Kepler Universitäts Klinikum

Herz-CT 2019

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Klinik für Kardiologie und internistische Intensivmedizin

Kepleruniklinikum Linz

Medizinische Fakultät Linz










Zahlen

Anzahl Herz CT‘s:

2015	**266**
2016	**327**
2017	**361**
2018	**460**
2019	**347** (01.01. – 30.09.2019)

Gesamtanzahl Herz CT´s ab 01.01.2015 **1.761**

Indikation:

- Ausschluss / Nachweis einer koronaren Herzkrankheit (CT Koronarangiographie und Ca^{++} Score)
- Darstellung der Pulmonalvenenanatomie (zur Planung vor Pulmonalvenenisolation)
- Verdacht auf Koronaranomalien
- Verdacht auf Herzohrthrombus (KI gegen TEE)
- (myokardiale Narbendarstellung)

2013 ESC guidelines on the management of stable coronary artery disease

Recommendations	Class[a]	Level[b]
Coronary CTA should be considered as an alternative to stress imaging techniques for ruling out SCAD in patients within the lower range of intermediate PTP for SCAD in whom good image quality can be expected.	IIa	C
Coronary CTA should be considered in patients within the lower range of intermediate PTP for SCAD after a non conclusive exercise ECG or stress imaging test or who have contraindications to stress testing in order to avoid otherwise necessary invasive coronary angiography if fully diagnostic image quality of coronary CTA can be expected.	IIa	C
Coronary calcium detection by CT is not recommended to identify individuals with coronary artery stenosis.	III	C
Coronary CTA is not recommended in patients with prior coronary revascularization.	III	C
Coronary CTA is not recommended as a 'screening' test in asymptomatic individuals without clinical suspicion of coronary artery disease.	III	C

ESC Guidelines 2019 on Chronic Coronary Syndromes

New major recommendations in 2019	
Basic testing, diagnostics, and risk assessment	
Non-invasive functional imaging for myocardial ischaemia or coronary CTA is recommended as the initial test for diagnosing CAD in symptomatic patients in whom obstructive CAD cannot be excluded by clinical assessment alone.	I
It is recommended that selection of the initial non-invasive diagnostic test be based on the clinical likelihood of CAD and other patient characteristics that influence test performance, local expertise, and the availability of tests.	I
Functional imaging for myocardial ischaemia is recommended if coronary CTA has shown CAD of uncertain functional significance or is not diagnostic.	I
Invasive angiography is recommended as an alternative test to diagnose CAD in patients with a high clinical likelihood and severe symptoms refractory to medical therapy, or typical angina at a low level of exercise and clinical evaluation that indicates high event risk. Invasive functional assessment must be available and used to evaluate stenoses before revascularization, unless very high grade (>90% diameter stenosis).	I
Invasive coronary angiography with the availability of invasive functional evaluation should be considered for confirmation of the diagnosis of CAD in patients with an uncertain diagnosis on non-invasive testing.	IIa
Coronary CTA should be considered as an alternative to invasive angiography if another non-invasive test is equivocal or non-diagnostic.	IIa
Coronary CTA is not recommended when extensive coronary calcification, irregular heart rate, significant obesity, inability to cooperate with breath-hold commands, or any other conditions make good image quality unlikely.	III

Limitation:

- Körpergewicht über 180kg
- Eingeschränkte Nierenfunktion (GFR < 30)
- Z.n. aortokoronaren Bypass
- Z.n. Stentrevaskularisation

Vorbereitung:

Wünschenswert: Sinusbradykardie (f<60 Schläge /Minute)

- ß-Blocker (z.B. Tenormin 50-100mg)
- Benzodiazepine (z.B. Lexotanil 3mg)
- Nitro-Spray

Bildakquisition:

