

The Multicentre DISCHARGE Trial Pilot Study: Image quality and Protocol Adherence Results

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Topic

- Purpose
- Material and Methods
- Results CT
- Results ICA
- Limitations
- Take Home Message

Purpose

- Protocol Adherence
- Error Analysis
- Image Quality analysis

Material and Methods

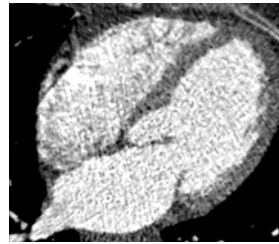
226 cases were reviewed:

- 150 Cardiac-CT:
 - Protocol adherence (10 steps guide)
 - IQ analysis
- 76 ICA
 - Protocol adherence (general recommendation)

Deviation degree	Example
Critical/Red	Known CAD, missing lung recon
Major/Orange	Incorrect slice increment or slice thickness in CTA
Minor/Yellow	Missing IR recon
No deviation/Green	

Results CT

	Dataset	Number and percentage	
NDX	First cases sent	21.4%, 15 of 70	Literature 8%
	Final accepted	12%, 9 of 75	

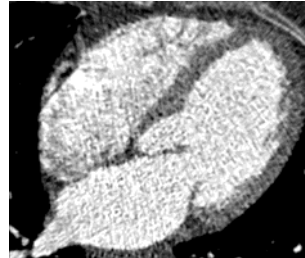


Results CT

	Dataset	Number and percentage	
High quality cases	First cases sent	24,3%, 17 of 70	p <0,05
	Final accepted	77,3%, 58 of 75	

Results CT

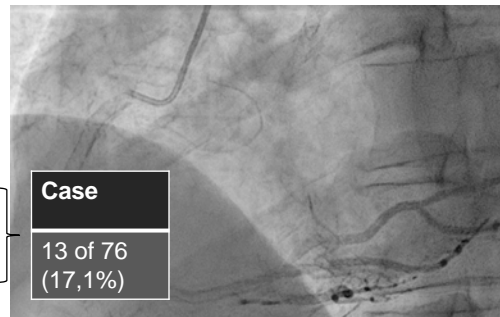
	General dataset	Literature
Parameters	Value (HU)	Value (HU)
SNR	18.1±7.0	10.47 ± 3.29
CNR	14.6±5.9	8.33
Signal to general noise ratio	17.6±9.3	9.4 ± 3.0
Qualitative analysis	3.7	3.75



Tumur O et al, JMIR, 2013
 Feger S et al, PLOS one, 2015
 Tatsugami et al, BRJR, 2012

Results ICA

	Parameters	Number and percentage
Exclusion Criteria	CABG	1 of 76 (1,3%)
	Stent	1 of 76 (1,3%)
Projection	Left (n 4)	6 of 76 (7,9%)
	Right (n 2)	9 of 76 (11,8%)



Limitations

- Large differences in terms of **generation** and **rows**
- **Difficult to fit** in the 10-steps guide into the routine protocol
- Only a **subset** of the pilot study patients was transferred to the core lab for review.

Take Home Message

- Follow **the 10 steps guide to perform a Cardiac-CT**
- Follow **general recommendation to perform a ICA**
- **Great improvement in adherence!!**



Thank you for your attention



Any questions?

