Extended abstract

Multi-slice computed tomography coronary angiography – coronary artery anomalies

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MSCT-coronary angiography (MSCT-CA) is a minimally invasive, 3D imaging modality. It offers superior appraisal of coronary artery morphology and eventual stenosis in patients with suspicion on coronary artery disease.

In addition, MSCT-CA enables accurate assessment of the vessel wall, particularly plaque characteristics and coronary anatomy in a 3D fashion, thereby allowing optimal relative positioning of anatomical structures, 3D visualisation enables determination of vessel origin and course but also helps to identify the dependant myocardial territory, a basic principle of CAA (coronary artery anomalies) classification.

Congenital anomalies of coronary arteries (CAA) vary in prevalence of about less than 1% in general population. Later are frequently found in combination with other congenital heart defects. Coronary anomalies are classified into three anatomic categories: anomalies of origin and course, anomalies of termination, coronary atresia, hypoplasia, or ectasia.

Anatomic anomalies of coronary arteries are typically asymptomatic, are discovered solely by angiography or autopsy, but some "malignant" CAA are associated with high incidence of syncope, arrhythmia, myocardial infarction, and sudden death.

KEYWORDS: MSCT coronary angiography, coronary anatomy and anomalies, anomalies of origin and course, anomalies of termination, coronary atresia, hypoplasia or ectasia.

Literature

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