

HEART SCAN \$99



Calcium-Score Screening Heart Scan

A calcium-score screening heart test (coronary calcium scan) uses computerized tomography (CT) to detect calcium deposits in the coronary arteries of your heart. A *higher coronary calcium-score suggests you have a higher chance of significant narrowing in the coronary arteries and a higher risk of future heart attack.*

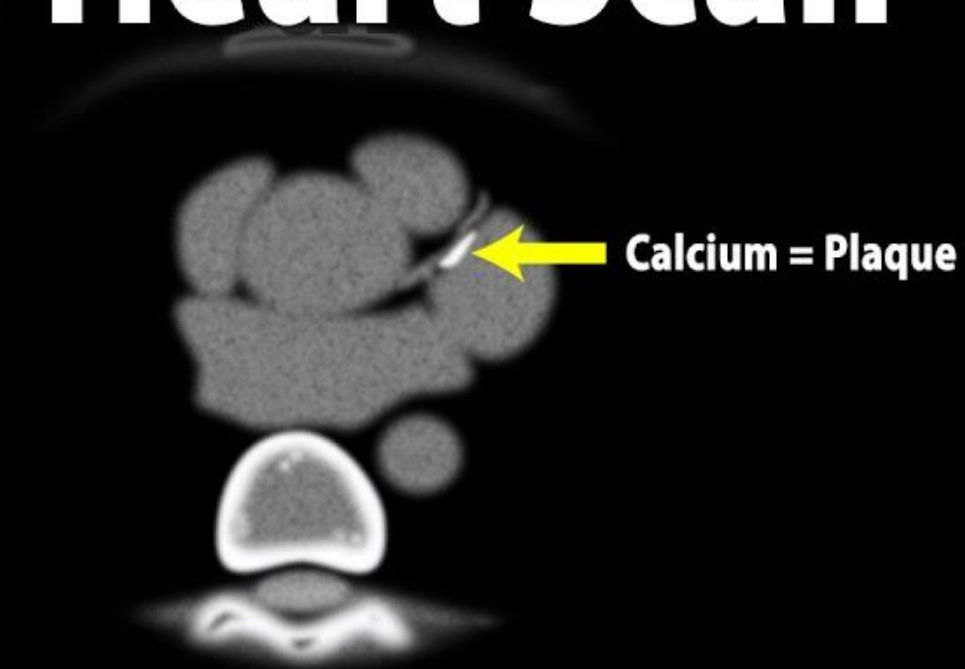
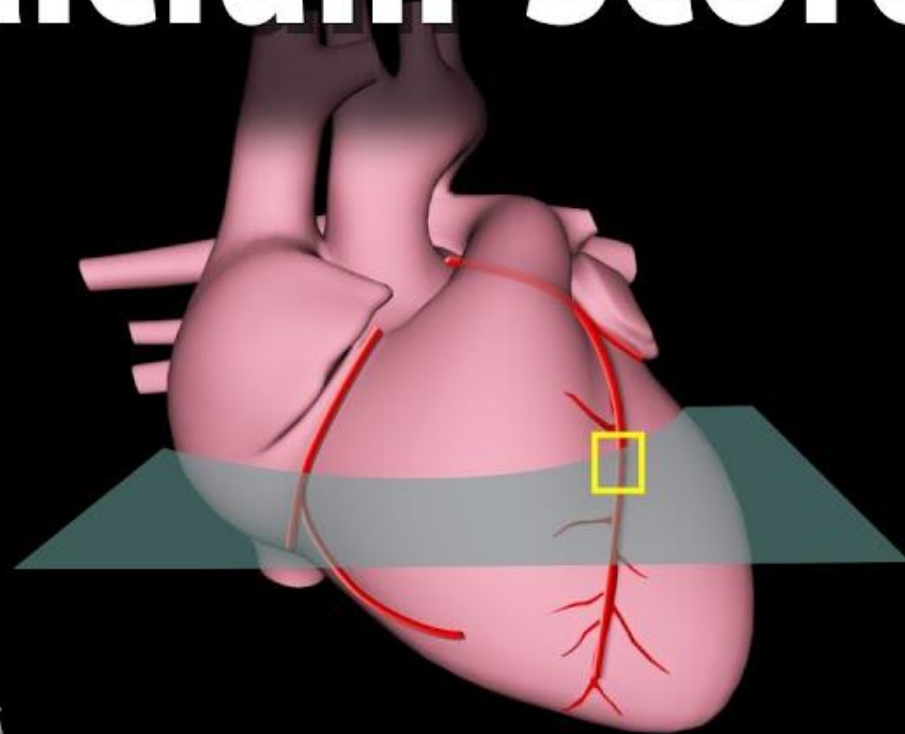
Calcium score = 0

