

CT Angiography vs Angiogram

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Background: In the diagnosis of obstructive coronary artery disease (CAD), computed tomography (CT) is an accurate, non-invasive alternative to invasive coronary angiography (ICA). However, the comparative effectiveness of CT and ICA in the management of CAD to reduce the frequency of major adverse cardiovascular events is uncertain.

Methods: We conducted a pragmatic, randomized trial comparing CT with ICA as initial diagnostic imaging strategies for guiding the treatment of patients with stable chest pain who had an intermediate pretest probability of obstructive CAD and were referred for ICA at one of 26 European centers. The primary outcome was major adverse cardiovascular events (cardiovascular death, nonfatal myocardial infarction, or nonfatal stroke) over 3.5 years. Key secondary outcomes were procedure-related complications and angina pectoris).

Conclusion: Among patients referred for ICA because of stable chest pain and intermediate pretest probability of CAD, the risk of major adverse cardiovascular events was similar in the CT group and the ICA group. The frequency of major procedure-related complications was lower with an initial CT strategy.

CT angiography vs angiogram: The main difference between the two procedures is that while a standard angiogram involves a catheter being inserted into the artery and to the area being

studied, a CT angiogram does not require the insertion of a catheter. A significant advantage of a CT angiogram over a traditional angiogram is that a CT angiogram is non-invasive.

Conclusion: A CT angiogram and a traditional angiogram are both effective imaging tests in diagnosing conditions relating to the heart and blood vessels. However, many will favor the non-invasive option of a CT angiogram, which is fast, convenient, and relatively painless. A CT angiogram is very accurate in detecting CHD in patients and almost as accurate as a traditional angiogram, allowing doctors to make decisions such as ruling out CAD in patients with a low-to-medium risk of disease. CT scans are already the preferred method of choice for patients with a pretest probability for CHD of 50% or lower. And with the recent introduction of ultrahigh-resolution CT scanners, it could only be a matter of time until conventional invasive angiograms are slowly filtered out and replaced entirely by CT scanners, due to their accuracy, convenience, and development in spatial resolution.

Biography

I am Madhuja Nath Graduated from Tver State Medical University, Russia. After that I have worked in various multispeciality hospital in both Public and private sector. Upon gaining significant amount of experience in India, I migrated to UK, now working in NHS as CT1, in Department of Medicine.

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Received Date: October 04, 2022; **Accepted Date:** October 06, 2022; **Published Date:** October 31, 2022