Ferromagnetic foreign bodies in eye orbits are a contraindication for patients having a MRI scan.

Orbit x-rays may be required as part of the screening process.

Radiographic screening for orbital foreign body prior to MRI is needed in patients who have a history of a metallic orbital foreign body for which they sought medical attention AND the medical practitioner did not get the whole foreign body out.
- If the patient was told by their physician that the whole metallic foreign body was removed they do not need radiographic screening.
- Patients with occupational exposure (welding, grinding) do not need screening unless they have the history above.

This policy and procedure applies to Covenant Health Edmonton Acute Care facilities, patient care provider staff and physicians.

All patients who have a history of orbit trauma by a potential ferromagnetic foreign body for which they sought medical attention are to have their orbits cleared by either plain orbit films (at least two views) or by CT scan.

A Radiologist or Resident must review the orbital X-Rays and/or CT scan prior to the MRI procedure being performed.

Should the patient present at the MRI Department for their procedure and express uncertainty about the presence of an orbital metallic foreign body, the MRI Technologist will review the question with the patient “Did you ever seek medical attention for a foreign body in your eye?” If yes the technologists must ask, “Has it been removed by a physician?” Should uncertainty still exist the Radiologist or Radiology Resident will arrange for orbital X-Rays to be performed, prior to the MRI procedure.

When a Radiologist or Radiology Resident is not available to order or review the orbital X-Rays; the patient will be rebooked once the orbits have been cleared.

Unconscious/unresponsive patients and/or patients who cannot provide their own reliable histories who are unaccompanied by a family member to verify their surgical history, shall have orbit/skull films done prior to the MRI examination.

Covenant Health Policy/Procedure #VII-B-20, Interpretive Services
Applicable site or organization applicable ‘Patient Consent’ policy/procedure(s)