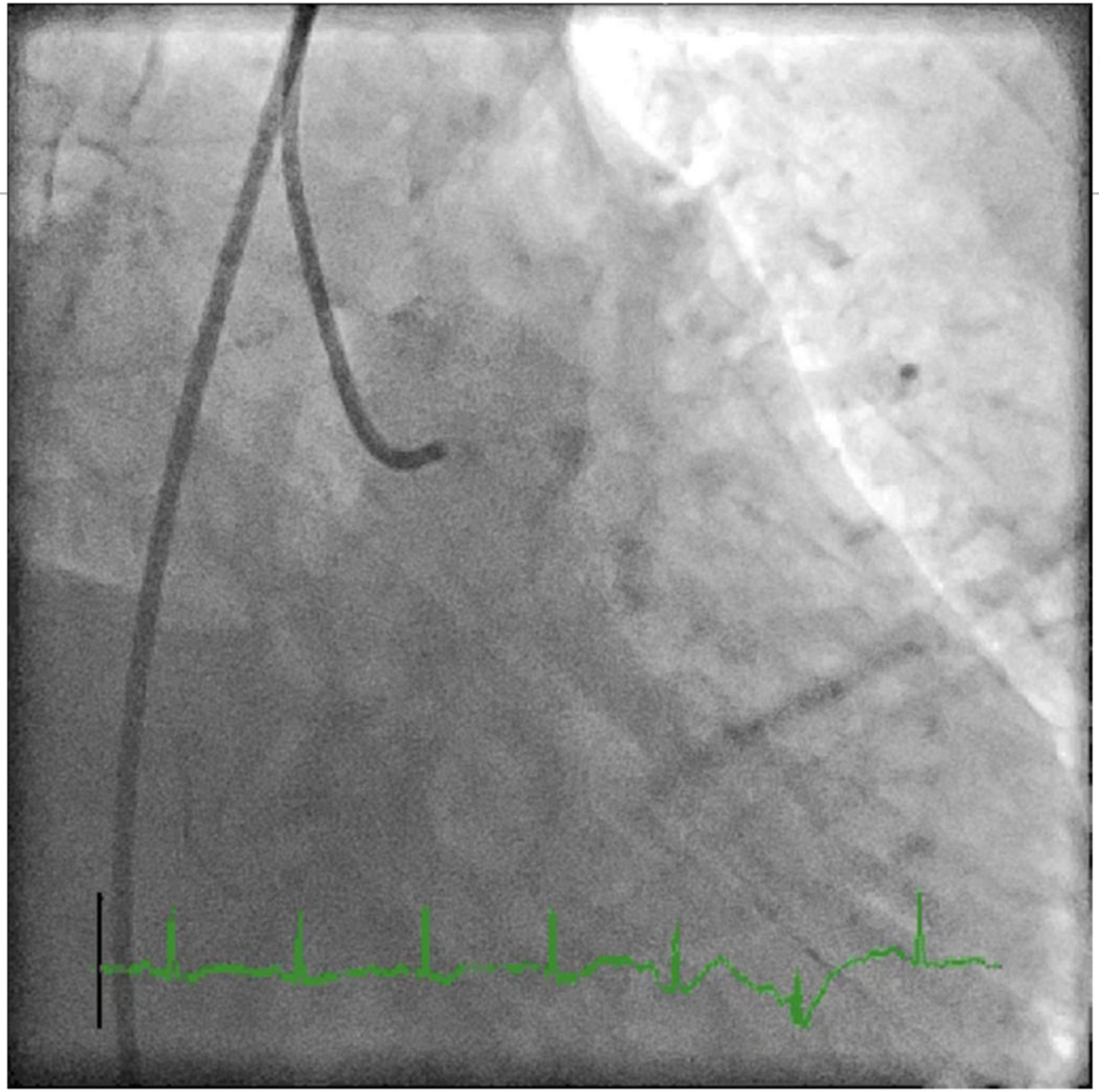
Am Kepleruniklinikum mittels zwei Siemens Somatom Force CT-Scannern

