Top Ten Things To Know
Coronary CT Angiography

1. Coronary CTA is considered the "reference standard" for coronary assessment because of its higher resolution quality as compared to other coronary imaging options.

2. Questions still remain as to whether the quality of the Coronary CTA translates to improved outcomes for the patient.

3. The purpose of this consensus document is to provide a multidisciplinary approach for assessing three areas without consensus and areas of consensus relating to the diagnosis of CAD using coronary CTA.

4. The benefits of using CT angiography include ruling out CAD in patients with acute chest pain, pulmonary embolism and aortic dissection. The disadvantages of using CT angiography include exposure to high levels of radiation and iodinated contrast agents which may produce allergic reactions and acute renal injury.

5. The 64-channel coronary CTA is every effective in detecting non-calcified and calcified plaques in coronary arteries of asymptomatic patients. However, there is no evidence linking non-calcified, non-obstructive plaques to an increase in risk.

6. CTA has the ability to evaluate and rule out three major cardiac events for patients who are admitted into the emergency department with chest pain: CAD, pulmonary embolism and aortic dissection at the same time. But utilizing CTA should not replace careful evaluation of the patient to ensure that the positives outweigh the negatives of using this technology.

7. More studies are necessary to evaluate whether CTA is a cost effective tool to improve patient outcomes in patients with acute chest pain who are being evaluated in the emergency department.

8. Because of interpretative aspects of the CTA are more challenging than other CT technologies, the image quality and diagnostic accuracy is highly depended upon the proper training of the technicians and patient selection.

9. Future studies are needed to address the impact of variability in test performance and interpretation on the ability of coronary CTA to alter clinical care and improve future outcomes.

10. There have been many advances in CT Technology and as more advances are developed, CTA will be able to provide information not currently available from invasive angiography and will create a major shift in how patients with atherosclerotic cardiovascular disease are classified and managed.


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