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What's New in the Patient Safety World

July 2026

More on Nail Polish and MRI

Our November 2025 What's New in the Patient Safety World column "MRI Hazards - Big and Small" noted a new trend using ferromagnetic nail polish has led to streak artifacts on 3T MRI interfering with scan interpretation (Lou 2025). One example is the "cat eye" manicure -- a pattern achieved by nail technicians swiping a magnet over the magnetic particles in the nail polish. Metallic hair dye may also cause minor distortions on MR images. The article also mentions permanent eyeliner that has ferromagnetic material and many tattoos containing iron oxide as causing not only MRI artifacts but also occasionally causing burns.

MR safety experts Kristin Seitz and Tobias Gilk recently discussed this issue (Seitz 2026). They note there have been lots of warnings on social media about cat-eye nail polish being "unsafe" to wear during an MRI scan, particularly warnings of the potential for heating and patient burns. That has led to cancellations or delays in patients getting MRI scans in some cases.

They note that metallic particles are not unique to nail polish. Iron oxide is a common ingredient in many cosmetic products -- mascara, bronzer, tinted sunscreen, etc. Yet we don't see the same sorts of warnings about these products. They note that, to date, there have been no FDA MAUDE reported incidences of RF heating of metallic nail polish -- or any other topical cosmetic product. They also note that ASTM/US FDA standards indicate that objects with an electrically conductive length of 2 cm or less are not at risk of clinically significant levels of RF heating in MR imaging at 3.0 T or lower field strengths.

On the other hand, the risks of image distortion or artifacts are real. Yet these artifacts generally only extend only a few inches from the object, so the risk should only really apply to imaging of the hand, wrist or anatomy that is very close to the placement of the hand during imaging.

Seitz and Gilk recommend that, if imaging anatomy other than hands and hands can't be moved >30 cm superior or inferior of image center, such as while imaging the elbow, it is recommended to remove the nail polish. Or, one could move the MRI patient's hands

toward midline. Also, anatomy further from the walls (i.e., closer to midline of the MR bore) receives significantly less incident RF and will be less likely to heat. Heating risks may also be mitigated through the use of cold compresses.

To avoid artifacts when imaging other body parts (not hands), they recommend simply making sure that the hands with the nail polish aren't close to the region of interest. But, if imaging hands or wrist, it would be advisable to remove the metallic nail polish due to possible artifacts and degradation of image quality.

Seitz also has a video explaining what MRI technologists need to know about imaging and this type of nail polish.

This is very reassuring and hopefully will help avoid delays or cancellations of necessary MRI's in patients having such nail polish.

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"
- May 2025 "Add Another Item to Your MRI Screening Protocols"
- November 2025 "MRI Hazards - Big and Small"
- January 6, 2026 "Here's Why Firefighters Need MRI Training"
- March 10, 2026 "The Invisible Force Podcast"
- May 5, 2026 "Sedation in the MRI Suite"
- June 2026 "Another MRI Risk"

References:

Lou N. Magnetic Cosmetics Fly Under the Radar as MRI Risks. MedPage Today 2025; October 16, 2025
https://www.medpagetoday.com/meetingcoverage/asa/117988

Seitz K, Gilk T. Metallic and cat-eye nail polish in MRI. AuntMinnie.com 2026; June 17, 2026
https://www.auntminnie.com/clinical-news/mri/podcast/15827424/metallic-and-cateye-nail-polish-in-mri?braze_ext_id=6430320719ef38833c505bae&braze_int_id=64e760bde8ea910001caaca9&since=1781845200000

Carey L. MRI safety topic: metallic cat-eye nail polish. AuntMinnie.com 2026; June 17, 2026 (video)
https://www.auntminnie.com/resources/videos/video/15827440/mri-safety-topic-metallic-cateye-nail-polish?braze_ext_id=6430320719ef38833c505bae&braze_int_id=64e760bde8ea910001caaca9&since=1781845200000



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