



Revolution ACT - Clinical gallery

April 2017

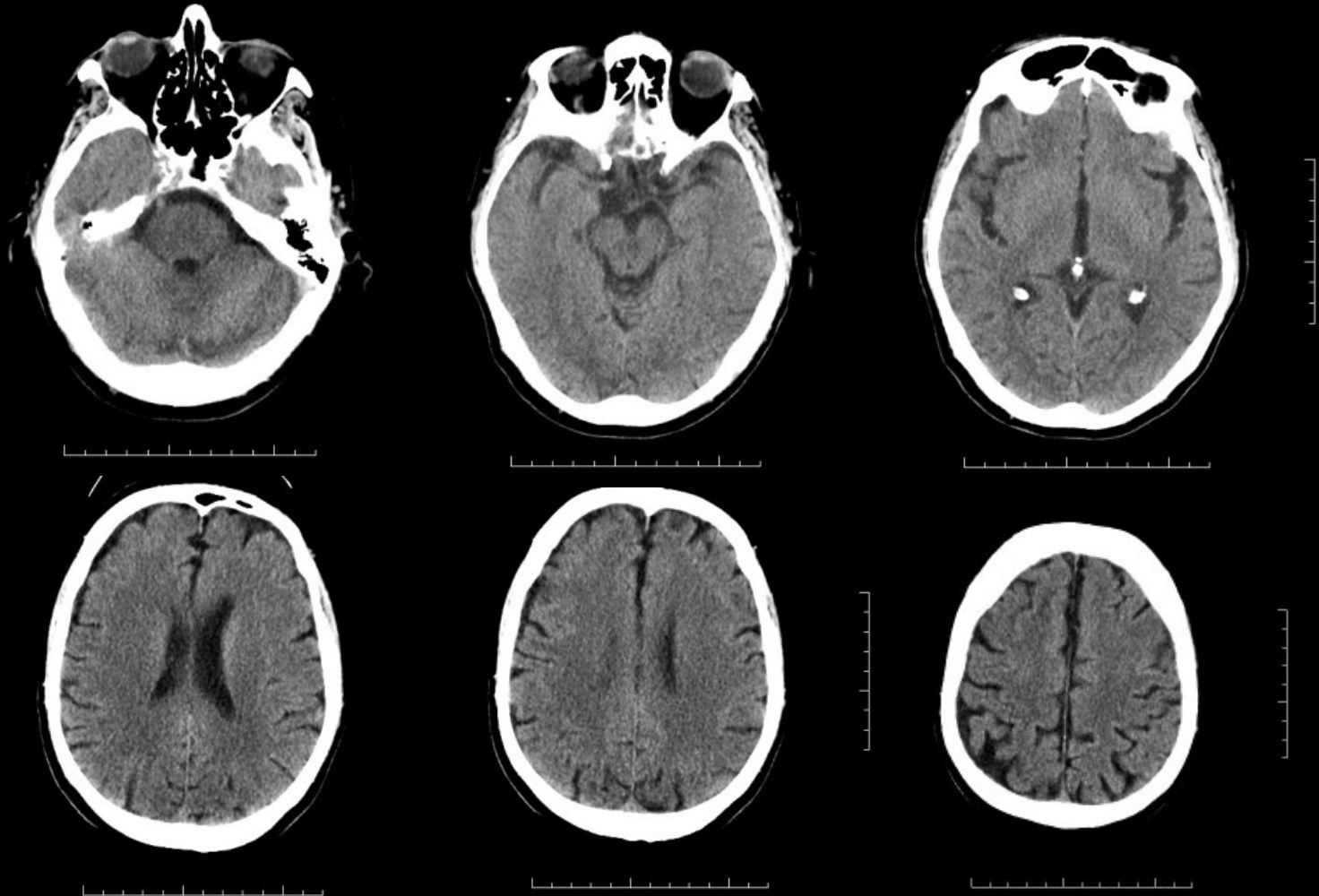
Imagination at work.

Neuro



Excellent low-contrast detectability

Scan type	Helical
Rotation time, s	1.0
kV	120
mA (Smart mA)	200
Slice mm	1,25
(recon 2.5mm)	
Noise Index	5,2
ASiR %	40
Kernel	Standard
CTDIvol, mGy	43,88
DLP, mGy-cm	764,08
Eff. Dose, mSv ¹	1.7

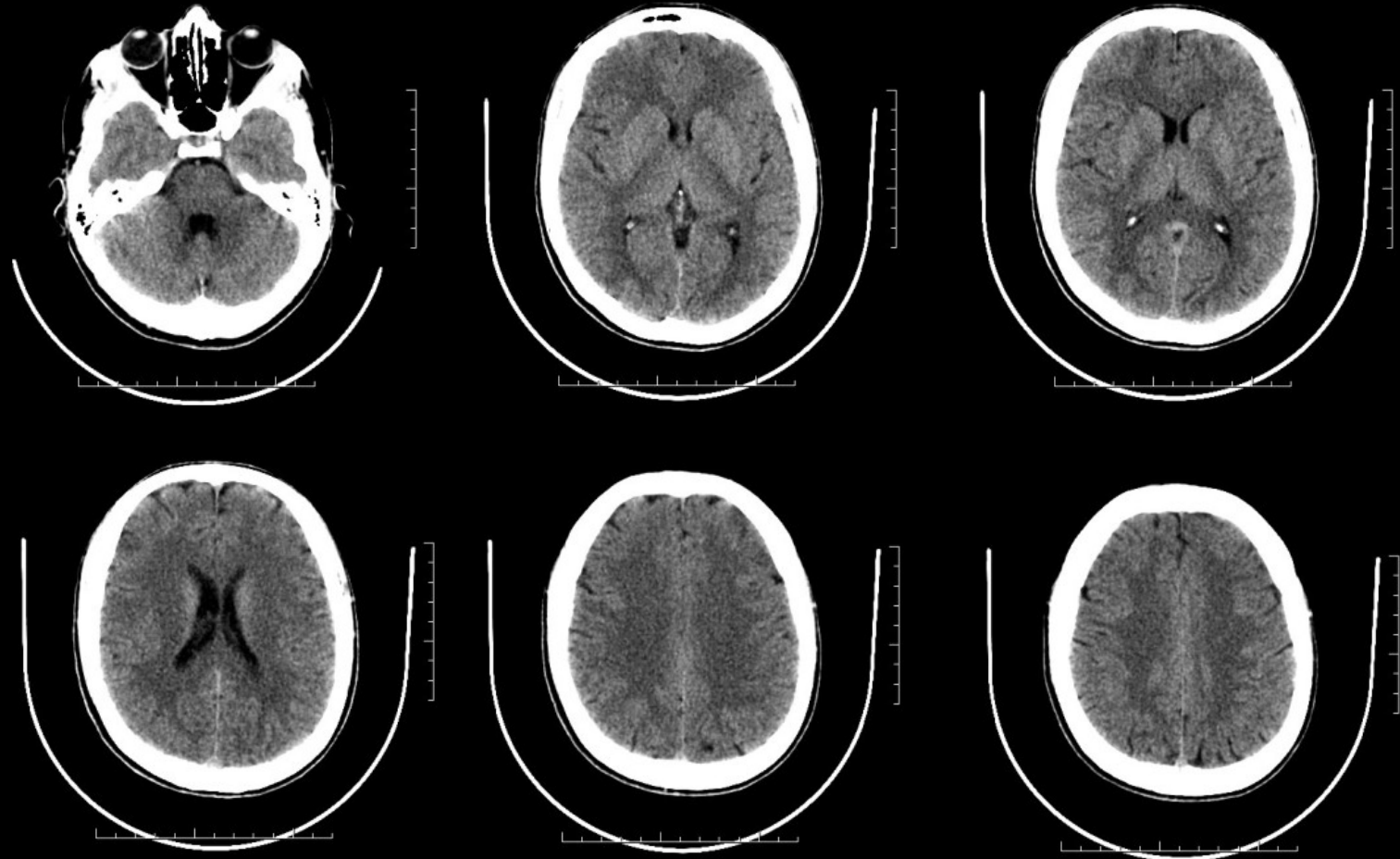


1. Obtained using a head conversion factor of 0.0023*DLP

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Low-dose head exam without contrast

Scan type	Helical
Rotation time, s	1.0
kV	120
mA (Smart mA)	174-200
Slice mm	1,25
Noise Index	5,2
ASiR %	50
Kernel	Standard
CTDIvol, mGy	39,86
DLP, mGy-cm	649,32
Eff. Dose, mSv ¹	1.49

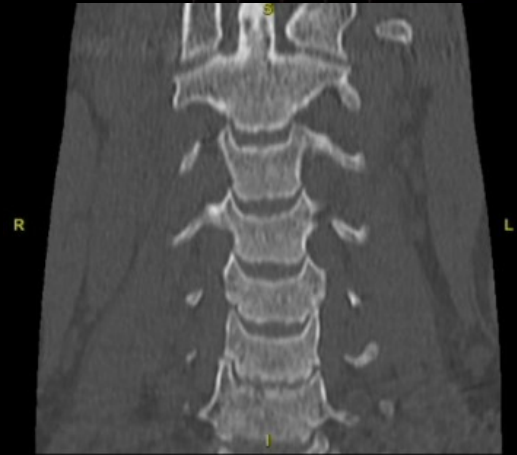
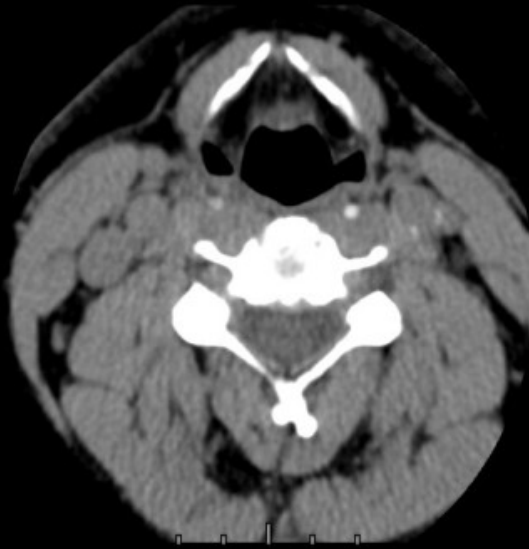