Calcium score = 30

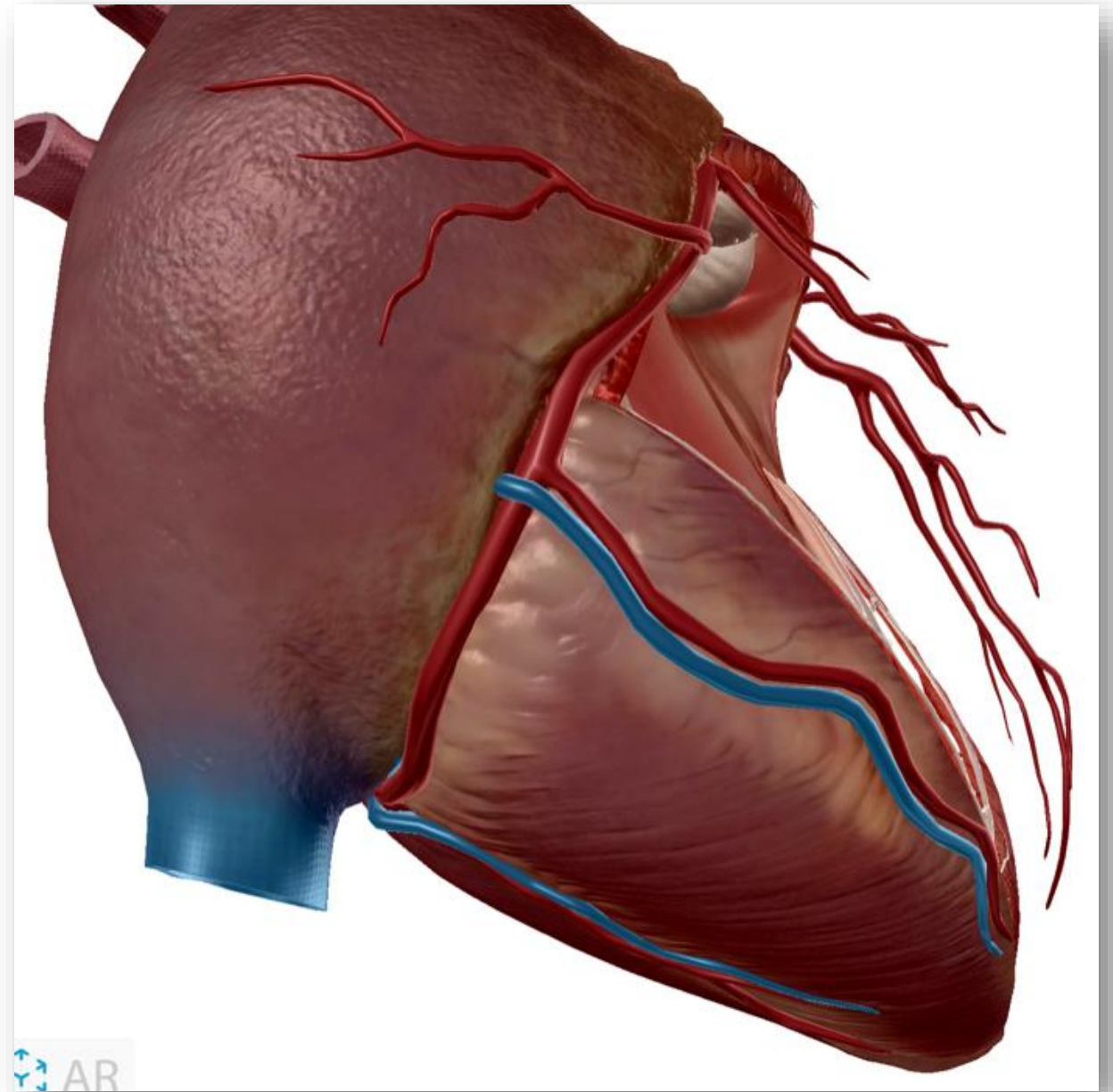
