A modern HYBRID-Room

Your partner to reduce radiation and protect your patient’s kidneys

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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
2005 ...

- More security
- Efficient dose regulation
- Lower contrast load
2007 ... a Hybrid Room ... a new world

- Xray protection
- Anesthesia equipment
- OR lamps
- Integrated Table
- Sterile environment
- Monitors
- Robotic C-Arm
Radiation and radiation dose reduction are arguably the most controversial topics in medical imaging today.
A long term strategy to reduce dose

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Pulsed Fluoroscopy

* With 7.5 pps

Acquisition

Low dose acquisition

Courtesy Siemens
CAREvision

Dose reduction up to 75%

- Low frequencies to meet individual dose-saving targets
- Below 10 p/s down to 0.5 p/s

CAREvision 75%
CAREposition

- CAREposition
  Patient positioning without fluoroscopy while moving the table or moving the C-arm

Dose reduction up to 5%
CAREprofile

- Radiation-free adjustment of collimators
- Radiation-free semitransparent filter parameter setting

Dose reduction up to 9%
Low Dose Acquisition

- Low dose protocols
- Reduces radiation during acquisition
- Can be selected from the footswitch

Dose reduction up to 67%
Operating room (~83m²)

Control room

Technical room
Bolus-chase & Peristepping
Low Dose syngo DynaCT

- 3D imaging for especially radiosensitive patients
- Collect the information needed
- Reduced dose in comparison to regular 3D protocols
- 5 sec protocol at 0.1 μGy/frame instead of 0.36 μGy/frame

Dose reduction up to 72%
Live Patient Dose Monitoring
CAREreport: Dose Reporting

• Features
  – CAREreport provides the possibility to record dose details for each irradiation event as a DICOM object
  – One DICOM Dose Structured Report object is created at the end of each procedure step
  – CAREreport is the basis for CARE Analytics

• Benefits
  – Enhanced in-house dose reporting
  – Prepares for future legal requirements
3D imaging will change the world ...

... our daily world changes today once we become good friends with our C-arm and ... our patients will grateful for that.
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