1. Obtained using a head conversion factor of 0.0023*DLP

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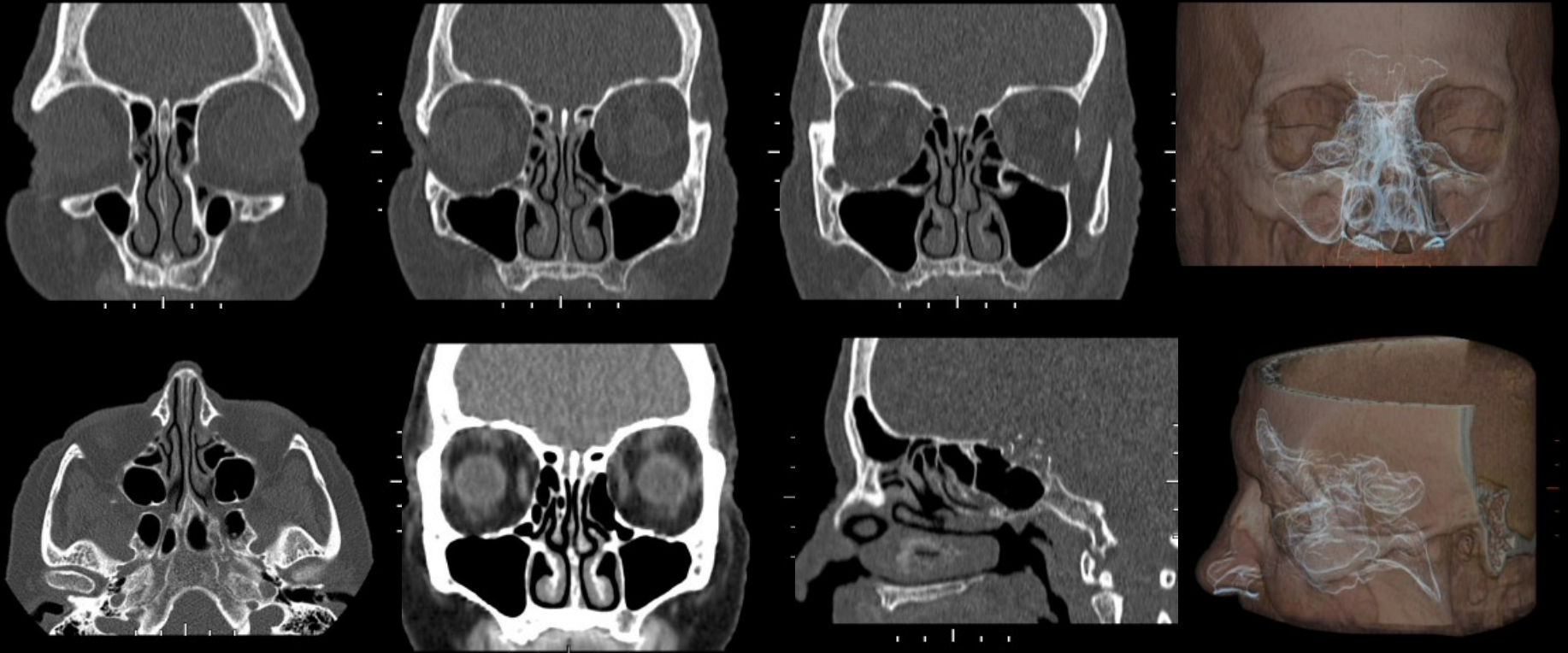
Cervical spine

Scan type	Helical
Rotation time, s	1.0
kV	120
mA (Smart mA)	50-200
Slice mm	1,25
Noise Index	18
ASiR %	50
Kernel	Standard
CTDIvol, mGy	11,5
DLP, mGy-cm	165,71
Eff. Dose, mSv ¹	0,89 mSv



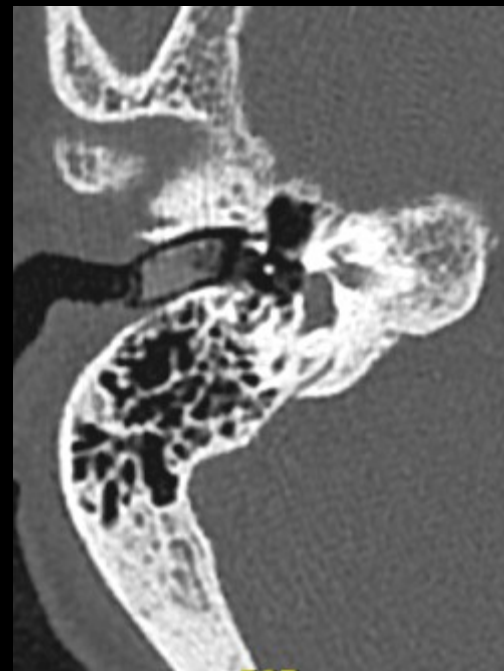
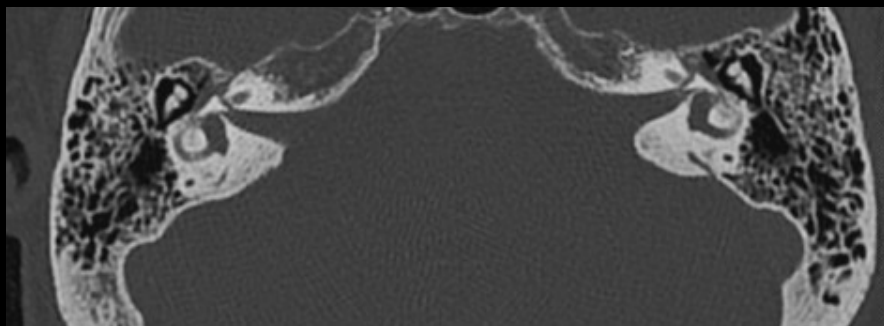
Sinuses

Scan type	Helical
Rotation time, s	1.0
kV	100
mA	30
Slice mm	1,25
ASiR %	20
Kernel	Bone+
CTDIvol, mGy	4,26
DLP, mGy-cm	49,23
Eff. Dose, mSv ¹	0,11



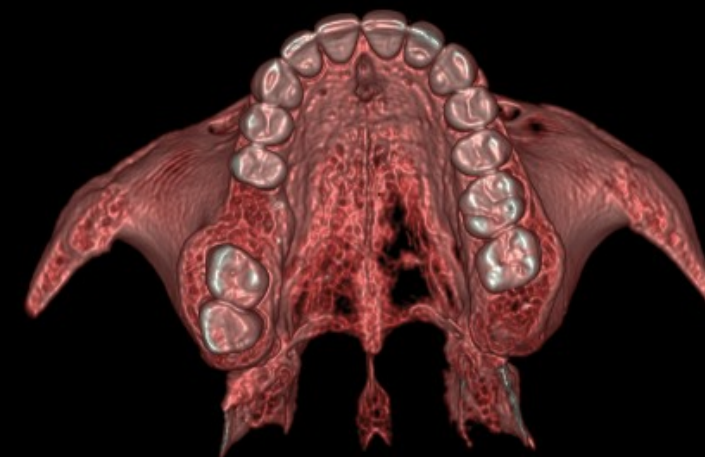
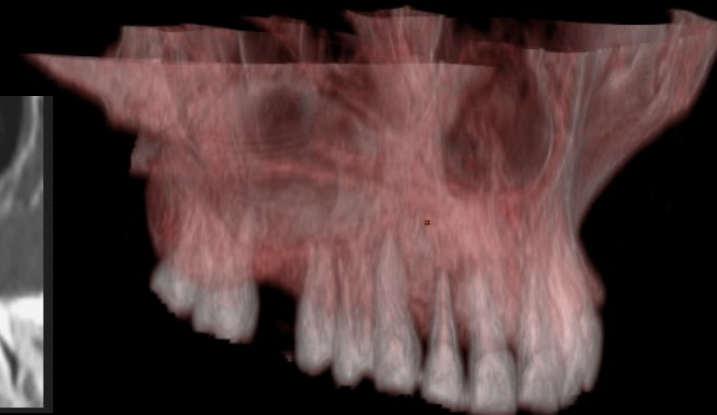
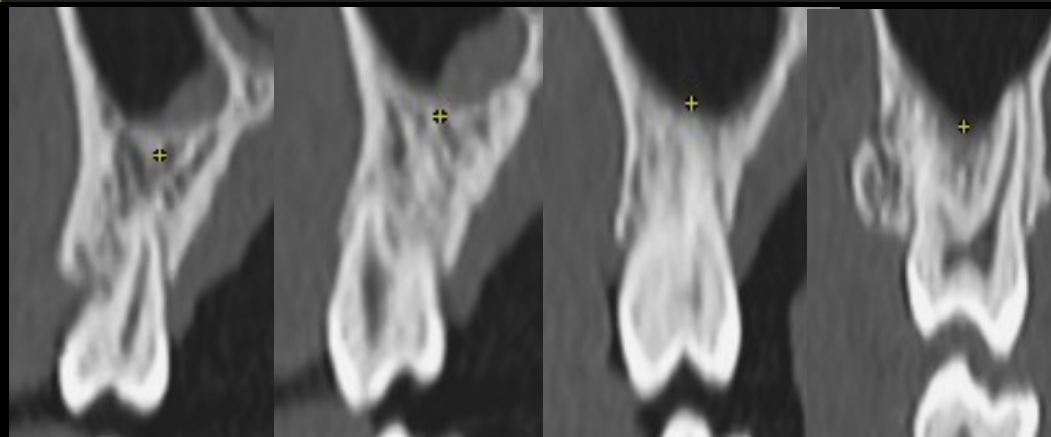
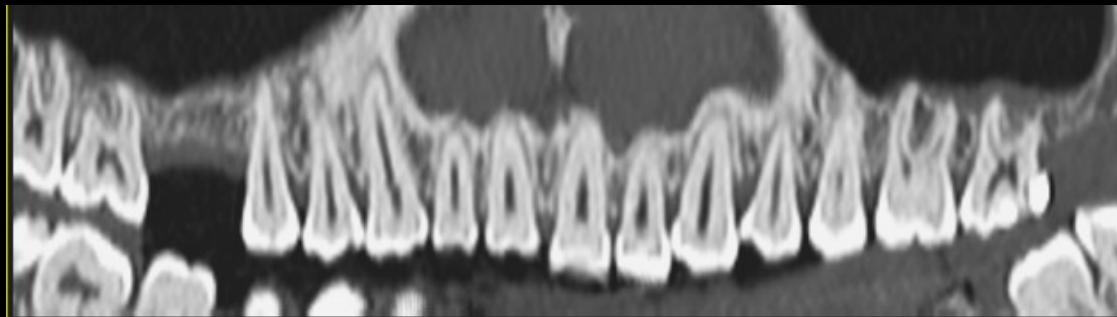
Excellent spatial resolution for inner ear

