February 5, 2001

Item: Magnetic Resonance Imaging (MRI) systems, all.

Specific Incident: A “sand bag” attached to a patient’s arm undergoing an MRI exam contained iron pellets (unknown to staff) encased in heavy vinyl; brand name “North West”. When the patient was being moved into the MRI bore, the iron-filled bag flew into the magnet and pinned the patient’s forearm to the side of the magnet. Emergency measures were used to turn the magnet off, and the patient was unharmed. Sometimes, “sand bags” = “iron bags”.

Recommendation: 1) Purchase “sand bags” for patient care that do not contain iron (or only materials specified by the vendor to be used safely). These bags should be labeled MRI-safe (i.e., intended for use in your specific MRI environment)

2) If your facility continues to use “sand-bags” for patient care that contain iron, those bags should be clearly labeled “Contains Iron: DO NOT expose to MRI”

3) Patients should disrobe and wear clothing tested for your MRI environment

4) DO NOT verify that a “sand-bag” is compatible by testing it with the MRI magnet – this could have catastrophic consequences

5) Staff should consider all items to be unsafe for the MRI environment until “proven” otherwise. This could be done with a checklist, where each item is explicitly determined “safe” by manufacturer documentation and removal of any metal items

Additional Information: To better understand other potential hazards with MRI systems, please see the “Supplemental MRI Hazard Summary” on the NCPS Web site http://vaww.ncps.med.va.gov/. AND, please notify NCPS if your facility has had close calls, or you have discovered effective countermeasures. Also see FDA guidance at www.fda.gov/cdrh/ode/primerf6.html

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