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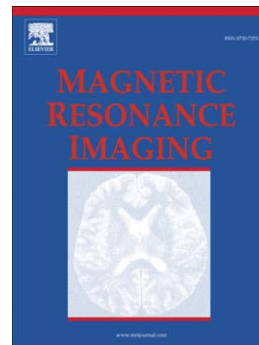
Are some agents less likely to deposit gadolinium in the brain?

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## Are some agents less likely to deposit gadolinium in the brain?

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### Abstract:

In December 2013, a groundbreaking study by Kanda et al was published showing that the serial injection of gadolinium based contrast agents (GBCAs) is correlated with a signal intensity increase in the dentate nucleus (DN) and the globus pallidus (GP) on unenhanced T1 weighted MR images. Subsequent studies by Kanda et al and McDonald et al on brain tissue from deceased patients provided evidence that the reported signal intensity increase in the brain correlates with gadolinium deposits in the brain tissue. In the following, multiple retrospective patient studies and animal studies assessed the potential of the marketed GBCAs to cause hyperintensities or gadolinium deposits in the brain, respectively. This review summarizes the evidence provided by these studies and additionally takes into account data from in vitro studies on the stability of GBCAs. The author concludes that there is a body of evidence suggesting that the potential of a GBCA to cause hyperintensities or gadolinium deposition in the brain corresponds with its stability and is particularly depending on the group of the specific GBCA as either linear or macrocyclic.

### Disclosures:

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