Scan type	Helical
Rotation time, s	1
Slice, mm	0.625/0,312
Scan length, mm	20
kV	120
mA	120
Kernel	Ultra
ASiR %	30
DLP, mGy-cm	149



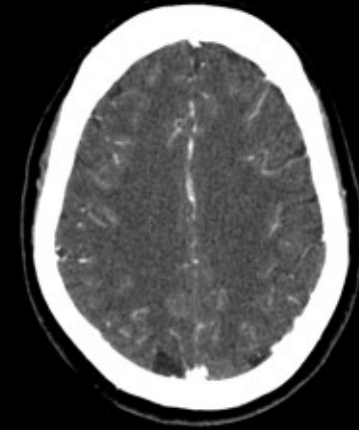
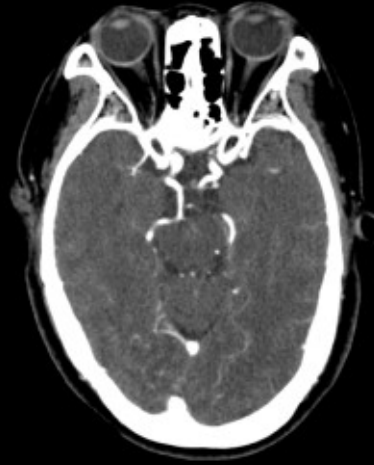
Dentascan

Scan type	Helical
Rotation time, s	1
Slice, mm	0.625/0,312
Scan length, mm	20
kV	120
mA	80
Kernel	Ultra
ASiR %	20
DLP mGy-cm	121,4

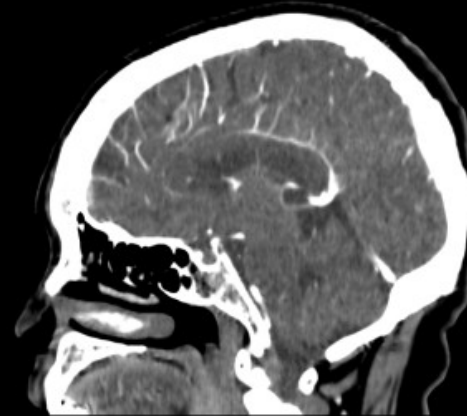


Low dose brain assessment with contrast

Scan type	Helical
Rotation time, s	1
Pitch	1.75:1
Slice, mm	1.25
kV	120
mA	180
Kernel	Standard
ASiR %	30
CTDIvol, mGy	44.7
DLP, mGy-cm	537
Eff. dose, mSv	1.23



Volume Rendering



Sagittal



Coronal

1. Dose conversion based on conversion factor 0.0023 - EUR-16262

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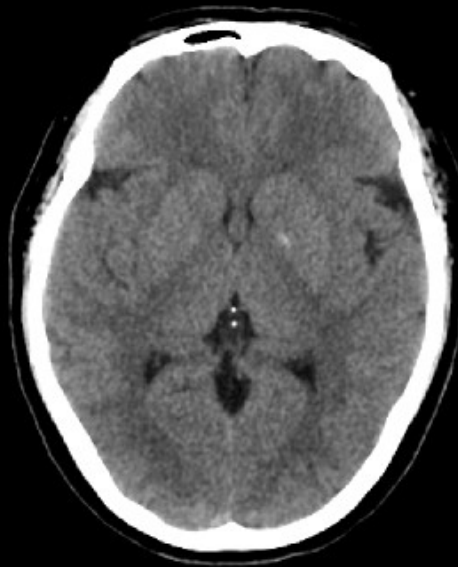


Bleeding assessment on brain

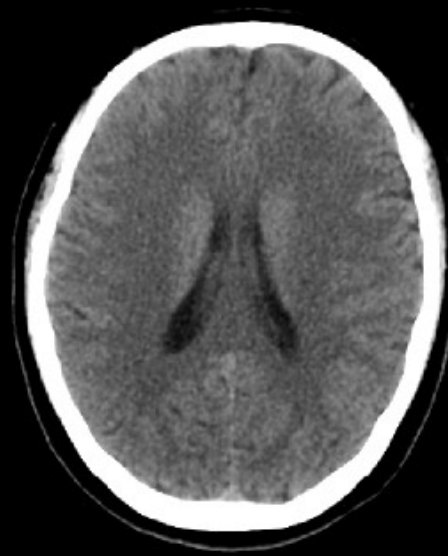
Scan type	Helical
Rotation time, s	1
Pitch	0.562:1
Slice, mm	1.25
kV	120
mA	160 – 163
Noise index	2.8
Kernel	Standard
ASiR %	30
CTDIvol, mGy	49
DLP, mGy-cm	833
Eff. dose, mSv	1.9



Axial 1.25mm



Axial 1.25mm



Axial
1.25mm



Volume Rendering
& Axial 1.25mm

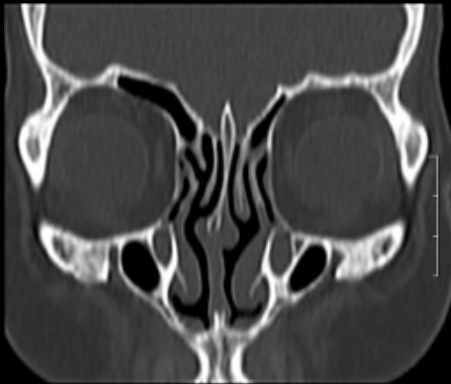


High resolution images for sinusitis and polyps search

Scan type	Helical
Rotation time, s	1
Pitch	0.562:1
Slice, mm	1.25
kV	120
mA	160 – 177
Noise index	2.8
Kernel	Bone
ASiR %	30
CTDIvol, mGy	51
DLP, mGy-cm	637
Eff. dose, mSv	0.1



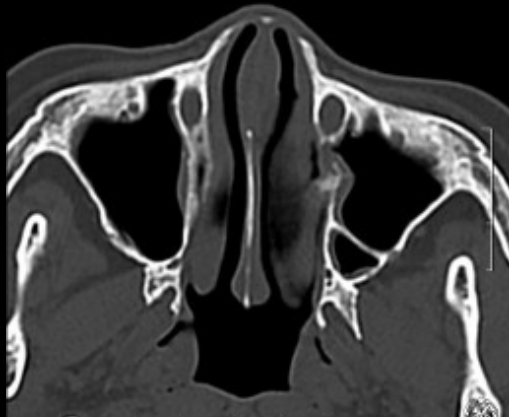
Volume Rendering



Coronal 1 mm



Sagittal 1 mm

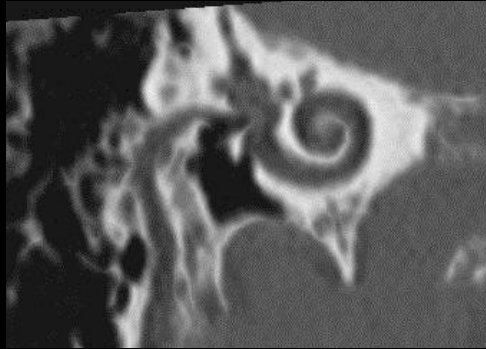


Axial 1 mm

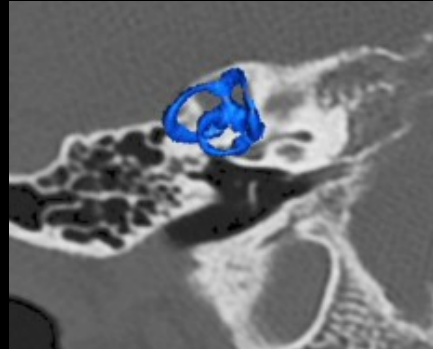


High resolution for middle ear exam

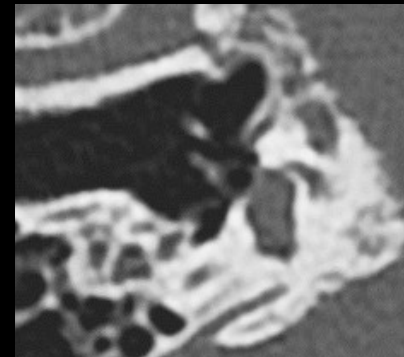
Scan type	Helical
Rotation time, s	1
Pitch	1:1
Slice, mm	0.625
kV	120
mA	195
Noise index	0
Kernel	Ultra
ASiR %	30
CTDIvol, mGy	46
DLP, mGy-cm	125
Eff. dose, mSv	0.29



