Appendix 1: Protocol [posted as supplied by author]

eMethods

On the day of the coronary computed tomographic angiography (CCTA) scan, patients were treated with a beta-blocker (to achieve a heart rate ≤60 beats per minute) and nitroglycerin (0.6-0.8 mg sublingually) to optimize image quality. Patients with asthma were given a calcium channel blocker to achieve heart rate control. A non-contrast scan was performed first. This scan was prospectively triggered at 75% of the RR interval, with 0.4 to 0.625 slice thickness (depending on scanner type) and 3mm increments. We then performed a contrast scan, injecting contrast agent at a rate of 5.5 to 7 ml/s, depending on body habitus of the patient. On scanners with the capacity for prospective triggering, studies were acquired with this technique whenever heart rate was adequately controlled (heart rate <65 beats per minute) and regular. For retrospective acquisitions, whenever possible dose modulation was used to minimize radiation dose.

Standard initial reconstruction of the CCTA data set was performed at 75% of the R-R interval, with additional reconstructions performed as required for image interpretation. Each participating site submitted several scans for central review to confirm adherence to the study imaging protocol and achievement of adequate image quality during site initiation.