

Single-Subject Neuroimaging / Reliability of MR in Psychiatric Disorders

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Highlights

- The major psychiatric MR techniques will be reviewed in the context of single subject neuroimaging
- The power of these techniques to diagnose and manage psychiatric illness will be discussed

This presentation will review the major MR imaging techniques currently used to study psychiatric illness. MR volumetry, voxel-based morphometry, diffusion tensor imaging, and functional MRI and MR spectroscopy will be discussed, including a summary of the technique, a brief review of the literature, and a discussion of the potential value and limitations of each technique in the context of single subject neuroimaging. A roadmap for psychiatric MR test validation will be presented, as well as final thoughts on the power of MRI to assist psychiatrists in the diagnosis and management of their psychiatric patients.

Reference

Melonakos, Eric D. Shenton, Martha E. Rathi, Yogesh. Terry, Douglas P. Bouix, Sylvain. Kubicki, Marek. Voxel-based morphometry (VBM) studies in schizophrenia-can white matter changes be reliably detected with VBM?. *Psychiatry Research*. 193(2):65-70, 2011 Aug 30.