Cochlea



Semicircular canals



Stirrup bone

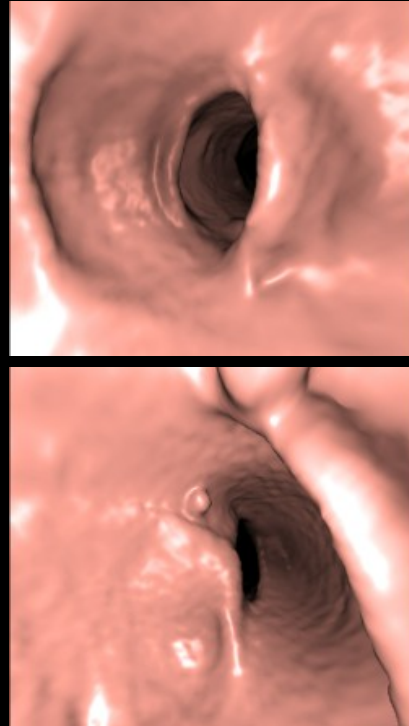


Axial 0,6 mm

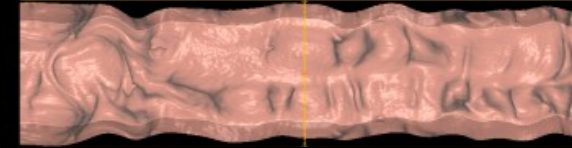


Virtual colonoscopy exam: screening exam

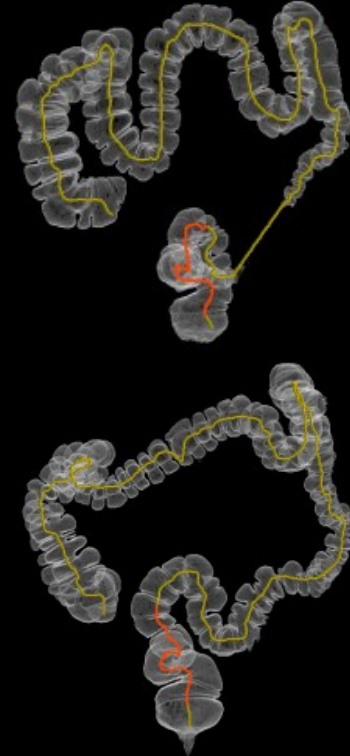
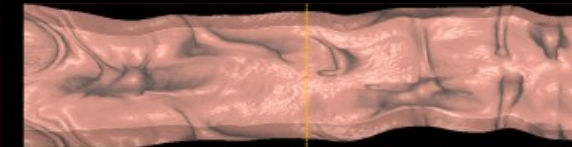
Scan type	Helical
Rotation time, s	1.0
kV	120
mA	60
Slice mm	1,25
Pitch	1.375
ASiR %	60
Kernel	Standard
CTDIvol, mGy	3.86
DLP, mGy-cm	376.2
2 phases	



Supine



Prone

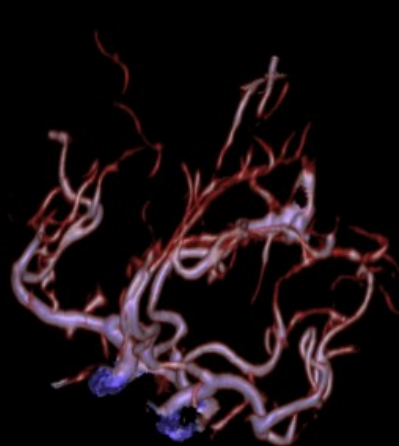


Vascular

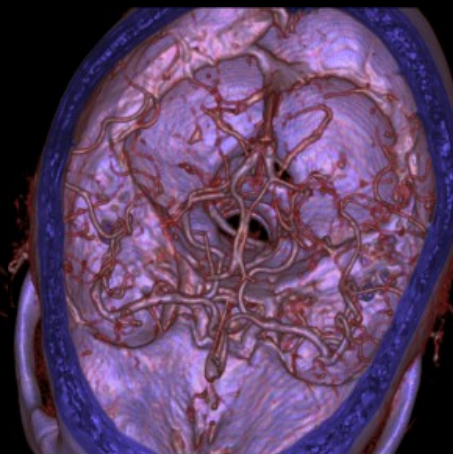


Carotid exam with contrast for stenosis suspicion

Scan type	Helical
Rotation time, s	1
Pitch	1.75:1
Slice, mm	1.25
kV	120
mA	180
Kernel	Standard
ASiR %	30
CTDIvol, mGy	17.7
DLP, mGy-cm	461
Eff. dose, mSv	1



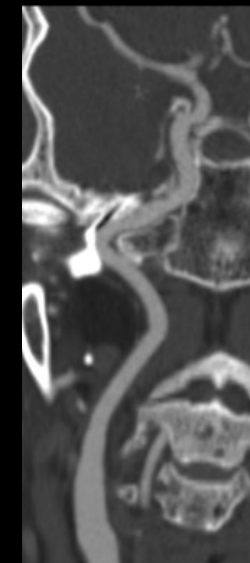
Volume Rendering



Volume Rendering



Volume Rendering



Curved



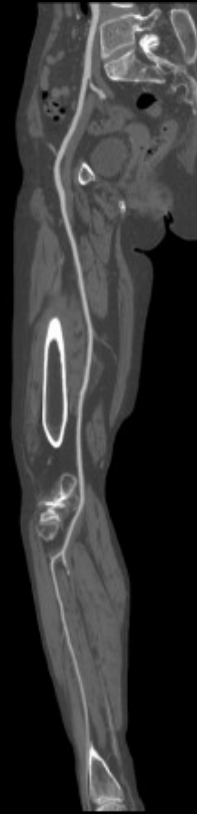
Volume Rendering

RunOff exam with contrast for occlusion suspicion

Scan type	Helical
Rotation time, s	1
Pitch	1.375:1
Slice, mm	1.25
kV	120
mA	180/50
Noise index	5.5
Kernel	Soft
ASiR %	50
CTDIvol, mGy	7.1
DLP, mGy-cm	722
Eff. dose, mSv	6.4



Volume Rendering



Volume Rendering



Volume Rendering

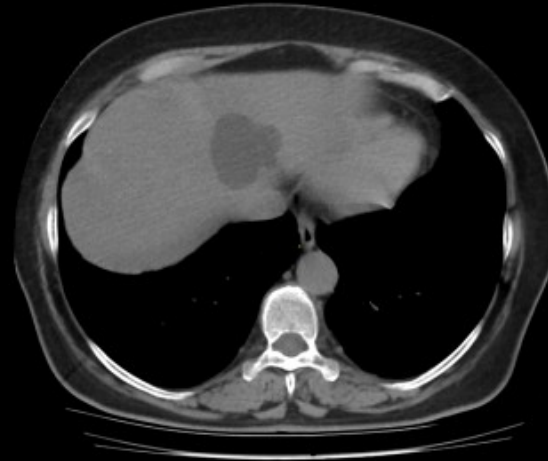
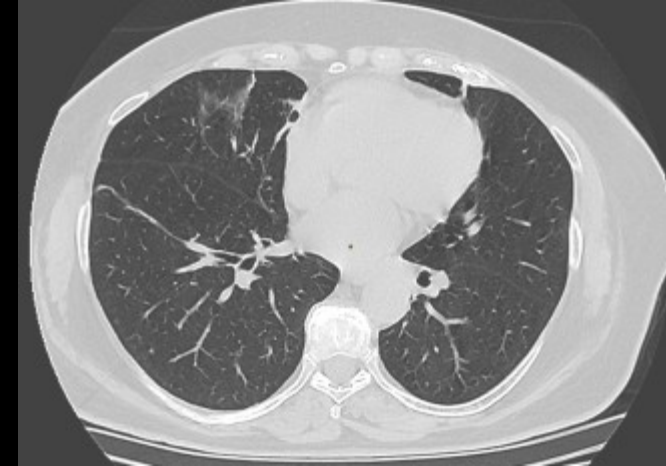
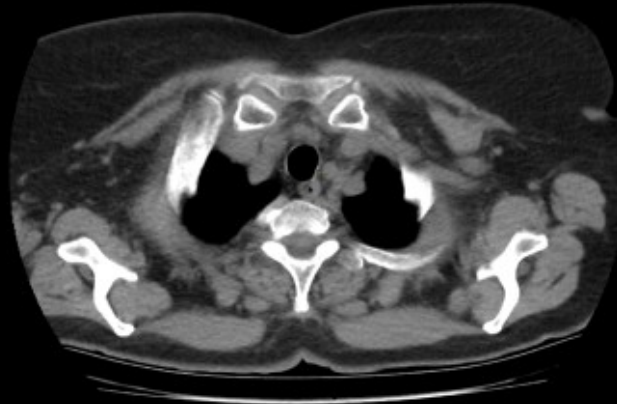


Body



Chest exam without contrast for pneumonia follow-up in high BMI patient

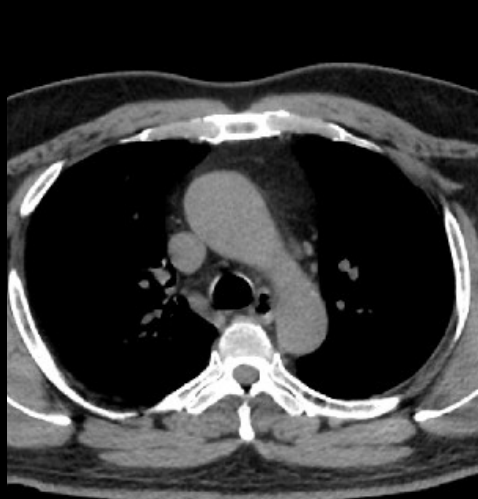
Scan type	Helical
Rotation time, s	1
Pitch	1.75:1
Slice, mm	5/1,25
kV	120
SmartmA NI 17	140-200
Kernel	Standard
ASiR, %	40/60
Kernel	Standard & Lung
CTDIvol, mGy	8,9
DLP, mGy-cm	283,88
Eff. Dose, mSv ¹	4,8
BMI	34



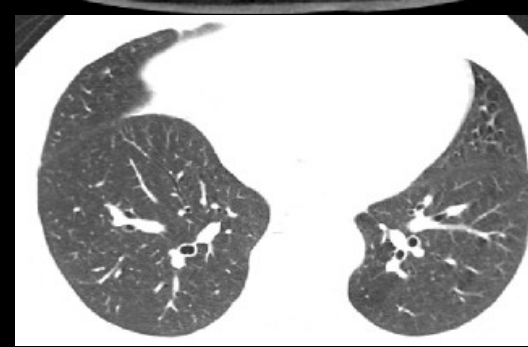
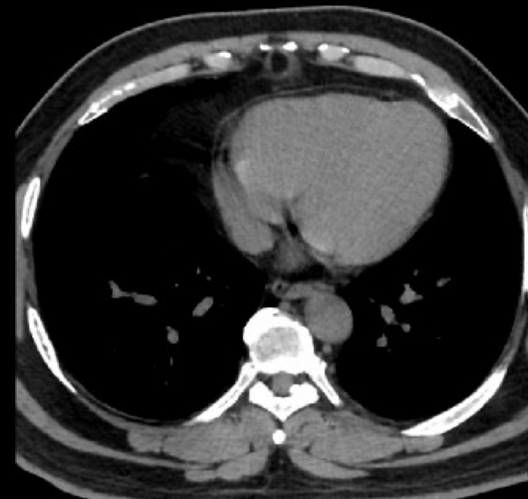
1. Obtained using a chest conversion factor of $0.017 \times \text{DLP}$

