Magnetic resonance colonography: a promising new technique.

Colorectal carcinoma is still the second leading cause of cancer-related death, although it arises mostly from benign adenomas. Numerous screening methods are available, but none of them is accepted as ideal. Ultrafast three-dimensional data sets acquired by cross-sectional imaging modalities (CT or magnetic resonance) in combination with new post-processing modes, known as virtual colonoscopy, have led to a new discussion of screening tests for colorectal cancer. Recently published results indicate a high sensitivity for CT colonography and for MR-based colonography (MRC), with detection rates of greater than 90% for colorectal lesions greater than 10 mm in size. Three-dimensional data acquisition for MRC is performed in less than 1 minute, and no severe complications have been reported. The main advantages of MRC are the lack of ionizing radiation, the low risk of the procedure, and low patient discomfort. MRC has become an attractive diagnostic procedure for colorectal lesions that can also be used as a screening method.