RE: Use of Pulse Oximeters for Supplementary Monitoring of Patients Undergoing MRI

MEMO TO: MRI Technologists and Physicians Interpreting MRI Studies, Department of Radiology
FROM: MRI Safety Committee

Purpose: Pulse oximeters are now available on all scanners as a supplementary means to observe the patients, and not as a substitute for conventional monitoring/observation.

Pulse oximetry is to be used on outpatients at the judgment of the technologist. However, use is required in those patients 1) taking narcotics, AND 2) taking sedatives, AND 3) with a history of sleep apnea.

For all other patients, in situations where the patient can be easily monitored visually (e.g., two techs, patient undergoing ankle scan, etc.), pulse oximetry is not required, but should always be available at the discretion of the technologist. The liberal use of pulse oximetry as a supplementary means to observe patients is highly encouraged, and technologists should use pulse oximetry in any situation where he/she deems additional monitoring would maximize patient safety.

In such patients, decreases in SpO₂% to 83% are acceptable. In situations where the SpO₂% drops below 83%, the technologist should stop the scan and rouse the patient, to ensure that the SpO₂% rises. As always, if there is any concern please notify a radiologist. If appropriate, the study can be rescheduled (e.g., during the day with nursing support) for the safest possible exam.

Documentation of SpO₂% in Healthlink is required in problematic cases, such as when SpO₂% drops below 83%, but is not required otherwise. There is no need for technologists to provide oxygen beyond what the patient takes at home or on the hospital floor.

Questions: Mike Tuite, MD; Scott Reeder, MD, PhD