Chest exam for nodule follow-up at BMI 29

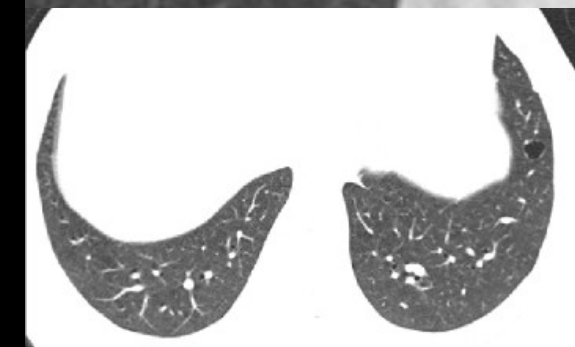
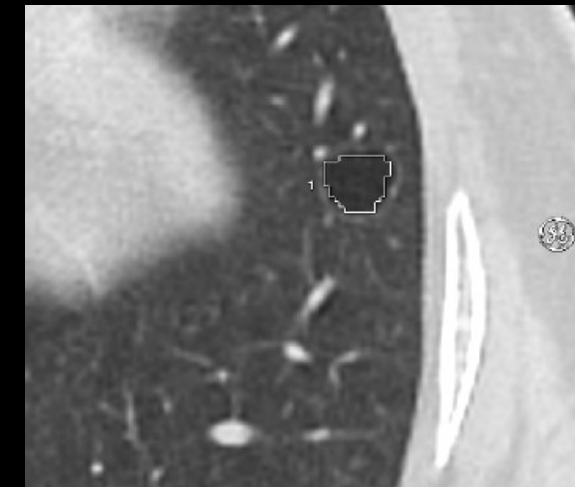
Scan type	Helical
Rotation time, s	1
Pitch	1.375:1
Slice, mm	1.25
kV	120
mA	200
Noise index	22
Kernel	Standard & Lung
ASiR %	30
CTDIvol, mGy	12.9
DLP, mGy-cm	396
Eff. dose, mSv	6.7



Axial 1 mm



Axial 1 mm

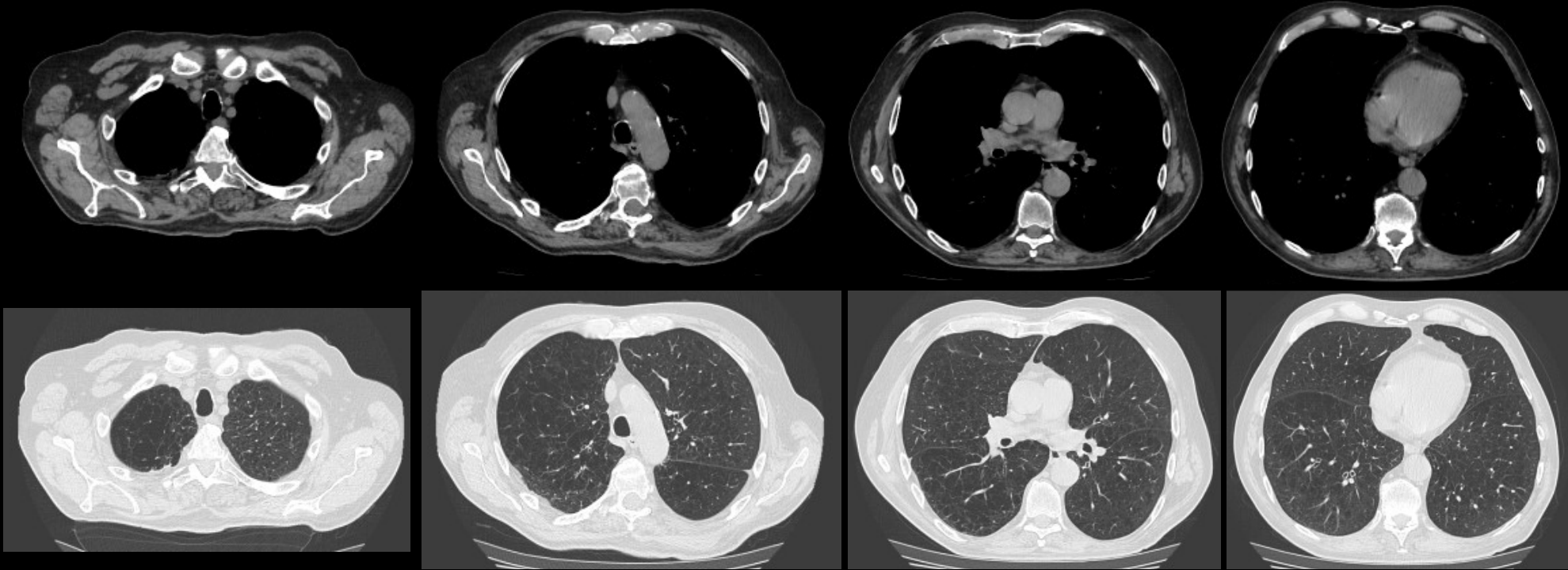


Axial 1 mm



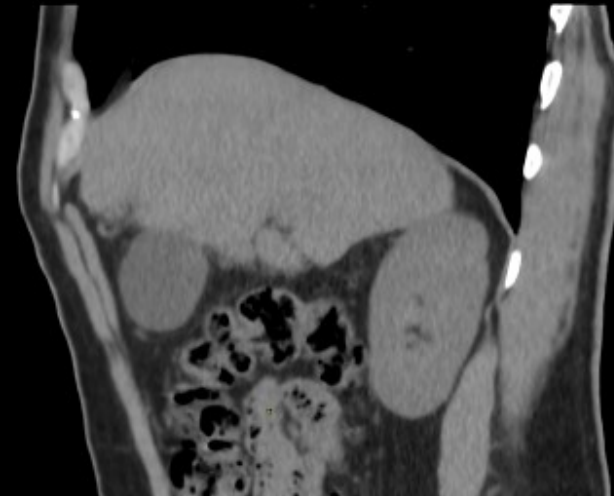
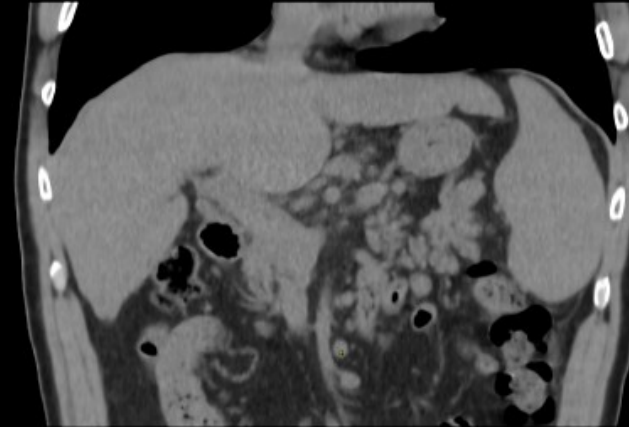
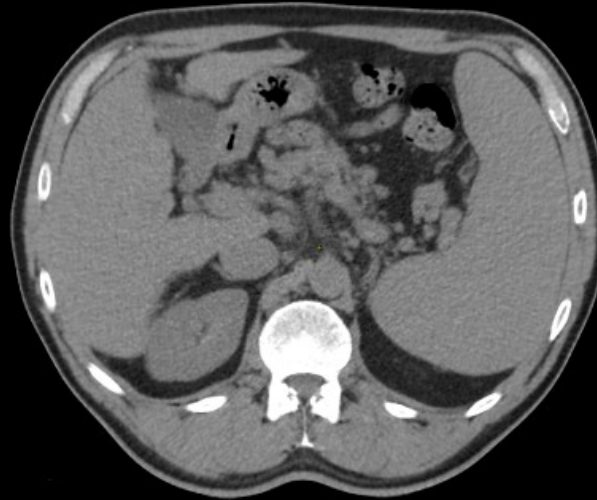
High resolution chest exam for chronic pulmonary disease

Scan type	Helical
Rotation time, s	1.0
kV	120
mA	Auto mA
Slice mm	1,25
NI	28
Pitch	1.375
ASiR %	70-30
Kernel	Standard & Lung
CTDIvol, mGy	7.72
DLP, mGy-cm	275.5



