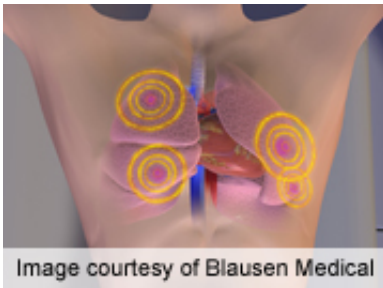


Dual-source cardiac CT IDs CAD in hard-to-image patients

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In patients who have previously been considered difficult to image, dual-source cardiac computed tomography can identify clinically significant coronary artery disease, according to a review published in the May issue of *Radiology*.

(HealthDay)—In patients who have previously been considered difficult to image, dual-source cardiac (DSC) computed tomography (CT) can identify clinically significant coronary artery disease, according to a review published in the May issue of *Radiology*.

Marie E. Westwood, Ph.D., from Kleijnen Systematic Reviews in York, U.K., and colleagues conducted a literature review to evaluate the [diagnostic performance](#) of DSC CT newer-generation instruments for identifying [coronary artery disease](#) in patients who are difficult to image using 64-section CT. Twenty-five studies were included which used invasive [coronary angiography](#) as reference standard.

Of the 22 studies that used a Somatom Definition instrument, the researchers found that the pooled, per-patient estimates of sensitivity were 97.7 percent for patients with arrhythmias and 97.7 percent for patients with high [heart rates](#). For specificity, the corresponding pooled estimates were 81.7 and 86.3 percent. For patients with previous stent implantations, sensitivity estimates of 90 percent or greater were reported in two studies with Somatom and one study with Aquilion One, while specificities were 81.7 and 89.5 percent for Somatom and 81.0 percent for Aquilion One. Only per-segment or per-artery data were available in patients with high coronary calcium scores, previous bypass grafts, or obesity, but sensitivity estimates remained high (>90 percent in all but one study) and specificities ranged from 79.1 to 100 percent using Somatom Definition.

"DSC CT may provide sufficiently accurate anatomic information for the diagnosis and assessment of coronary artery disease in some or all difficult to image groups; these technologies may be most useful in avoiding further invasive investigations," the authors write.

One author disclosed [financial ties](#) to Kleijnen Systematic Reviews.

More information: [Abstract](#)
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