procedure/patient

Reduction of complications