12 h prior to examination:

Prednisone, 50 mg PO *or* methylprednisolone, 32 mg PO

2 h prior to examination:

Prednisone, 50 mg PO *or* methylprednisolone, 32 mg PO *and* cimetidine, 300 mg PO *or* ranitidine, 150 mg PO

Immediately prior to examination:

Benadryl, 50 mg IV (alternatively, can be given PO 2 h prior to exam)

Other side effects of CT contrast include a sensation of warmth throughout the body and a metallic taste during IV administration. Extravasation of contrast media, although rare, can be painful and lead to compartment syndrome. When this occurs, immediate consultation with plastic surgery is indicated. Patients with significant cardiac disease may be at increased risk for contrast reactions, and in these patients, limits to the volume and osmolality of the contrast media should be considered. Patients who may undergo systemic radioactive iodine therapy for thyroid disease or cancer should not receive iodinated contrast media, if possible, because this will decrease the uptake of the radioisotope into the tumor or thyroid (see the *American College of Radiology Manual on Contrast Media*, 2021; *https://www.acr.org/-/media/ACR/Files/Clinical-Resources/Contrast_Media.pdf*).

MAGNETIC RESONANCE IMAGING

■ TECHNIQUE

MRI is a complex interaction between hydrogen protons in biologic tissues, a static magnetic field (the magnet), and energy in the form of radiofrequency (Rf) waves of a specific frequency introduced by coils placed next to the body part of interest. Images are made by computerized processing of resonance information received from protons (typically hydrogen) in the body. Field strength of the magnet is directly related to signal-to-noise ratio. While 1.5 Tesla (T) and 3-T magnets are now widely available and have distinct advantages in the brain and musculoskeletal systems, even higher field magnets (7-T) and positron emission tomography (PET)-MR machines