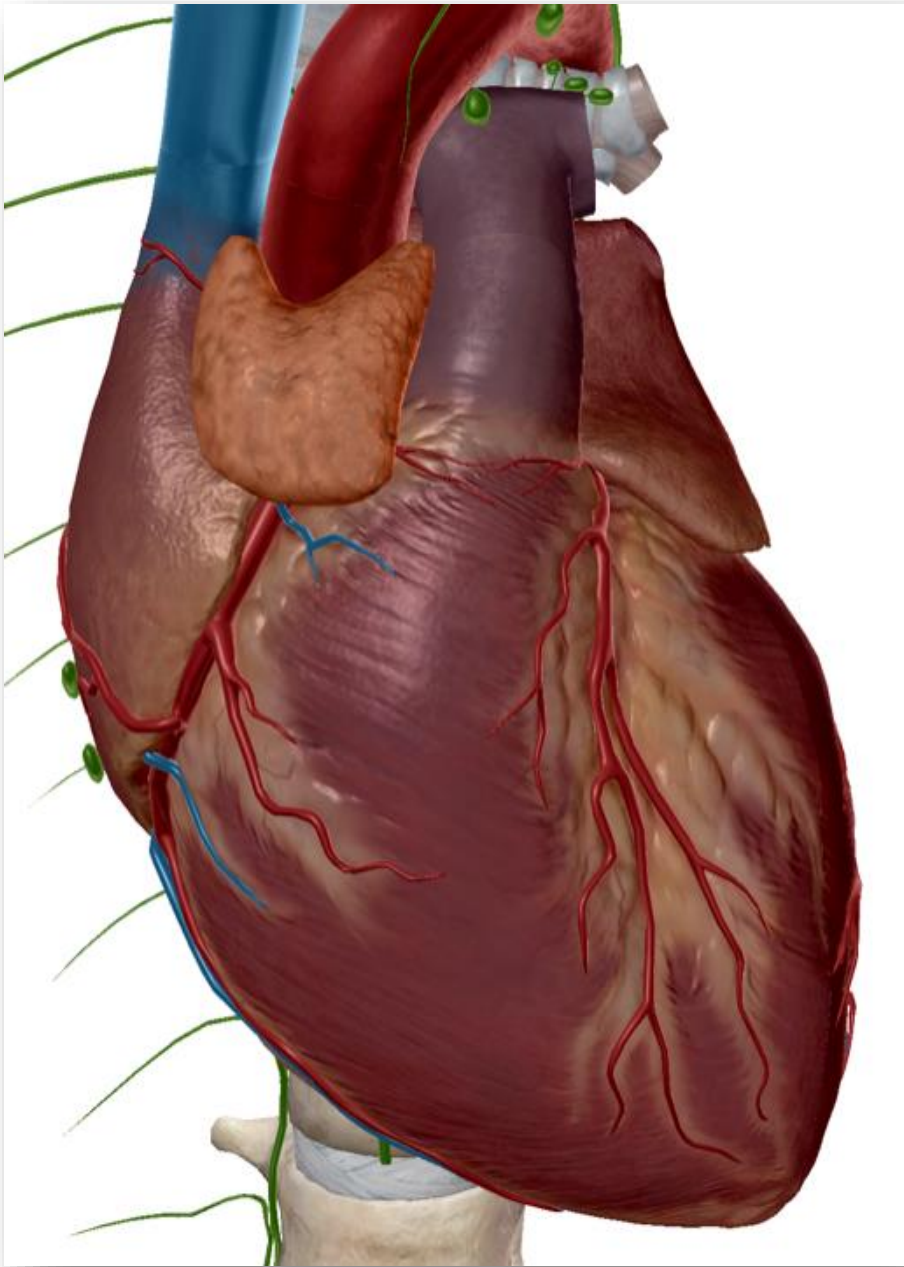
Calcium score = 300