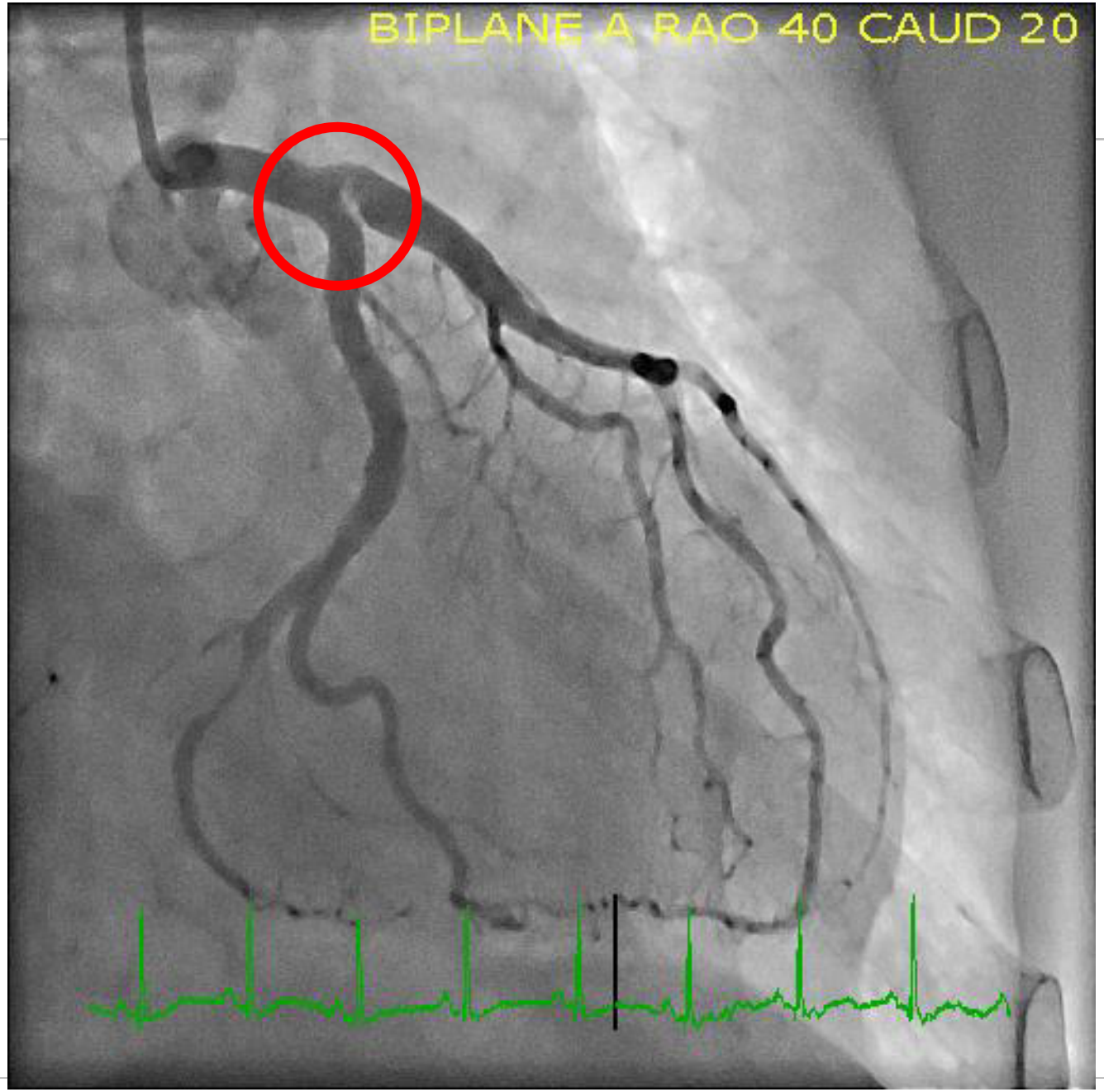


Quelle:www.siemens-healtineers.com

Flash Modus versus Sequenz Modus