Abdomen exam without contrast

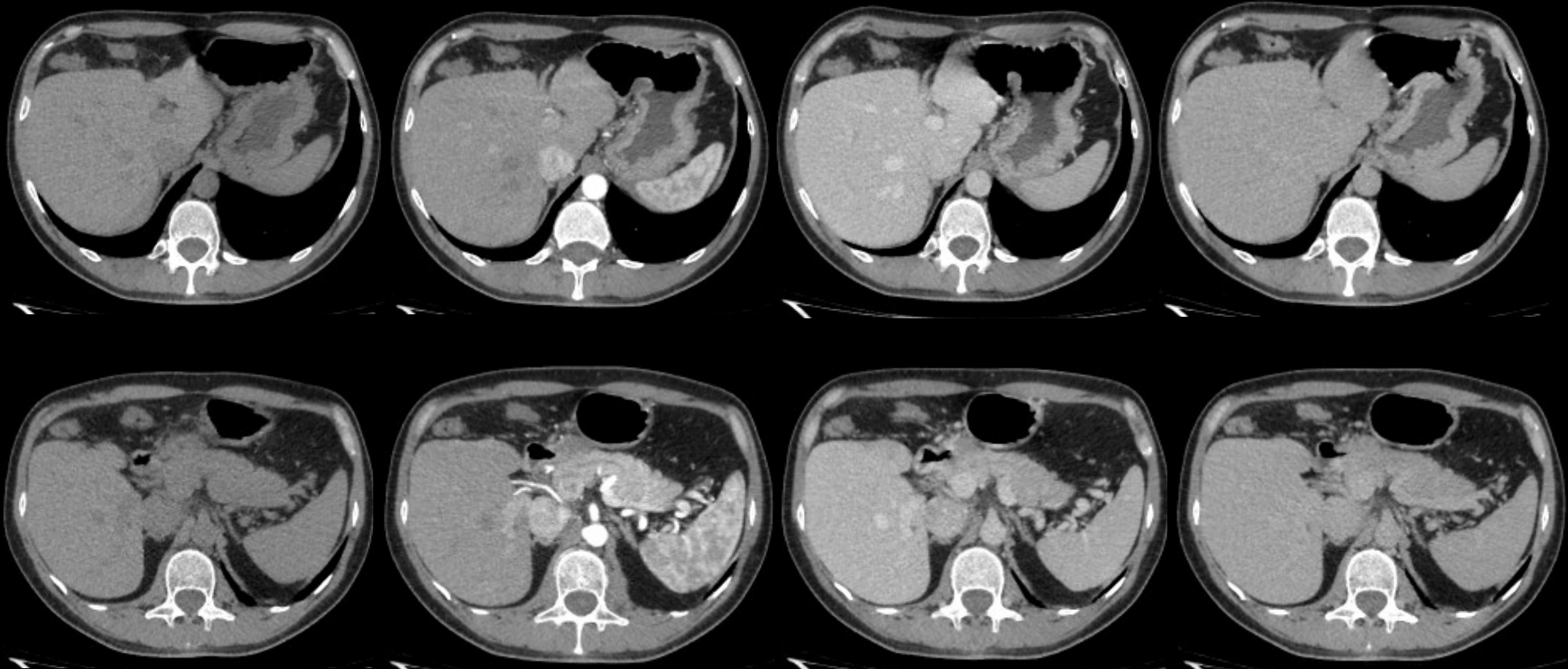
Scan type	Helical
Rotation time, s	1
kV	120
mA mod.	80-200
ASiR %	50
Thickness	1,25
Noise Index	30
Pitch	1,375
Kernel	Standard
CTDIvol, mGy	10
DLP, mGy-cm	273
Eff. dose, mSv ¹	4



1. Obtained using an abdomen conversion factor of $0.015 \times \text{DLP}$

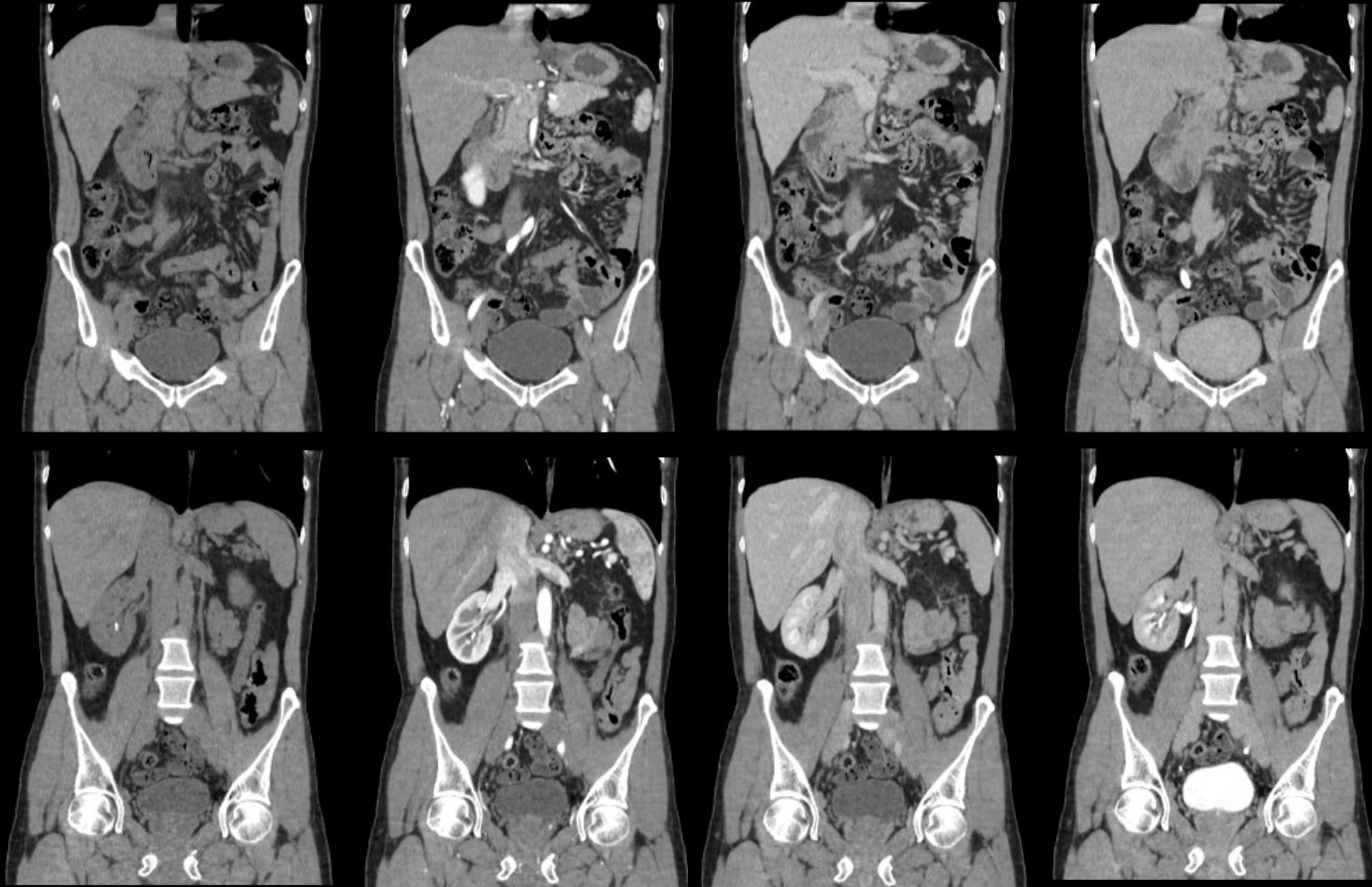
Multi-phase abdomen CT: kidney cancer 1/2

Scan type	Helical
Rotation time, s	1.0
kV	120
mA	Auto mA
Slice mm	1,25
NI	34-30
Pitch	1.75
ASiR %	70
Kernel	Standard
DLP, mGy-cm	873.9
4 phases	



Multi-phase abdomen CT: kidney cancer 2/2

Scan type Helical
Rotation time, s 1.0
kV 120
mA Auto mA
Slice mm 1,25
NI 34-30
Pitch 1.75
ASiR % 70
Kernel Standard
DLP, mGy-cm 873.9
4 phases



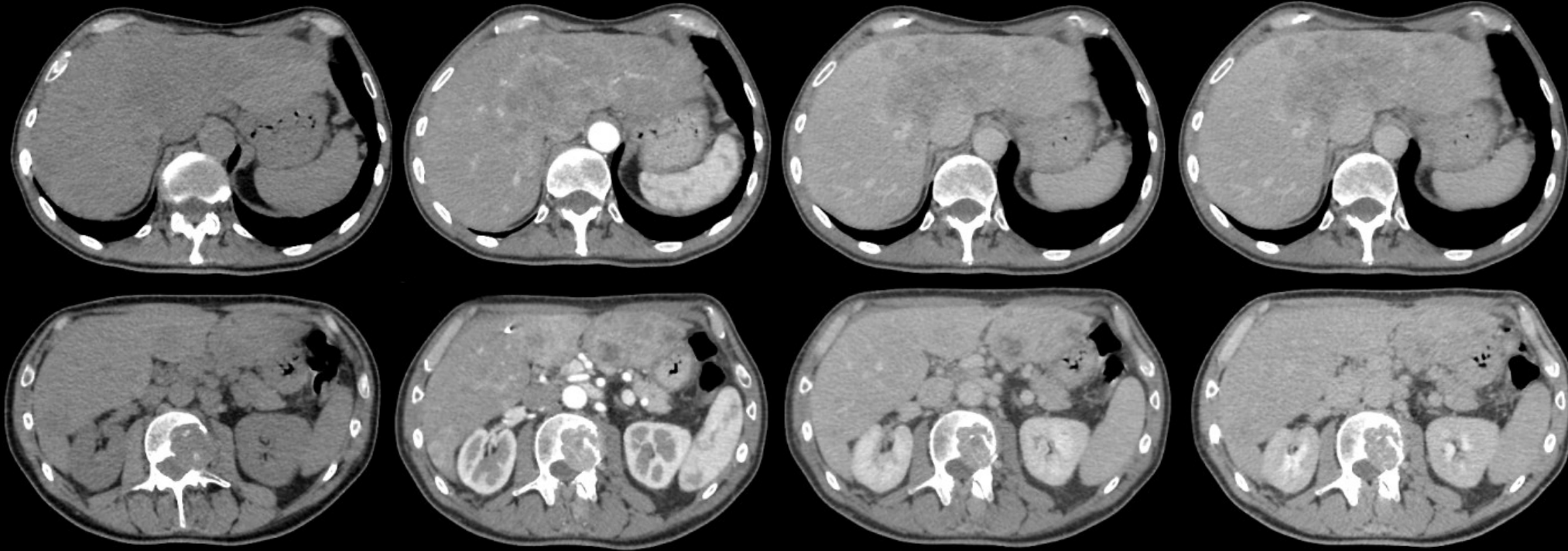
Multiphase chest-abdomen-pelvis: post bladder cancer surgery follow-up

Scan type	Helical
Rotation time, s	1.0
kV	120
mA	Auto mA
Slice mm	1,25
NI	34-30
Pitch	1.75
ASiR %	70 - 30
Kernel	Standard & Lung
DLP, mGy-cm	915.9
4 phases	



