

MRI may help physicians diagnose, stage and treat diabetes

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Noninvasive imaging (MRI) may aid physicians in the early diagnosis, staging and treatment of diabetes, according to a study performed at Massachusetts General Hospital and Harvard Medical School in Boston, MA. This is the first study of its kind to apply noninvasive imaging techniques to diabetes research.

"With noninvasive MRI we have the ability to evaluate beta cell mass, a major factor of [insulin secretion](#) that is significantly reduced in type two [diabetes](#) and almost gone in type one," said Anna Moore, MD, lead author of the study. "We are also able to detect inflammation of the pancreas and vascular changes associated with type one and type two diabetes. This opens a huge area that is closed right now," said Dr. Moore.

"Knowing the number of functional [beta cells](#) left would allow physicians to develop the most appropriate treatment plans for their patients. It would also allow them to respond, change or manipulate those treatment plans at any time," she said.

"Noninvasive MRI could no doubt tremendously assist in achieving insulin independence in patients with diabetes," said Dr. Moore.

This study appears in the August issue of the *American Journal of Roentgenology*.

Source: American Roentgen Ray Society

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