Calcium score = 1000

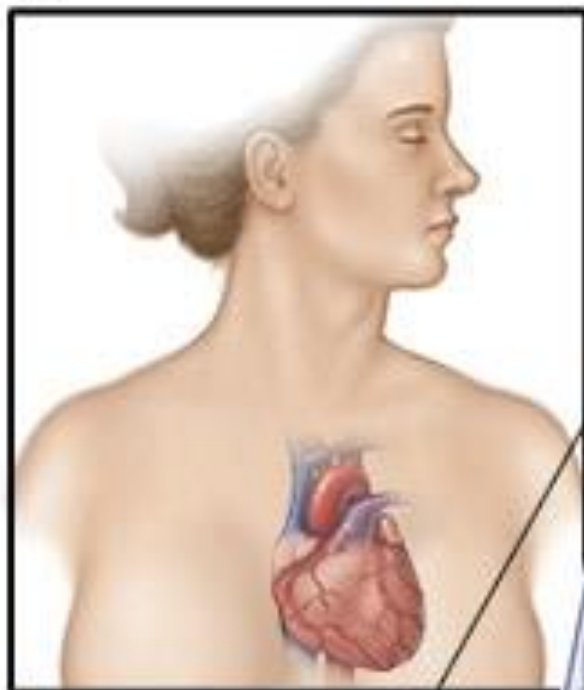
Calcium-Score Heart Scan



Calcium = Plaque

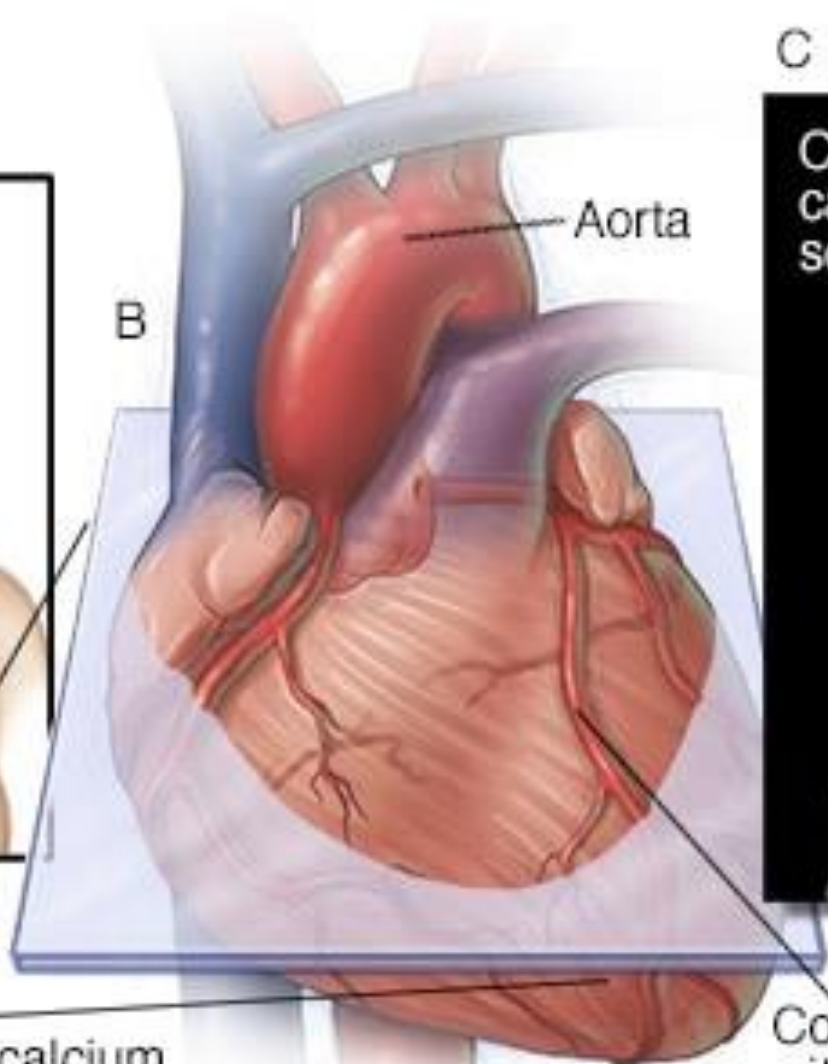


A



Location of coronary calcium scan imaging section

