

Cardiology today

NEWS & PERSPECTIVE FOR THE CARDIOVASCULAR SPECIALIST

Women had more poorly evaluable coronary segments than men

Patient-based analysis revealed that adequate exams were similar in both sexes, however.

By

Society of Cardiovascular Computed Tomography 4th Annual Scientific Meeting

Although the source of poor image quality differed, women presented with more poorly evaluable coronary segments than men when imaged with CTA (read more stories about CTA on *Cardiology Today* [here](#)).

Researchers enrolled 198 consecutive patients with suspected CAD (90 women), with 1,241 segments in the women and 1,557 segments in the men. Patients underwent coronary CTA and the researchers graded the coronary segments for motion, calcium score and contrast enhancement. Images with severe degradation were classified as “poorly evaluable” by the researchers.

According to the results, 6.2% of segments were classified as poorly evaluable in the women vs. 4.0% in the men ($P=.007$). Poorly evaluable segments were due to motion grade (1.6% vs. 0.3%; $P<.001$) and contrast enhancement (2.3% vs. 0.3%; $P<.001$) in more women than in men, and calcium score was responsible for the poorly evaluable segments in more men than women (3.4% vs. 2.3%; $P<.001$). There was no difference between the number of poorly evaluable segments per study in the patient-based analysis between the sexes ($P=.392$). The mean calcium score was higher in men (183) than in women (101; $P=.023$) and mean heart rate was higher in women (59) than in men (56; $P=.012$).

“In the segment-based analysis, women have more poorly evaluable coronary segments than men, and the source of poorly evaluable segments is different in women and men,”

Frederico E. Mordini, MD, a clinical assistant professor of medicine with the North Shore University Medical Group in Evanston, Ill., said in his presentation. “In the patient-based analysis, the proportion of technically adequate exams is equivalent in men and women. This is among the first studies to address gender differences in cardiac CTA, and further gender-based studies in cardiac CTA are needed.” – *by Eric Raible*

For more information:

- Mordini FE. #90. Presented at: [Society of Cardiovascular Computed Tomography 4th Annual Scientific Meeting](#); July 16-19, 2009; Orlando, Fla.

[More stories from the SCCT Scientific Meeting --->](#)