

Is MRI Dependency A Problem? A Case Report From Phoenix Scans Further

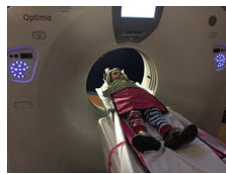
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In the wake of the Australian national study of the cancer risk due to CT-scan ionizing radiation,¹ avoidance of CT- scan and increasing dependence on MRI as a presumed safe alternative to imaging has occurred.

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Now Miller et al. ([doi: 2015-2222](#)) writing out of Phoenix Children's Hospital raise new questions about safety of repeated MRI's. In a single patient study of a child with intraorbital rhabdomyosarcoma they found that the use of frequent (35 studies) MRI monitoring of the tumor status has changed the background imaging characteristics of the brain. The Phoenix group noted a few earlier reports of this phenomenon in adults and even point out a postmortem study of frequently MRI-imaged adults confirming deposition of gadolinium (Gad) in the brain tissue.

While the reported patient had normal renal function and from the report is likely to have survived because of MRI surveillance, the authors readily admit not knowing the long term clinical implications of this finding. The presence of ever-increasing Gad levels in the brain of frequently imaged patients is yet a new concern to be further elucidated. Truly there is no free lunch.

1. Mathew JD, Forsyth AV, Brady Z, Butler MW, Groener ST, et al. Cancer Risk in 680,000 people exposed to computerized tomography scans in childhood and adolescence: data linkage study of 11 million Australians

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