

#ECR2022: CT vs Invasive Coronary Angiography in Stable Chest Pain



At the European Congress of Radiology (ECR) in Vienna this week, Marc Dewey, Professor of Radiology, Pál Maurovich-Horvat, Professor of Radiology and Klaus Kofoed, Associate Professor of Cardiology, presented the main trial results and future implications of the DISCHARGE trial.

Computed tomography (CT) is an accurate and non-invasive alternative to invasive coronary angiography (ICA) in the diagnosis of obstructive coronary artery disease (CAD). However, it is still uncertain which method is more effective in managing CAD to reduce the frequency of major adverse cardiovascular effects.

In this study, researchers compared CT with ICA as an initial diagnostic imaging strategy to guide the treatment of patients with stable chest pain with an intermediate pretest probability of obstructive CAD. Patients were referred for ICA at one of 26 European centres. The primary outcome of the study was major adverse cardiovascular events including cardiovascular death, nonfatal myocardial infarction, or nonfatal stroke, over a period of 3.5 years. Secondary outcomes included procedure-related complications and angina pectoris.

Three thousand five hundred and sixty-one patients were included in the study. Major adverse cardiovascular events occurred in 2.1% of patients in the CT group and 3.0% of patients in the ICA group. Major procedure-related complications occurred in 0.5% of patients in the CT group and 1.9% of patients in the ICA group. During the final four weeks of follow-up, angina was reported in 8.8% of the patients in the CT group and 7.5% of patients in the ICA group. During the final four weeks of follow-up, angina was reported in 8.8% of the patients in the CT group and 7.5% of patients in the ICA group.



Major Procedure-Related Complications



These findings show that the risk of major adverse cardiovascular events was similar in both the CT and the ICA groups among patients referred for ICA because of stable chest pain and intermediate pretest probability of CAD. However, the frequency of major procedure-related complications was lower in patients in the CT group.

Source: ECR 2022, NEJM Image Credit: Slides from ECR 2022 session; iStock

Published on : Thu, 14 Jul 2022