

STROKE IMAGING

Marc Fisher, M.D.

Department of Neurology, Beth Israel Deaconess Medical Center

Harvard Medical School

Boston, MA, USA

Disclosures:none

Learning Objectives

- What imaging modalities are used for acute ischemic stroke
- What are the problems with using ASPECTS on plain head CT
- What are the basics of CT perfusion
- What are some pitfalls when performing CT perfusion
- Using diffusion and perfusion MRI for acute ischemic stroke
- How has advanced imaging impacted acute ischemic stroke treatment

Key Messages

- Both CT and MRI provide useful information in the evaluation of acute ischemic stroke
- CT is more readily available and should include a standard head CT and in many cases CT angiography
- CT perfusion should be obtained, especially when LVO is considered
- CT perfusion has pitfalls that must be recognized
- MRI is more accurate for the identification of the ischemic penumbra and core but difficult to obtain in many locations