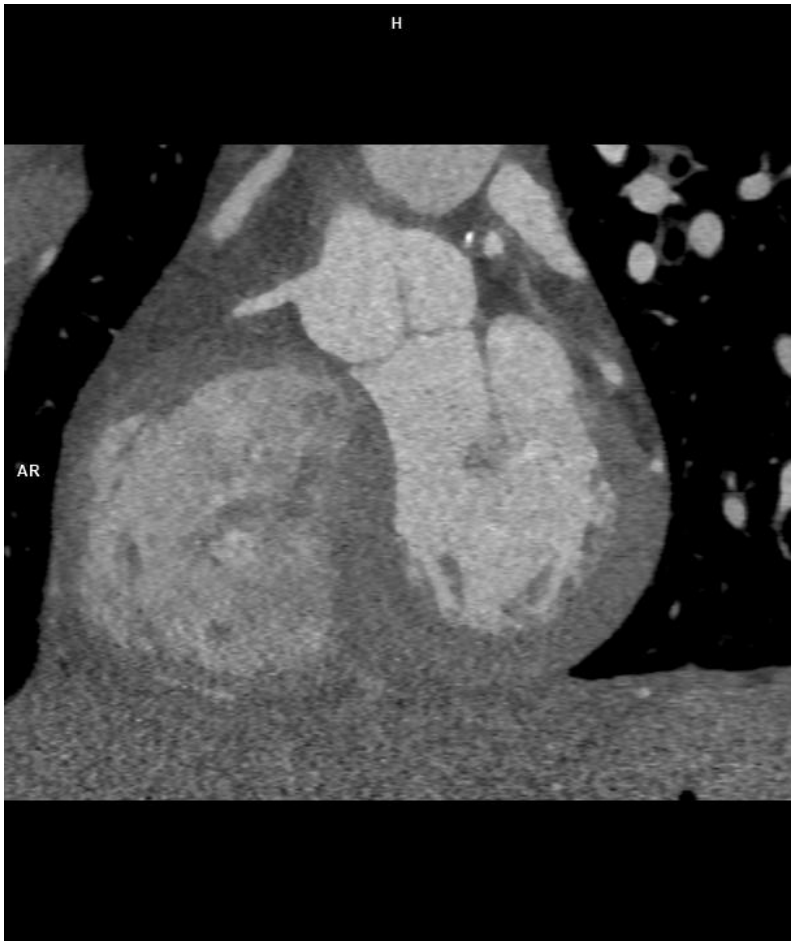
Bilder aus dem Kepleruniklinikum





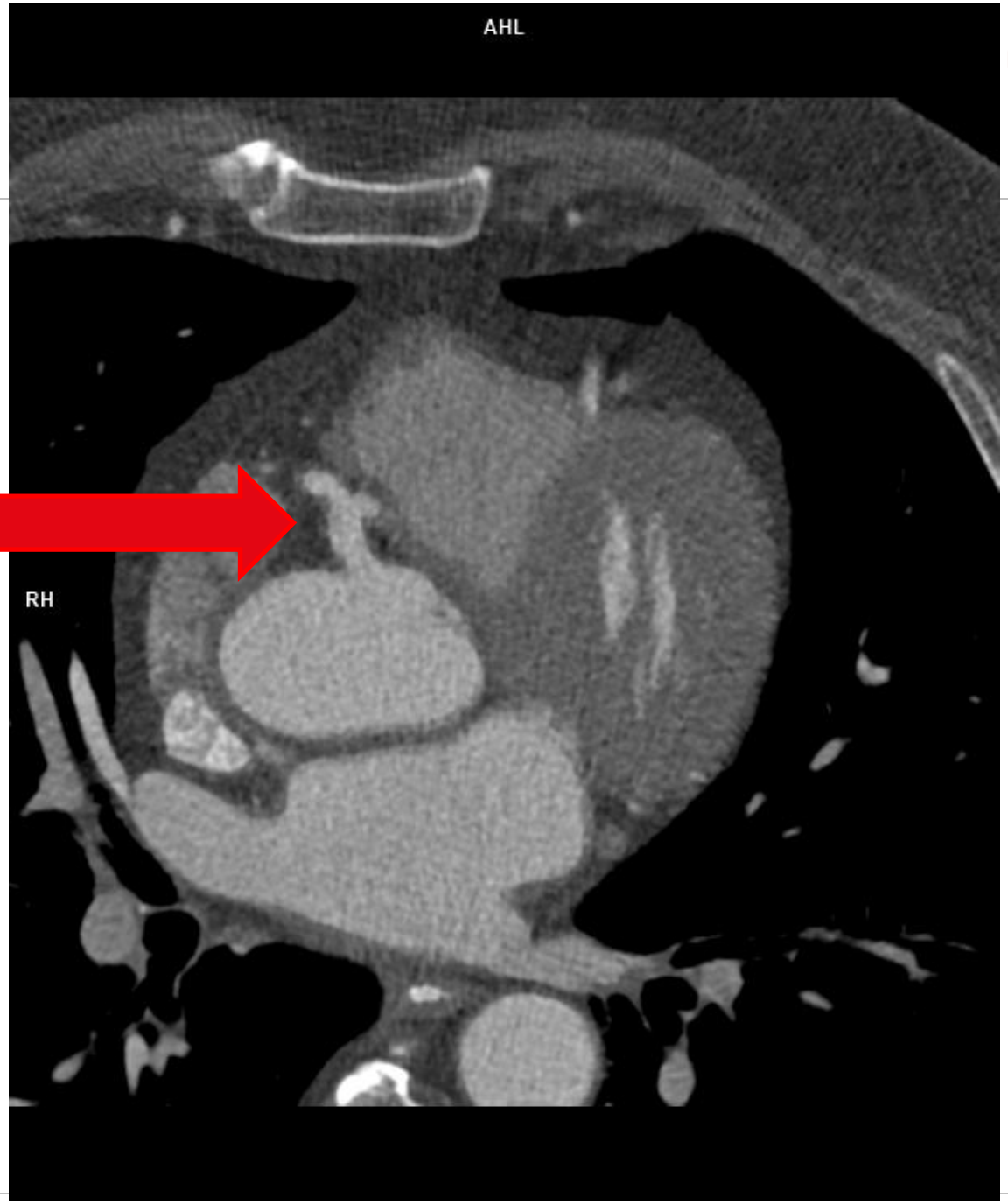