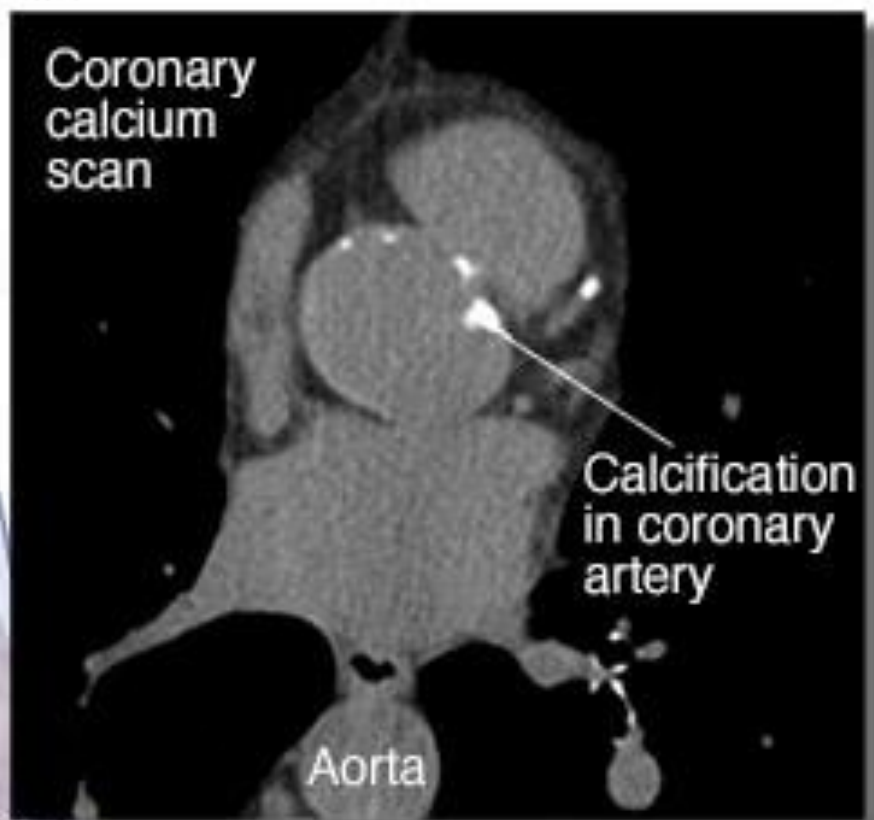
B



Aorta

Coronary artery with calcification

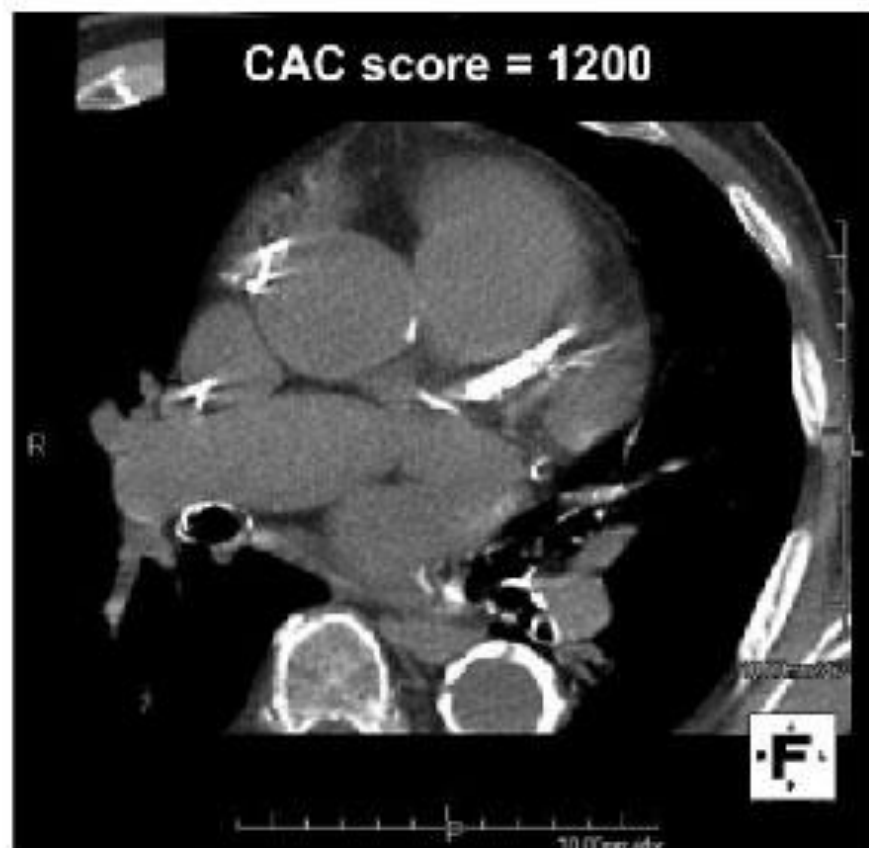
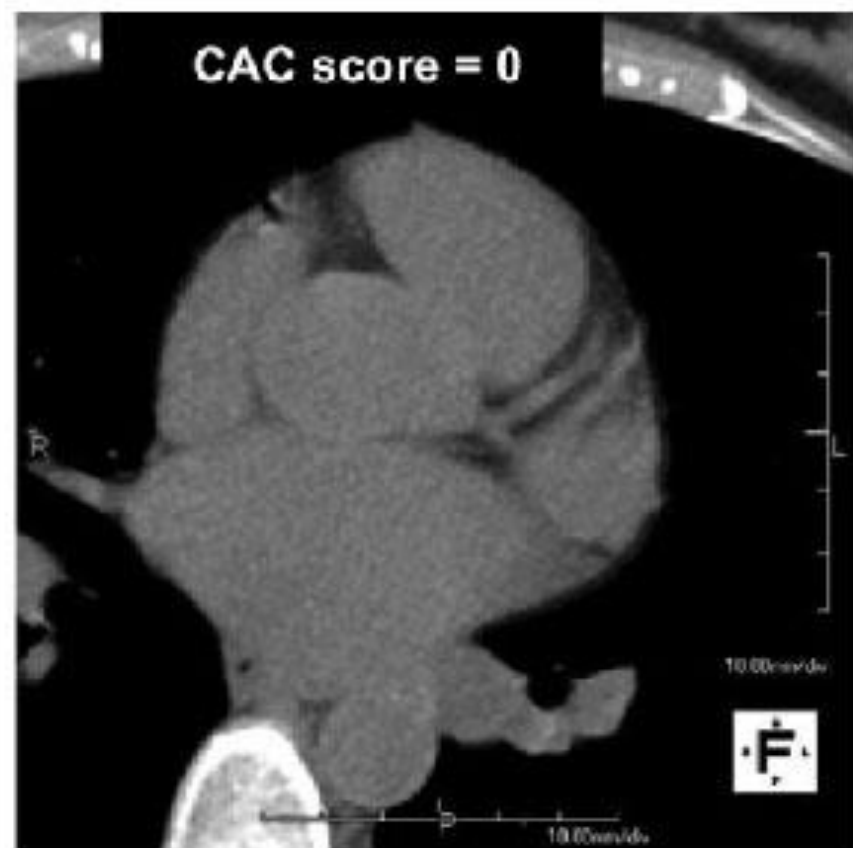
C

