Print "PDF version"

What's New in the Patient Safety World

May 2025

Add Another Item to Your MRI Screening Protocols

We screen patients prior to MRI scanning for ferromagnetic materials that may pose a risk for thermal injury during MRI. Such materials have been turning up in unexpected places. In our September 2019 What's New in the Patient Safety World column "New MRI Hazard: Magnetic Eyelashes" we discussed the risks associated with magnetic eyelashes. We also noted that clothing and other related products may have incorporated ferromagnetic and/or conductive materials (eg, antimicrobial silver and copper) that are not reliably disclosed in labeling. Examples given include sportswear (including underwear), brassieres, orthotic-related items (eg, stump covers or stump shrinkers), and blankets, but there are likely others as well. Tattoos and dermal adornments are other items commonly seen. It also discusses orbital X-rays for screening patients having a history of orbital trauma with possible metallic elements. And our January 2021 What's New in the Patient Safety World column "New MRI Risk: Face Masks" discussed the risk of burns during MRI from face masks that may have metal parts, like nose pieces nose clips or wires, headband staples, nanoparticles (ultrafine particles), or antimicrobial coating that may contain metal (such as silver or copper).

Now another novel item has been identified: hair extensions! An article from AuntMinnieEurope.com (Payne 2025) has a good discussion about whether patients with such hair extensions should be scanned or not. Hair extensions may attach with metal beads or clips, or otherwise have metal components. These could produce image artifacts if scanning the head/neck area. The article also notes that "If the extension comes loose, it (or small parts of it) could even be drawn into the magnet itself, causing significant problems there. Metal shavings or metal powder in the magnet can damage the magnetic field itself."

The article indicates that the risks of burns or discomfort are relatively minor. But it makes sense to ask patients about hair extensions prior to MRI scans and at least notify the patient that there is a risk, even if it is minor.

Some of our prior columns on patient safety issues related to MRI:

- February 19, 2008 "MRI Safety"
- March 17, 2009 "More on MRI Safety"
- October 2008 "Preventing Infection in MRI"
- March 2009 "Risk of Burns during MRI Scans from Transdermal Drug Patches"
- January 25, 2011 "Procedural Sedation in Children"
- February 1, 2011 "MRI Safety Audit"
- October 25, 2011 "Renewed Focus on MRI Safety"
- August 2012 "Newest MRI Hazard: Ingested Magnets"
- October 22, 2013 "How Safe Is Your Radiology Suite?"
- October 21, 2014 "The Fire Department and Your Hospital"
- August 25, 2015 "Checklist for Intrahospital Transport"
- August 2016 "Guideline Update for Pediatric Sedation"
- October 2016 "MRI Safety: There's an App for That!"
- January 17, 2017 "Pediatric MRI Safety"
- August 8, 2017 "Sedation for Pediatric MRI Rising"
- March 2018 "MRI Death a Reminder of Dangers"
- March 2018 "Cardiac Devices Safe During MRI But Spinners!?"
- November 2018 "OMG! Not My iPhone!"
- April 2, 2019 "Unexpected Events During MRI"
- September 2019 "New MRI Hazard: Magnetic Eyelashes"
- October 15, 2019 "Lots More on MRI Safety"
- November 5, 2019 "A Near-Fatal MRI Incident"
- November 2019 "ECRI Institute's Top 10 Health Technology Hazards for 2020"
- January 7, 2020 "Even More Concerns About MRI Safety"
- March 2020 "Airway Emergencies in the MRI Suite"
- October 2020 "New Warnings on Implants and MRI"
- January 2021 "New MRI Risk: Face Masks"
- June 1, 2021 "Stronger Magnets, More MRI Safety Concerns"
- November 2021 "Yet Another Risk During MRI"
- January 2022 "MRI Safety Issues"
- July 26, 2022 "More Risks in the Radiology Suite"
- October 24, 2012 "Serious MRI Accident at Unregulated MRI Center"
- November 21, 2023 "Another Terrifying MRI Accident"
- January 2024 "Guns and MRI Don't Mix"
- February 20, 2024 "What is a "Safety Case"?"
- June 11, 2024 "Nursing in the MRI Suite"
- August 13, 2024 "Preventing Thermal Injury During MRI"
- October 2024 "Another MRI Accident Reveals Gap in Oversight
- October 2024 "MRI Special Patient Considerations"
- October 8, 2024 "First Responders and MRI"
- April 22, 2025 "Updated ACR Manual on MRI Safety"

References:

Payne M. Hair extensions and MRI: To scan or not to scan? AuntMinnieEurope.com 2025; Mar 17, 2025
https://www.auntminnieeurope.com/clinical-news/mri/article/15739778/hair-extensions-and-mri-to-scan-or-not-to-scan

The Truax Group
Healthcare Consulting
www.patientsafetysolutions.com

http://www.patientsafetysolutions.com/

Home

Tip of the Week Archive

What's New in the Patient Safety World Archive