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IMAGE FOCUS

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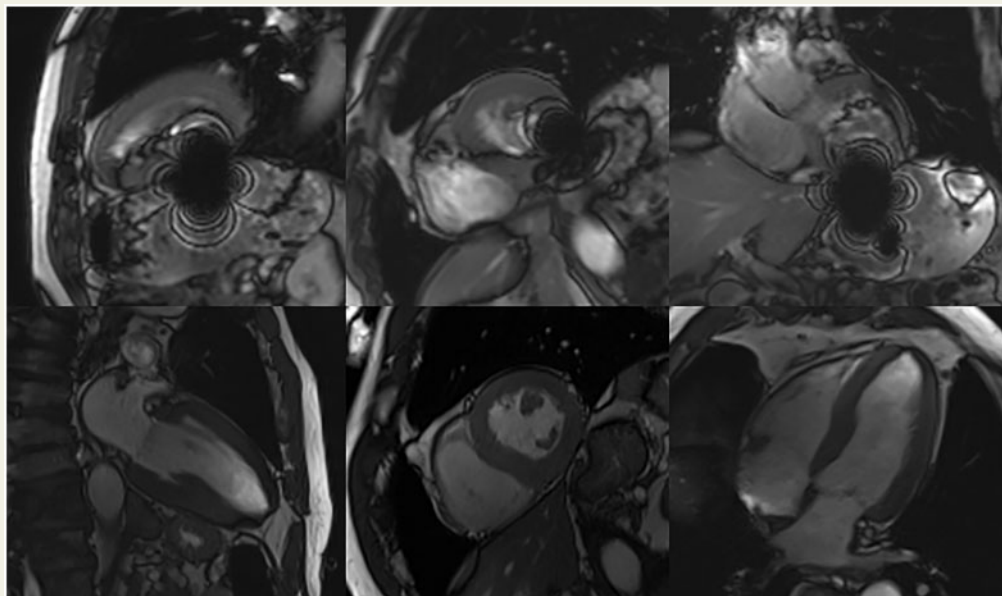
Moving ferromagnetic objects distorting cardiac magnetic resonance imaging

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A 78-year-old male patient, with a history of hypertension and aortic valve stenosis, underwent cardiac magnetic resonance (CMR) imaging. The CMR scan was aborted due to two significant artefacts. One of the artefacts, presumably located in the ventricle, made interpretation of the heart impossible (Panels A–C). We suspected that the artefacts were caused by ferromagnetic objects. The patient experienced no discomfort during the scan.



The patient had neither experienced injury nor undergone surgery suggesting any internal metal objects. Recent X-ray and computer tomography (CT) exams of the same region did not reveal any signs of metal objects. Surprised by the finding, the patient recalled removing a piece of aluminium foil from his salad 1 h prior to the CMR scan and added that he might have ingested some pieces.

The patient was offered an additional CMR scan 2 days later, as the risk of harm was considered very low. At this point, a similar artefact was seen more distally, possibly in the transverse colon. Interpretation of the heart was now possible (Panels D–F). Independent of these findings, an abdominal CT-scan performed 3 days later did not reveal any signs of metal objects.

We suspect that these artefacts were caused by ingestion of small aluminium pieces 1 h prior to the initial CMR scan, distorting cardiac imaging. To our knowledge, there are no reports on similar cases.

Upper row shows localizer images with artefacts from the initial aborted CMR exam (Panels A–C). Lower row displays two-chamber, short axis, and four-chamber views from the second exam (Panels D–F).

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