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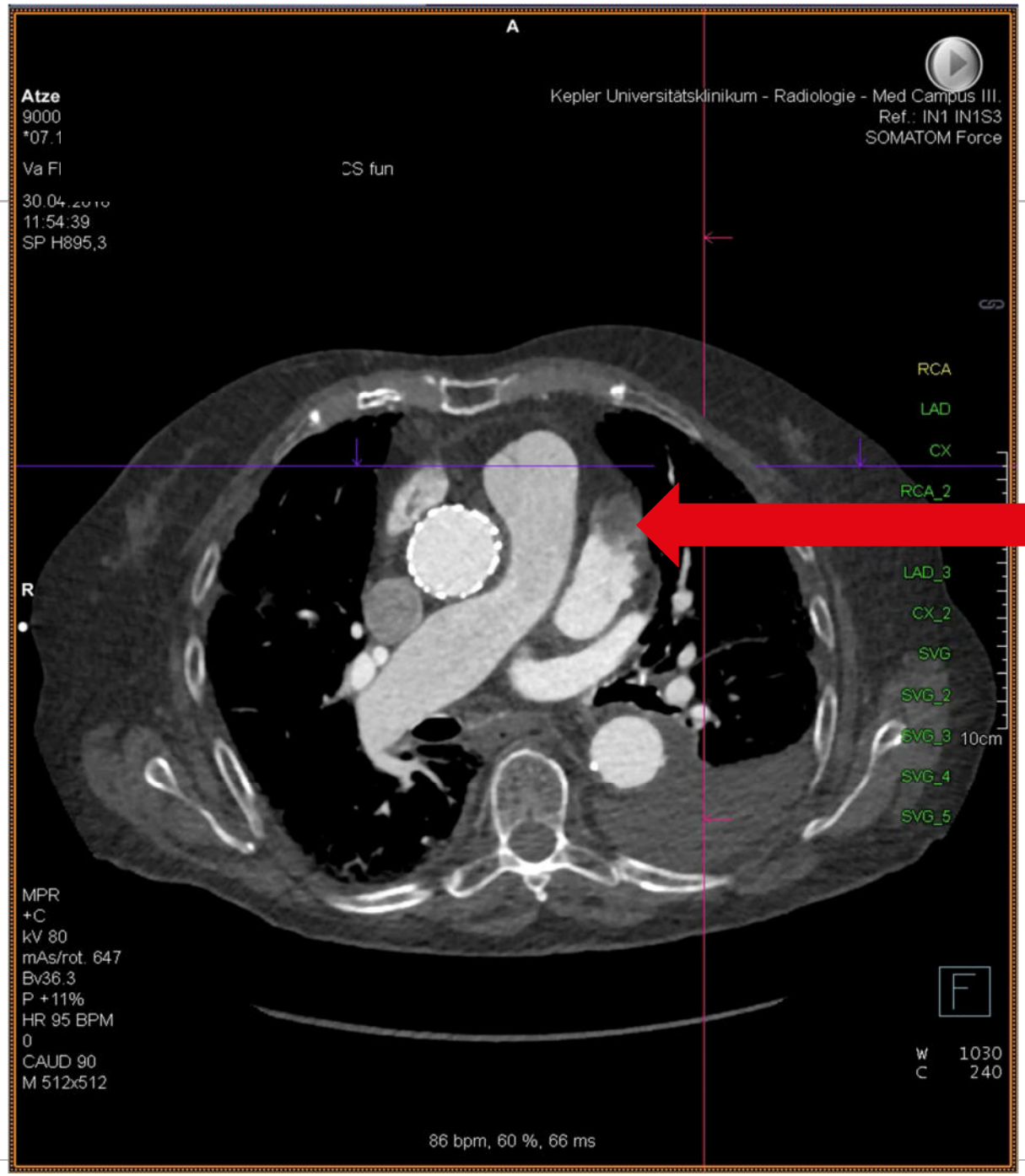
Plaque proximaler LAD

