Eye Artifacts from Mascara in MRI

During the early phases of operation of our magnetic resonance imaging (MRI) unit, distracting eye artifacts were often observed on the images (fig. 1A), and a subtle but definite soiling of the inner surface of the magnet was noted. The offending agent was suspected to be mascara, many brands of which contain iron oxides. A small amount of mascara on a piece of tape placed on a phantom confirmed our suspicions (fig. 1B). Also, a plastic container of mascara was found to be attracted into the magnet. The mascara artifact is not significant with routine cerebral imaging but does degrade orbital detail.

We now ask all outpatients to remove their mascara before coming to the imaging center. In addition, we have mascara-removal materials available for those who are unable to make the trip without eye makeup.

Robert M. Wright
Peggy A. Swietek
Michael L. Simmons
Saint Francis Medical Center
Peoria, IL 61637

Fig. 1.—A, Artifact over anterior orbit on MRI for multiple sclerosis. B, Similar artifact on phantom after application of short length of tape coated with mascara.