

**ROLE OF SPECIAL MR TECHNIQUES IN
DISCRIMINATION BETWEEN CAPSULAR STAGE
BRAIN ABSCESES, NECROTIC AND CYSTIC
BRAIN LESIONS**

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ABSTRACT

Brain abscesses and brain tumours may have similar clinical presentations. Also, the differential diagnosis of brain abscesses versus cystic or necrotic tumours may be difficult based on computed tomography or magnetic resonance (MR) imaging findings. However, the strategies of management for abscess and neoplasm are very different, and it is especially imperative to have a correct diagnosis before any surgical intervention of cystic brain lesions. The MR special techniques, e.g. diffusion-weighted imaging (DWI) and MR spectroscopy (MRS), are useful as additional diagnostic modalities for differentiating brain abscesses from cystic or necrotic brain tumours. DWI shows high signal intensity in most cases of pyogenic abscesses and low signal intensity in most cases of cystic or necrotic tumours. MRS shows characteristic metabolites in pyogenic abscesses, distinct from those in cystic or necrotic tumours.

Key words

- Brian abscess
- Cystic or necrotic brain tumours
- Magnetic resonance imaging
- Diffusion weighted images
- Apparent diffusion coefficient
- Magnetic resonance spectroscopy

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