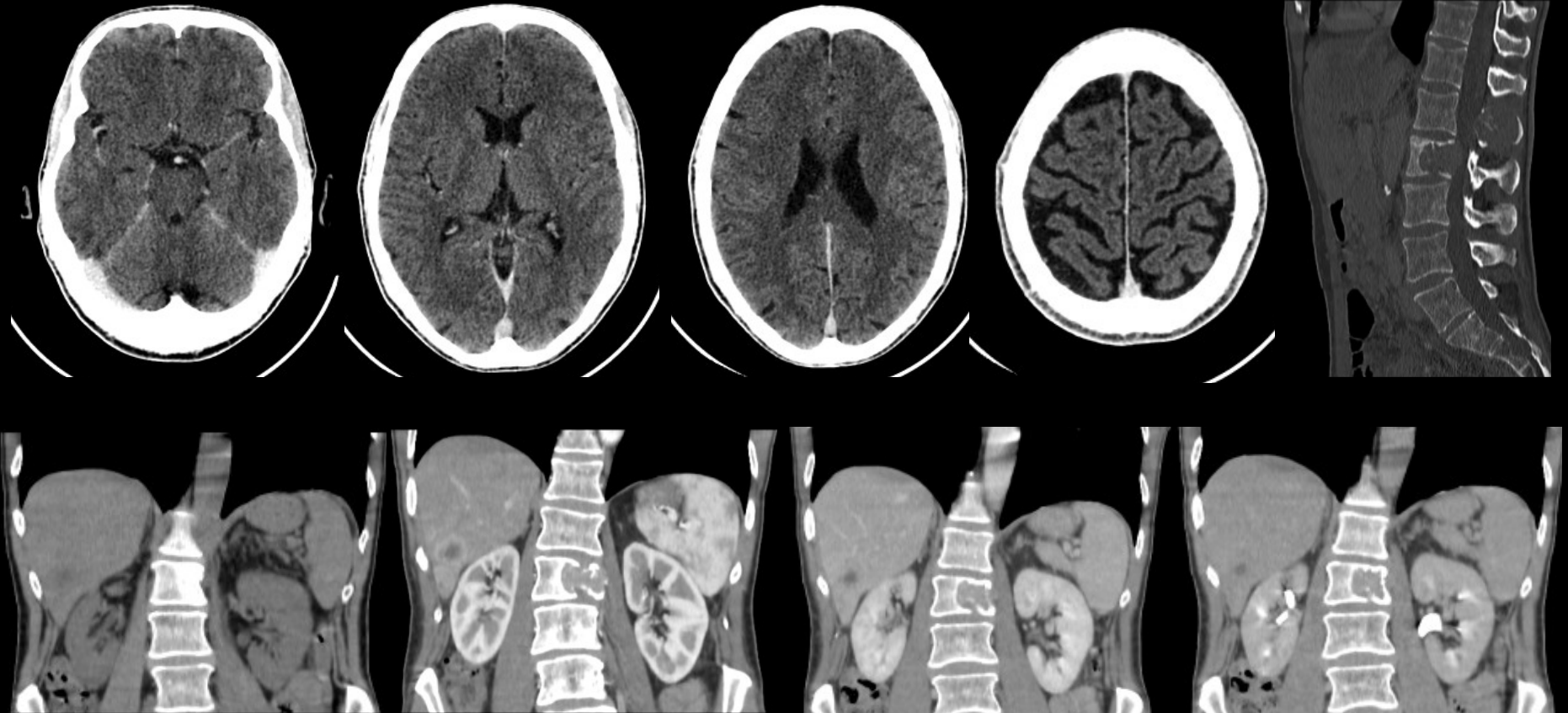
Full body with head exam: primitive colorectal cancer staging 1/2

Scan type	Helical
Rotation time, s	1.0
kV	120
mA	Auto mA
Slice mm	1,25
NI	34-30
Pitch	1.75
ASiR %	70 - 30
Kernel	Standard & Lung
DLP, mGy-cm	1640
4 phases + Head	



Full body with head exam: primitive colorectal cancer staging 2/2

Scan type Helical
Rotation time, s 1.0
kV 120
mA Auto mA
Slice mm 1,25
NI 34-30
Pitch 1.75
ASiR % 70 - 30
Kernel Standard
& Lung
DLP, mGy-cm 1640
4 phases + Head



MSK



High resolution exam for cervical disc herniation

Scan type	Helical
Rotation time, s	1
Pitch	0.938:1
Slice, mm	1.25
kV	120
mA	120 – 200
Noise index	6.6
Kernel	Standard / Bone+
ASiR %	50
CTDIvol, mGy	12.9
DLP, mGy-cm	299
Eff. dose, mSv	1.6



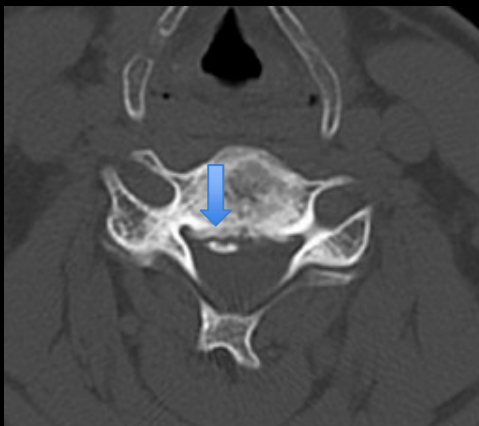
Volume Rendering



Sagittal 1.25mm



Axial 1 mm



Axial 1 mm



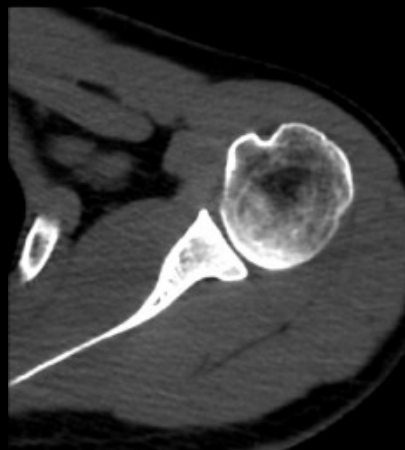
1. Dose conversion based on conversion factor 0.0054 - EUR-16262

Shoulder exam for dislocation suspicion

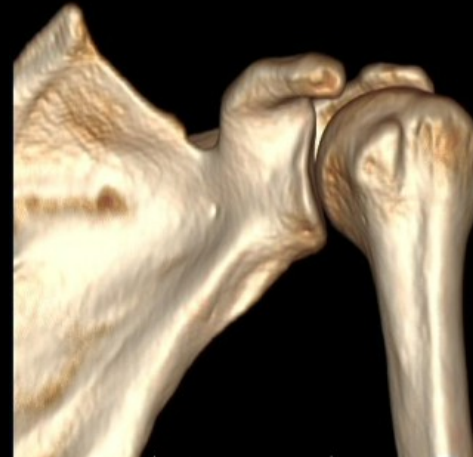
Scan type	Helical
Rotation time, s	1
Pitch	0.938:1
Slice, mm	1.25
kV	120
mA	71 – 127
Noise index	23.1
Kernel	Bone+
ASiR %	30
CTDIvol, mGy	10.29
DLP, mGy-cm	174.2
Eff. dose, mSv	2.9



Axial 1 mm



Axial 1 mm



Volume
Rendering



Volume
Rendering



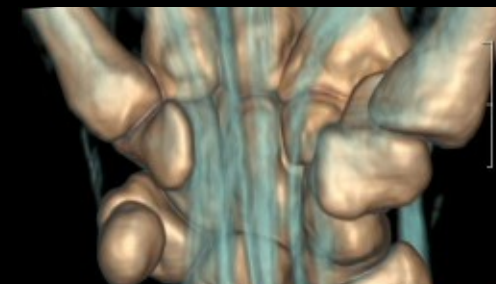
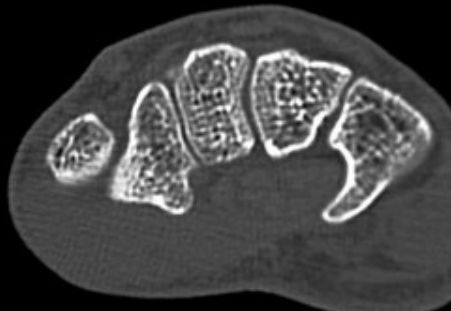
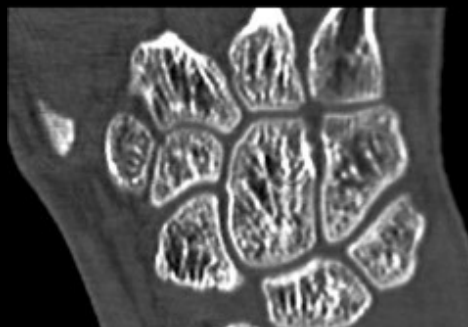
Wrist with radio-cubital fractures

Scan type	Helical
Rotation time, s	1
kV	100
mA mod.	60
ASiR %	30/60
Pitch	0.562
Kernel	Ultra / Standard
CTDIvol, mGy	5,84
DLP, mGy-cm	73



Carpal tunnel and wrist assessment

Scan type	Helical
Rotation time, s	1
Pitch	1:1
Slice, mm	0.625
kV	120
mA	100
Noise index	32.7
Kernel	Ultra
ASiR %	30
CTDIvol, mGy	12.9
DLP, mGy-cm	70
Eff. dose, mSv	0.63



Lumbar spine canal evaluation

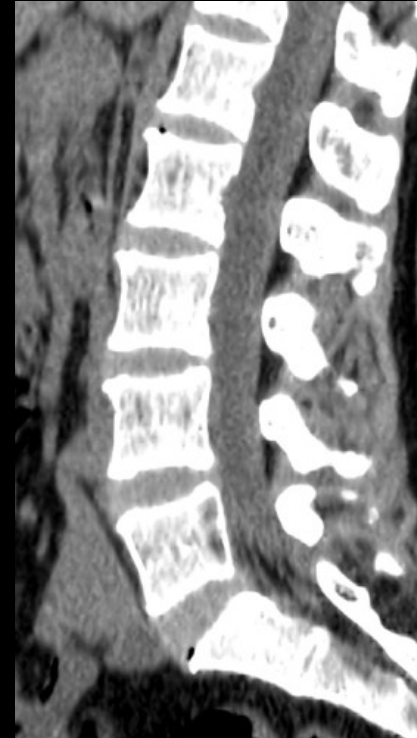
Scan type	Helical
Rotation time, s	1
Pitch	0.938:1
Slice, mm	1.25
kV	120
mA	150
Noise index	23.1
Kernel	Standard
ASiR %	50
CTDIvol, mGy	12.6
DLP, mGy-cm	308
Eff. dose, mSv	4.6



