

METALLIC FOREIGN BODIES AND IMPLANTS OF UNKNOWN COMPOSITION

GENERAL COMMENTS

- Cases will be assessed on an individual basis and only approved if the benefits of MRI outweigh the risks and if MRI is the most appropriate imaging modality to answer the clinical question.
- The supervising radiologist should consider magnetically induced force and torque, current induction and RF heating regarding the foreign body and its proximity to vital anatomic structures.
- The MRI technologist must fill out the Foreign Body / Implant / Device form (MI-0651) and have the supervising radiologist sign the form prior to proceeding with the MRI.

ORBITAL FOREIGN BODIES

- Patients with a history of orbital/ocular injury involving metal require current AP and lateral orbit radiographs or thin-section CT imaging to screen metallic foreign bodies.

BULLET FRAGMENTS AND SHRAPNEL

- Patients with a history of retained bullet fragments and/or shrapnel may require AP and lateral radiographs or CT to determine the foreign body's relation to vital structures (at the discretion of the supervising radiologist).
- Bullet fragments and pellets manufactured in the US are typically composed of non-ferromagnetic metal, while those used in the military (including the US military) and those manufactured in a foreign country frequently contain ferromagnetic metal.
- Shrapnel typically contains ferromagnetic metal.