Bilateral Upper Extremity Full Thickness Burns Acquired During an MRI Procedure – A Case Study

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Magnetic resonance imaging (MRI) scans are generally considered to be safe procedures with few potential complications. Skin and soft tissue burns are uncommon complications of MRI scans. The exact mechanism of this type of injury is unknown but attributed to either excessive heating of the skin with prolonged direct contact with the MRI machine or closed loop electrical currents. The necessity of sedatives for claustrophobic patients, use of critical care monitoring equipment, increased body mass index, and implanted surgical devices can increase the risk of adverse events. This case study describes an adult male patient who acquired bilateral upper extremity, full thickness burns during a sedated MRI examination. Increasing provider awareness of the risk factors and adverse events associated with MRI exams, particularly those attributing to an increased potential for thermal and electrical injuries, will contribute to safer imaging techniques and improved clinician discretion in patient management.