Indications for referral

Any patient with a permanent pacemaker (PPM) and any non-pacemaker-dependent patient with implantable cardioverter defibrillator (ICD) who needs a clinically indicated MRI for any part of the body (including the chest region) is a candidate for this protocol. Patients must also have received a chest X-ray within six months and had their pacemakers interrogated prior to scheduling a MRI.

Process

Immediately before undergoing the MRI, one of our EP team members will interrogate the device. If necessary, the device will be set to a non-sensing mode for the MRI. EP will monitor the patient throughout the scan. EP will also interrogate the PPM or ICD immediately after and reprogram as necessary. MRI is limited to 1.5 tesla.

Contraindications

- Pacemaker-dependent patients with an ICD
- Epicardial or abandoned leads
- Older (manufactured prior to 2000) PPM or ICD device
- Pediatric patients younger than 8 years
- Patients < 80 lbs.
- Dementia or need for sedation

Follow-up

Patients should have post-MRI device check 1-6 weeks after MRI either at OHSU or with their referring cardiologist.

About us

The clinical cardiac electrophysiology (EP) service at OHSU is dedicated to the diagnosis and management of all types of heart rhythm disorders. We offer a complete range of noninvasive and invasive EP services, as well as a vigorous research program. Charles Henrikson, M.D. is the director of the electrophysiology service at OHSU. Dr. Henrikson and his staff perform the full range of EP procedures including pacemaker and defibrillator implantation; EP study and ablation of supraventricular tachycardia, atrial fibrillation, and ventricular tachycardia; laser lead extraction; and epicardial access and ablation. He has an active research program with more than 90 peer-reviewed publications.

To refer a patient or consult with our team, please call 800 245-6478.