Solitäres Koronarostium



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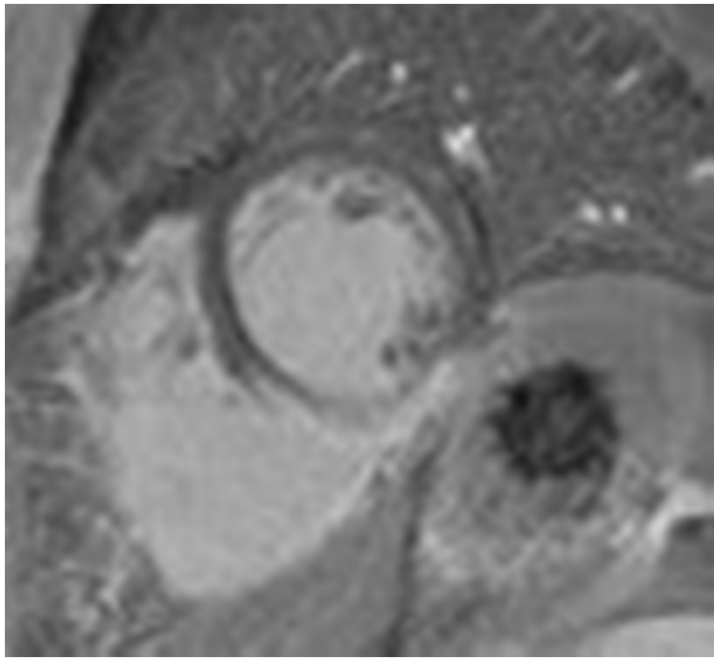

