The role of imaging in the management of progressive glioblastoma: a systematic review and evidence-based clinical practice guideline.


Abstract

QUESTION: Which imaging techniques most accurately differentiate true tumor progression from pseudo-progression or treatment related changes in patients with previously diagnosed glioblastoma?

TARGET POPULATION: These recommendations apply to adults with previously diagnosed glioblastoma who are suspected of experiencing progression of the neoplastic process.

RECOMMENDATIONS LEVEL II: Magnetic resonance imaging with and without gadolinium enhancement is recommended as the imaging surveillance method to detect the progression of previously diagnosed glioblastoma.

LEVEL II: Magnetic resonance spectroscopy is recommended as a diagnostic method to differentiate true tumor progression from treatment-related imaging changes or pseudo-progression in patients with suspected progressive glioblastoma.

LEVEL II: The routine use of positron emission tomography to identify progression of glioblastoma is not recommended.

LEVEL III: Single-photon emission computed tomography imaging is recommended as a diagnostic method to differentiate true tumor progression from treatment-related imaging changes or pseudo-progression in patients with suspected progressive glioblastoma.

PMID: 24715656 [PubMed - indexed for MEDLINE]