



УНИВЕРЗИТЕТ У НОВОМ САДУ
UNIVERSITY OF NOVI SAD

TOP ACHIEVEMENTS 2022

FACULTY OF MEDICINE

Published work in the journal category M21a, 2/172, IF 176.082 (title of the work: CT or Invasive Coronary Angiography in Stable Chest Pain)

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Background: In the diagnosis of obstructive coronary artery disease (CAD), computed tomography (CT) is an accurate, noninvasive 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. **Results:** Among 3561 patients (56.2% of whom were women), follow-up was complete for 3523 (98.9%). Major adverse cardiovascular events occurred in 38 of 1808 patients (2.1%) in the CT group and in 52 of 1753 (3.0%) in the ICA group (hazard ratio, 0.70; 95% confidence interval [CI], 0.46 to 1.07; $P = 0.10$). Major procedure-related complications occurred in 9 patients (0.5%) in the CT group and in 33 (1.9%) in the ICA group (hazard ratio, 0.26; 95% CI, 0.13 to 0.55). Angina during the final 4 weeks of follow-up was reported in 8.8% of the patients in the CT group and in 7.5% of those in the ICA group (odds ratio, 1.17; 95% CI, 0.92 to 1.48). **Conclusions:** 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. (Funded by the European Union Seventh Framework Program and others; DISCHARGE ClinicalTrials.gov number, NCT02400229.).

