



Neuro

SY05-2

CEST MRI and its neural applications

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Objectives:

- To describe the basic principles of CEST and its analysis.
- To recognize the potential neuroimaging applications of CEST and its related molecular information.

Chemical exchange saturation transfer (CEST) MRI is a young and rapidly developing molecular imaging approach, which has shown many promising clinical applications. For example, to identify radiation necrosis and tumor recurrence. CEST enhances the detectability of many endogenous and exogenous molecules presence at low concentrations in vivo. This course will cover the principles of CEST and its neural applications. This is to showcase CEST can detect specific endogenous or exogenous molecules in vivo to facilitate diagnosis and therapy, including brain tumor, cancer treatment and dementia.

Keywords: CEST, MRI, neuroimaging