

Coronary MRA Techniques

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- **Highlights:** Coronary MRA can reliably rule out significant coronary artery disease.
- **Target audience:** Scientists, clinicians, and trainees who conduct research or are interested in the application of MRI in coronary artery disease.
- **Outcome/Objectives:**
 - Learn various techniques imaging protocols that have been developed for coronary MRA.
 - Understand current clinical results and limitations of coronary MRA.
 - Learn current technical developments to further improve coronary MRA.
- **Purpose:** Coronary artery disease is the leading cause of deaths in developed countries. Coronary MRA is a promising non-invasive technique to detect coronary artery disease.
- **Methods:** 3D whole-heart SSFP coronary MRA is the commonly used method at 1.5T and contrast-enhanced MRA is often used at 3.0T. Navigator-echo gating has been used for respiratory motion correction.
- **Results:** Coronary MRA has been shown to reliably rule out significant coronary artery disease.
- **Discussion:** Coronary MRA is a highly promising method for non-invasive detection of coronary artery disease. Further improvements in resolution, speed, motion correction, and workflow are required for routine clinical application.