Axial 1.25mm



Volume Rendering



Sagittal
1.25mm



Sagittal
1.25mm



Hip prosthesis assessment

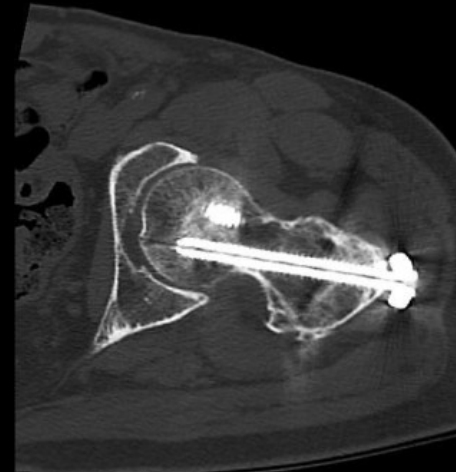
Scan type	Helical
Rotation time, s	1
Pitch	0.625:1
Slice, mm	1.25
kV	120
mA	110
Noise index	N/A
Kernel	Standard & Bone+
ASiR %	30
CTDIvol, mGy	17.36
DLP, mGy-cm	490
Eff. dose, mSv	9.3



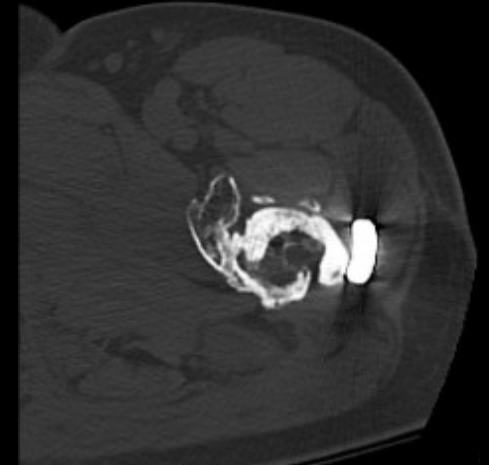
Volume Rendering



Coronal 1 mm



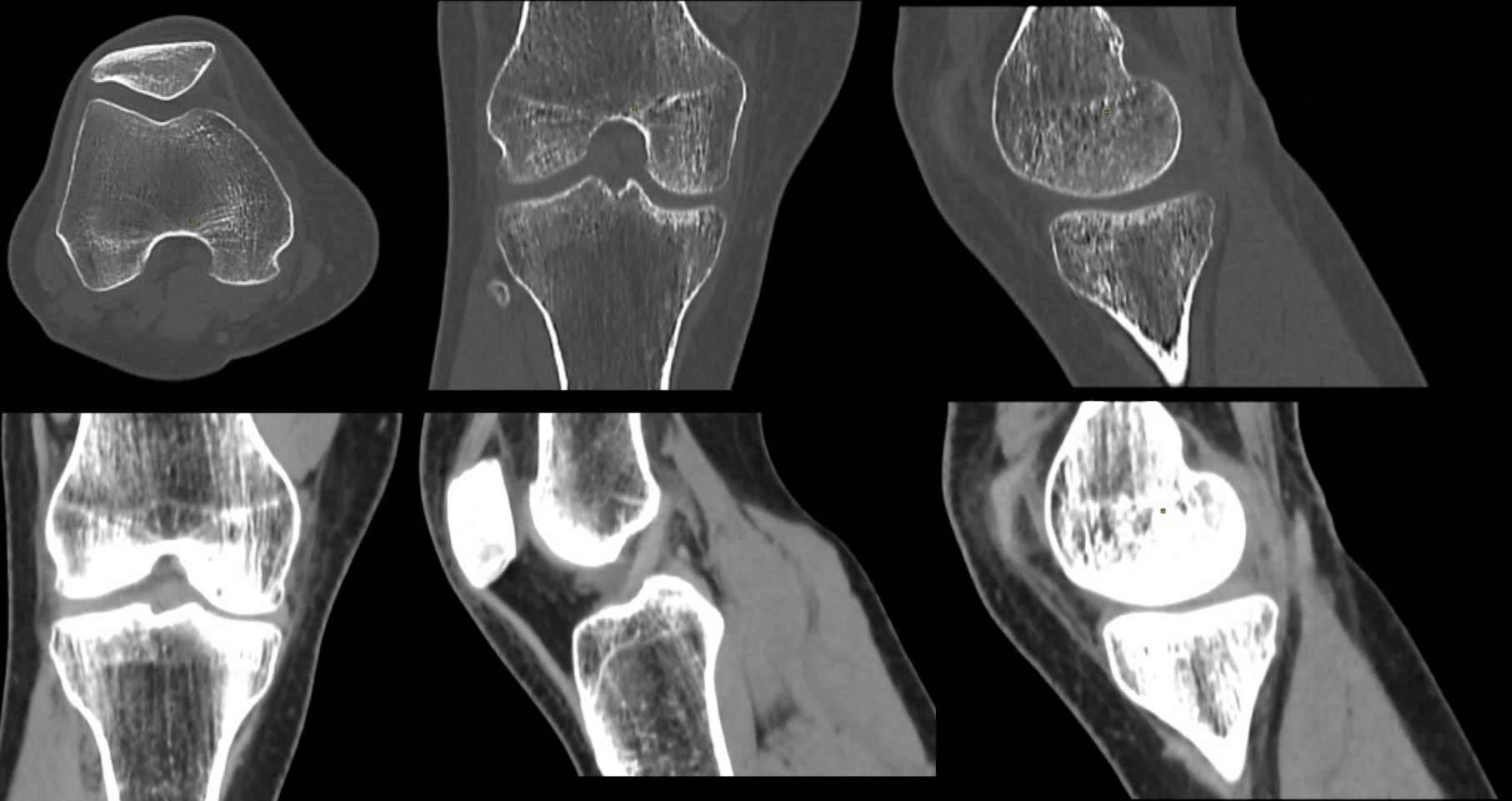
Axial 1 mm



Axial 1 mm

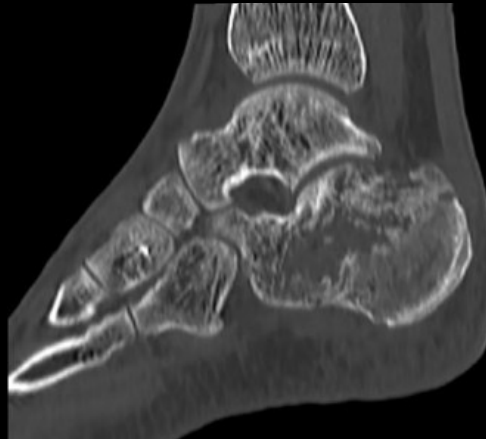
Knee

Scan type	Helical
Rotation time, s	1
kV	100
mA mod.	60
ASiR %	30/60
Pitch	0.562
Kernel	Ultra / Standard
CTDIvol, mGy	5,84
DLP, mGy-cm	73

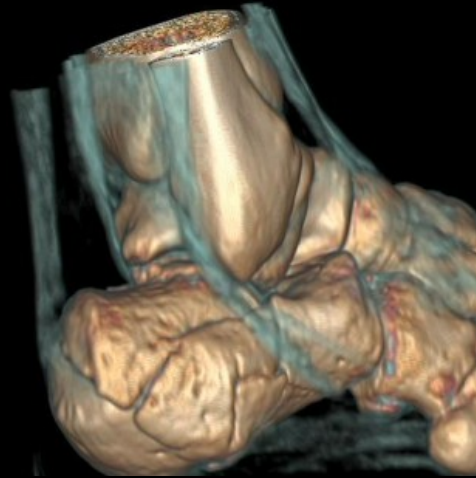


Ankle fracture

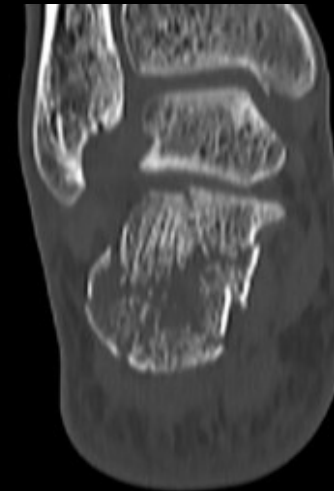
Scan type	Helical
Rotation time, s	1
Pitch	0.875:1
Slice, mm	1.25
kV	120
mA	100
Noise index	23.1
Kernel	Standard & Bone+
ASiR %	40 & 30
CTDIvol, mGy	11.27
DLP, mGy-cm	165



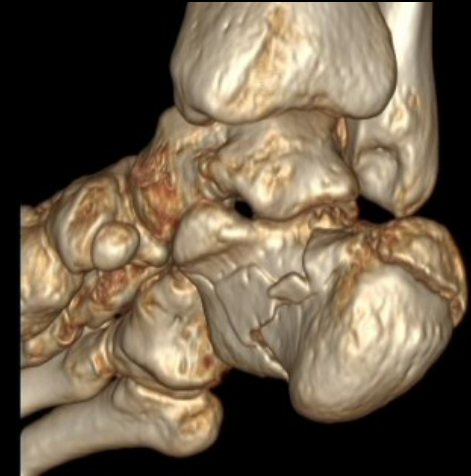
Sagittal 1 mm



Volume Rendering



Coronal 1
mm



Volume
Rendering

Ankle

Scan type	Helical
Rotation time, s	1
Pitch	0.562:1
Slice, mm	1,25
kV	120
mA	80
Noise index	20
Kernel	Standard / Ultra
ASiR %	60/40