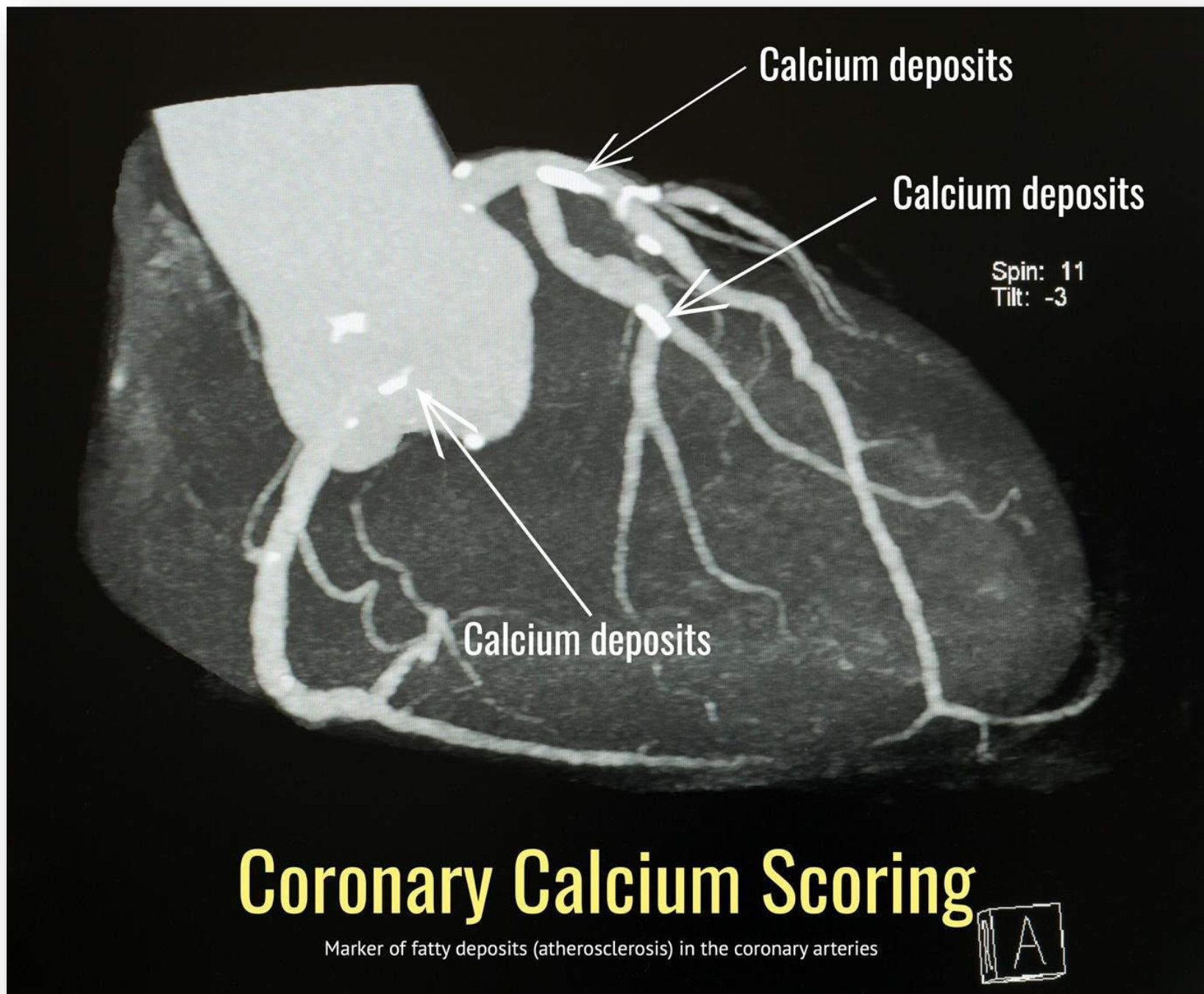


Coronary calcium scan

Calcification in coronary artery

Aorta





CORONARY CALCIUM SCORE CHART



NORMAL ARTERY



BEGINNING OF PLAQUE
FORMATION



FATTY DEPOSIT
ACCUMULATION



NARROWED ARTERY
BLOCKED BY A BLOOD CLOT

The amount of calcium present in the coronary arteries is scored according to the Agatston scale, as follows:

0	No identifiable calcium deposits
1-10	Low Risk. Less than 10% chance of heart disease
11-99	MILD calcium deposits
100-399	MODERATE calcium deposits
400-999	SEVERE calcium deposits
1000+	25% chance of heart attack within a year

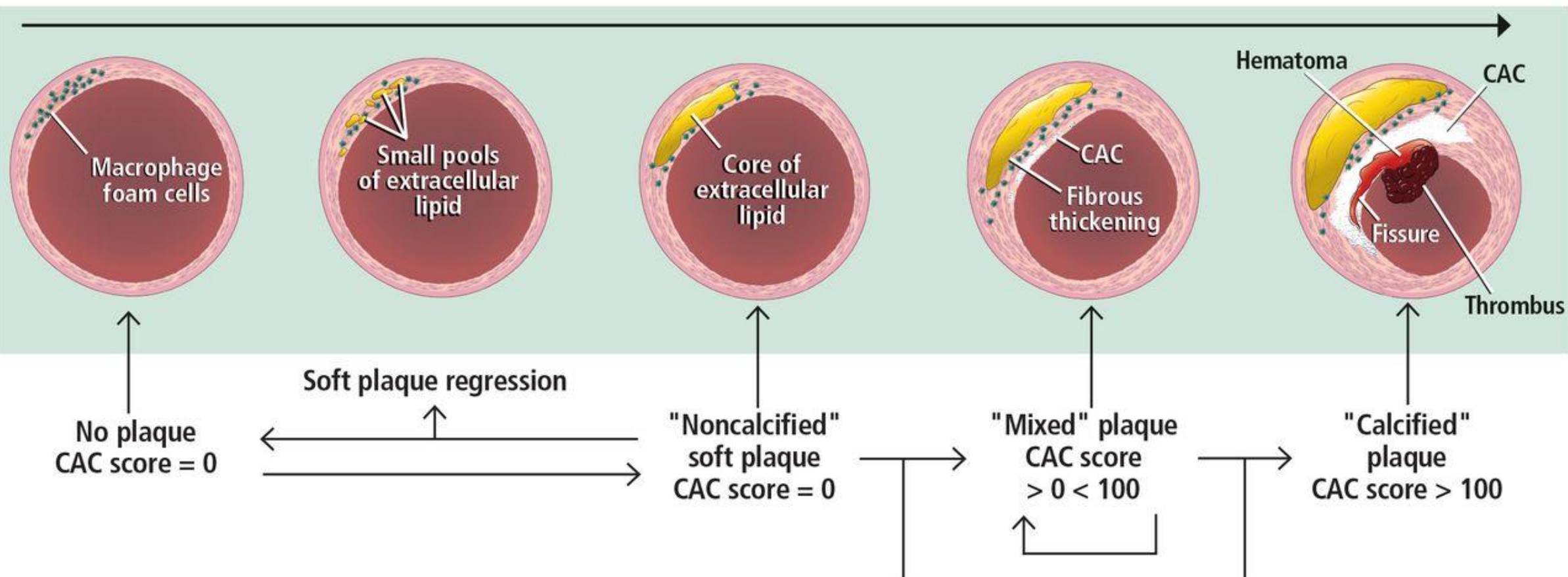
Type 2
Lesion

Type 3
Pre-atheroma

Type 4
Atheroma

Type 5
Fibroatheroma

Type 6
Complicated lesion



Coronary calcium scan score	Plaque	Risk	Next steps
0	none present	low risk of CAD or heart attack	no treatment required
1–10	minimal amounts of plaque present	low risk of CAD or heart attack	lifestyle changes to help prevent the score from increasing
11–100	small amounts of plaque present	moderate risk of CAD or heart attack	may need lifestyle changes and sometimes medication
101–400	moderate amounts of plaque that may be blocking arteries	medium to high risk of CAD or heart attack	medical treatments, lifestyle changes, and follow-up testing
Over 400	extensive amounts of plaque that is likely to be blocking the arteries	high risk of CAD or a heart attack	immediate further testing and treatment to help prevent heart attack

