3D Simulation in the hybrid OR
- just a gimmick or a valuable tool

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Disclosure

Speaker name:

I have the following potential conflicts of interest to report:
- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

I do not have any potential conflict of interest
(n=39) the difference of the postknowledge test between the 2D and 3D groups was statistically significant (Wilcoxon rank-sum, P = 0.0033).
3D Reconstruction Tools in OR (MRI)

**brainlab 3D StereoView**
- PACS-access
- Touch-screen
- quick reconstruction (sec)
- VR glasses
- short markers possible (additional software)
- big screen on the wall

**philips - VesselNavigator**
- PACS-access
- quick reconstruction (mins)
- markers+label possible
- positions of C-Arm storable before the operation
- big screen from ceiling
philips vesselnavigator
phils vesselnavigator
brainlab DIGITAL O.R.

DIGITAL O.R.
TURNING DATA INTO BETTER TREATMENTS
3D Simulation in hybrid OR
Examples carotid-subclavian bypass
43mm Aneurysm internal iliac artery
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Advance of 3D

- Better visualization
- Better understanding of complex anatomy – can reduce the operation time (less unnecessary X-rays)
- Preoperative planning of complex interventions – can reduce the amount of contrast media (less unnecessary angiographies) or can avoid reoperations
- Store preoperative positions of the c-arm (this reduces the use of contrast media and radiation)
• Every realistic possibility to shorten the operation-time, to reduce the use of contrast media and radiation should be used

• The brainlab or philips 3D-Software is easy to use and can help to reduce surgery time

• Clinical studies are necessary to proof these assumptions, but for us, the 3D Simulations are a valuable tool
Save the date – MAC 4.-6.12.2019

Thank you!
Examples

• Relationship between carotid and subclavian artery before transposition

• Size and dimension of intraabdominal
infected hematoma peri truncal