AHL
Kepler Universitätsklinikum - Radiologie - Med Campus III.
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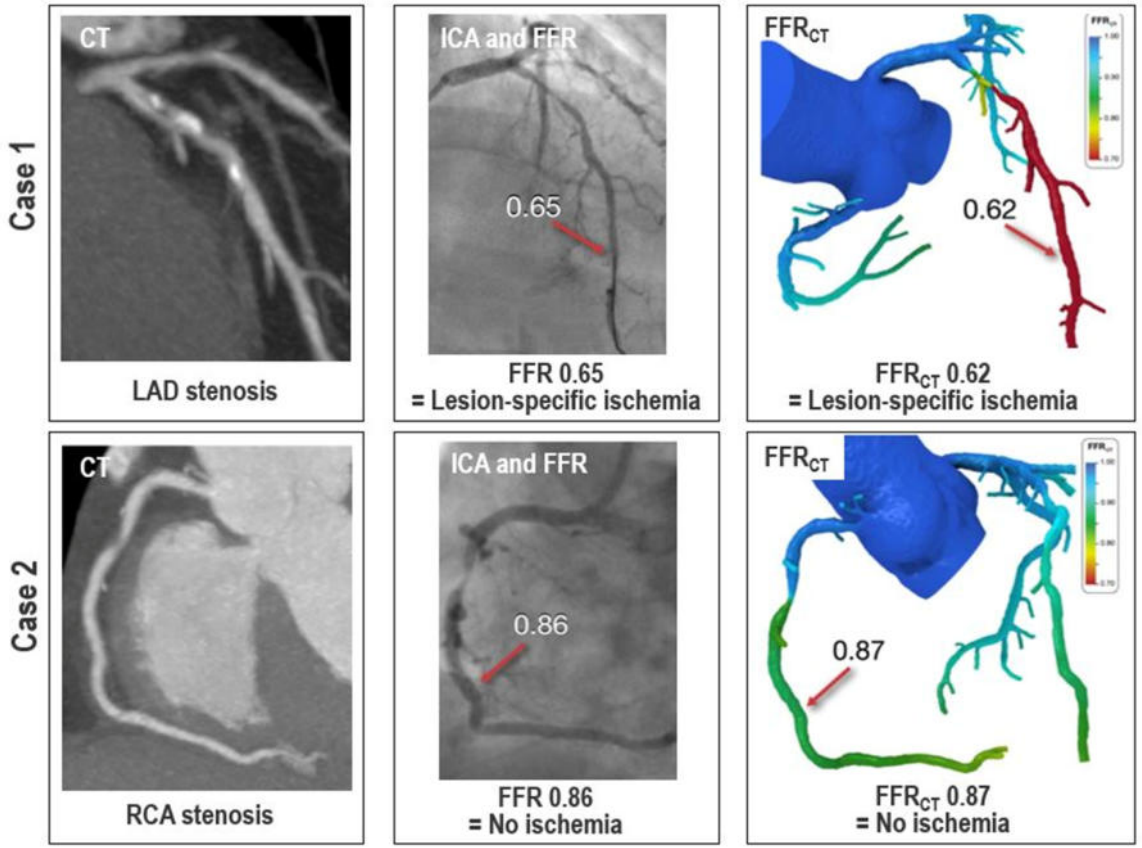
Thrombus

linkes Herzohr

Late enhancement – Darstellung von myokardialen Narben mittels Herz CT







Quelle: www.ahajournals.org

Vielen Dank für Ihre Aufmerksamkeit