OBSERVATION:

CT CARDIAC, NON-CONTRAST

Comparison: None

Technique: Axial images were obtained throughout the heart. CTDI vol 24.87 (mGy), Total DLP 503.15 (mGy-cm) MIPS data collection requirements: All CT scans at CIC/IR are performed using dose optimization techniques as appropriate to the performed exam including the following: Automated exposure control, adjustment of the mA and/or kV according to patient size and targeted exams, and use of iterative reconstruction technique.

Findings: The cardiac calcium score is 2106 which places the patient at 90 percentile. There is a small pericardial effusion.

Of incidental note, there are few small lung nodules, the largest measuring 7 mm in diameter at the left lung base. There is minimum opacity at the left lingular lung, likely atelectasis or scarring. CT chest is recommended.

IMPRESSION:

- 
1. Cardiac calcium score 2106 which places the patient at 90 percentile.

Patient name: WEGWERTH, HUGH R
DOB: 11/09/1973

Clinic: DOC HUGH DC
Req Phys: Wegwerth, Hugh, DC
Dept No: 00001645389

CT CARDIAC CALCIUM SCORING

Exam Date: 04/29/2022

Accession: 7283564

EXAM: CT CARDIAC SCORING

LOCATION: Midwest Radiology Outpatient Imaging Southdale

ORDER DATE/TIME: 4/29/2022 9:08 AM

INDICATION: CT CALCIUM SCORE WT 200 HT 6.2 NO FAM HX NO SMOKING NO DIABETES NO HIGH CHOLESTEROL NO HIGH BLOOD PRESSURE

COMPARISON: None.

TECHNIQUE: Axial images of the coronary arteries without contrast for coronary artery calcium scoring. Radiation dose for this scan was reduced using automated exposure control, adjustment of the mA and/or kV according to patient size, or iterative reconstruction technique.

FINDINGS: Results of the scan were readable.

CORONARY ARTERY CALCIUM SCORING:

Total: 0.3

Left main coronary artery: 0

Left anterior descending coronary artery: 0

Circumflex coronary artery: 0

Right and posterior descending coronary arteries: 0.3

This total calcium score is between the 25th and 50th percentile for a 40-49 year-old man.

Atherosclerotic plaque burden: Minimal identifiable plaque.

Probability of significant coronary artery disease: Very unlikely, less than 10 %.

Risk of developing symptomatic coronary artery disease

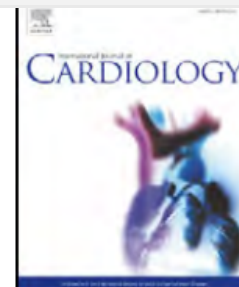




Contents lists available at [ScienceDirect](#)

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Coronary artery calcium score as a predictor for incident stroke: Systematic review and meta-analysis☆



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^b *Department of Medicine, University of Kansas Medical Center, United States*

^c *Houston Methodist DeBakey Heart & Vascular Center, United States*

5. Conclusion

In asymptomatic patients without apparent cardiovascular diseases, the incidence of stroke was overall low. The presence of coronary artery calcification was associated with incident stroke over mid-long term follow-up. CACS as a tool for early assessment of asymptomatic atherosclerosis provides prognostic information in asymptomatic population and may potentially be utilized as a risk stratifying tool for future cerebrovascular events in the scheme of cardiovascular prevention.

Supplementary data to this article can be found online at <http://dx.doi.org/10.1016/j.ijcard.2017.01.132>.

Estimated Arterial Age and 95% Confidence Intervals by Coronary Artery Calcium Score

CAC	Arterial Age in Years (95% CI)	CAC	Arterial Age in Years (95% CI)
0	39 (32–46)	100	73 (71–74)
10	56 (53–60)	200	78 (75–80)
20	61 (59–63)	300	80 (78–83)
30	64 (62–66)	400	83 (79–86)
40	66 (65–67)	500	84 (80–88)
50	68 (67–69)	750	87 (83–92)
60	69 (68–70)	1000	89 (84–94)
70	70 (69–71)	1500	92 (87–98)
80	71 (70–72)	2000	94 (88–100)
90	72 (71–73)	2500	96 (89–102)

Coronary artery calcium score: current status

CONCLUSION

The CAC score is an independent marker of risk for cardiac events, cardiac mortality, and all-cause mortality. In addition, it provides additional prognostic information to other cardiovascular risk markers.

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