

[Semin Neurol.](#) 2023 Nov 14. doi: 10.1055/s-0043-1776765. Online ahead of print.

Brain Tumor Imaging: Review of Conventional and Advanced Techniques

[Andrew Campion](#)¹, [Michael Iv](#)¹

Affiliations

PMID: 37963581 DOI: [10.1055/s-0043-1776765](https://doi.org/10.1055/s-0043-1776765)

Abstract

Approaches to central nervous system (CNS) tumor classification and evaluation have undergone multiple iterations over the past few decades, in large part due to our growing understanding of the influence of genetics on tumor behavior and our refinement of brain tumor imaging techniques. Computed tomography and magnetic resonance imaging (MRI) both play a critical role in the diagnosis and monitoring of brain tumors, although MRI has become especially important due to its superior soft tissue resolution. The purpose of this article will be to briefly review the fundamentals of conventional and advanced techniques used in brain tumor imaging. We will also highlight the applications of these imaging tools in the context of commonly encountered tumors based on the most recently updated 2021 World Health Organization (WHO) classification of CNS tumors framework.

Thieme. All rights reserved.

[PubMed Disclaimer](#)