

Poster #: 42

Title of The Role of MRI in Islet Cell Transplantation

Abstract:

Institution: University of Arizona

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Modality: MR

Organ System: GI

Intro: The role of MRI in pre and post- islet cell transplantation will be discussed.

Purpose: Purpose: Islet cell transplantation is a promising treatment for uncontrolled Type 1 diabetes and recurrent acute or chronic pancreatitis. MRI plays a critical role to screen potential transplant recipients and detect post-transplantation complications.

Methods Used: MRI provides a detailed evaluation of pre- and post-islet cell transplantation

Results of This educational exhibit will highlight specific MRI features of pre- and post-islet cell transplantation.

Abstract: Imaging features useful for optimal selection of transplant recipients will be discussed, including assessment of chronic pancreatitis, selection of patients who will benefit from auto-transplantation and abnormalities that represent contraindications for islet transplantation. Routine post-transplantation imaging is vital for detection of complications that are not apparent using standard physical or laboratory examination. The array of MRI features of early and delayed post-transplantation complications will be shown. This includes vascular complications, pre- and post-transplantation quantitative hepatic lipid assessment and chemotherapy induced changes.

Discussion: MRI provides a detailed evaluation of pre- and post-islet cell transplantation patients that can impact successful patient selection and monitoring of this complex procedure beyond what is possible by other diagnostic techniques. This exhibit reviews key imaging methods and findings.

Scientific and/or Clinical Significance? MRI provides a detailed evaluation of pre- and post-islet cell transplantation patients that can impact successful patient selection and monitoring of this complex procedure beyond what is possible by other diagnostic techniques. This exhibit reviews key imaging methods and findings.

Relationship to existing work Highlighting the importance of pre and post islet cell transplantation

The Role of MRI in Islet Cell Transplantation Purpose: Islet cell transplantation is a promising treatment for uncontrolled Type 1 diabetes and recurrent acute or chronic pancreatitis. MRI plays a critical role to screen potential transplant recipients and detect post-transplantation complications. Content Organization: This educational exhibit will highlight specific MRI features of pre- and post-islet cell transplantation. Imaging features useful for optimal selection of transplant recipients will be discussed, including assessment of chronic pancreatitis, selection of patients who will benefit from auto-transplantation and abnormalities that represent contraindications for islet transplantation. Routine post-transplantation imaging is vital for detection of complications that are not apparent using standard physical or laboratory examination. The array of MRI features of early and delayed post-transplantation complications will be shown. This includes vascular complications, pre- and post-transplantation quantitative hepatic lipid assessment and chemotherapy induced changes. Major Teaching Points: MRI provides a detailed evaluation of pre- and post-islet cell transplantation patients that can impact successful patient selection and monitoring of this complex procedure beyond what is possible by other diagnostic techniques. This exhibit reviews key imaging methods and findings.