

# Noninvasive imaging can guide more selective invasive coronary angiograph

August 29 2016

---

In stable symptomatic patients with suspected coronary artery disease, a strategy of using non-invasive computed tomography (CT) to guide the selective use of invasive coronary angiography was safe, and less expensive compared with direct invasive angiography.

Findings of the CONSERVE (Coronary Computed Tomographic Angiography for Selective Cardiac Catheterization) trial, presented in a Hot Line session at ESC Congress 2016, showed the CT-guided strategy was associated with no differences in major adverse cardiovascular events (MACE), and resulted in an 86% reduction in invasive coronary angiography (ICA) compared to the direct invasive angiography approach.

"Our study observed lower rates of invasive procedure, which were also associated with cost savings," commented investigator Hyuk-Jae Chang, MD, PhD from Yonsei University College of Medicine, in Seoul, Republic of Korea.

"The message from this trial is that, if we use coronary CT angiography as a gatekeeper to the catheterization lab in stable symptomatic patients with suspected [coronary artery disease](#), we'll reduce costs with sufficient safety."

The randomized, multicenter, controlled trial included 1,530 patients with indications for invasive angiography, based on current guidelines.

They were randomized to direct versus selective invasive coronary angiography, the latter driven by physician referrals based on initial results of the CT.

For the primary endpoint of 12-month MACE, rates were 5% in both groups, with the secondary endpoint of mean cardiovascular cost per patient being significantly lower in the selective versus direct invasive coronary angiography arm (\$2,883 vs \$6,031).

There was a >\$3000 cost savings per person in this trial over 12 months using medicare costs. If we account for the 4.6M caths that are done (3.6 in the outpatient setting), we can see that math works out to >\$10B each year.

In addition to being economically meaningful, the significant reduction in invasive procedures is clinically important, said Prof. Chang "CT guided strategy may uncouple the diagnosis - treatment cascade of ICA which promote excess revascularization and subsequently expose patients to non-negligible risk related to invasive procedure."

Provided by European Society of Cardiology

Citation: Noninvasive imaging can guide more selective invasive coronary angiograph (2016, August 29) retrieved 25 April 2024 from <https://medicalxpress.com/news/2016-08-noninvasive-imaging-invasive-coronary-angiograph.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.