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Deterministic Effects of Interventional Radiology Procedures

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Abstract

The purpose of this paper is to describe deterministic radiation injuries reported to the Food and Drug Administration (FDA) that resulted from therapeutic, interventional procedures performed under fluoroscopic guidance, and to investigate the procedure or equipment-related factors that may have contributed to the injury. Reports submitted to the FDA under both mandatory and voluntary reporting requirements which described radiation-induced skin injuries from fluoroscopy were investigated. Serious skin injuries, including moist desquamation and tissue necrosis, have occurred since 1992. These injuries have resulted from a variety of interventional procedures which have required extended periods of fluoroscopy compared to typical diagnostic procedures. Facilities conducting therapeutic interventional procedures need to be aware of the potential for patient radiation injury and take appropriate steps to limit the potential for injury.

KEYWORDS - radiation injury, radiation protection, fluoroscopy, interventional radiology