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Re: Respirators and surgical facemasks for COVID-19: implications for MRI



Sir—We read with interest the article by Murray *et al.*¹ regarding magnetic resonance imaging (MRI) artefacts, when we encountered artefacts due to facemask worn by a patient.

An adult male patient had come for follow-up MRI brain. After giving informed consent and after denying ferromagnetic materials on his body, the patient underwent MRI wearing a surgical facemask. (The general public had been instructed to wear facemasks because of the COVID pandemic.) After a few sequences, MRI technologists noticed artefacts. They found the metal nose bridge in the facemask worn by the patient, replaced that mask with a mask without a metal nose bridge, and continued the study, repeating only the diffusion-weighted sequence. No artefacts were noted on the rest of the sequences.

Artefacts were noted on the coronal T2, axial T2, axial T2 fluid-attenuated inversion recovery (FLAIR), axial T1 FLAIR, axial 3 D gradient echo (3D GRE; Fig 1a), and axial diffusion (Fig 1b) images in the areas of the nose, eyes, and frontal regions. The artefacts were more noticeable on the right side, as the right side of the mask had been placed more cranially. No artefact was noted on the diffusion image after replacement of the mask. Later a similar mask was radiographed and the metal blade confirmed.

The patient had experienced no discomfort due to the movement of the mask or due to local heating, but the mask had caused significant artefacts on the MRI images. We recommend that patients should be instructed to wear facemasks without metal nose bridges during MRI to avoid such artefacts.

Conflict of interest

The author declares no conflict of interest.

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Radiology training in the COVID-19 era: our new normal



Sir—Training has been one of the challenges of the COVID-19 pandemic because of changed caseload, social distancing, and trainee redeployment. The Royal College of Radiologists (RCR) have recognised this with new coding for Annual Review of Competency Progression (ARCP) outcomes.¹



Figure 1 (a) Axial 3D GRE and (b) diffusion-weighted images show artefacts in the frontal regions.