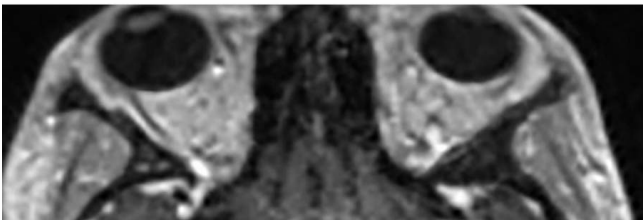
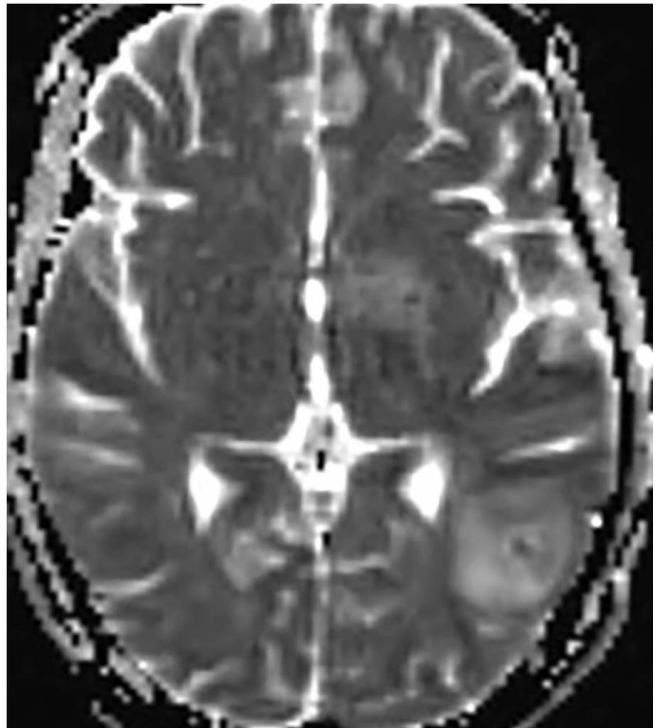
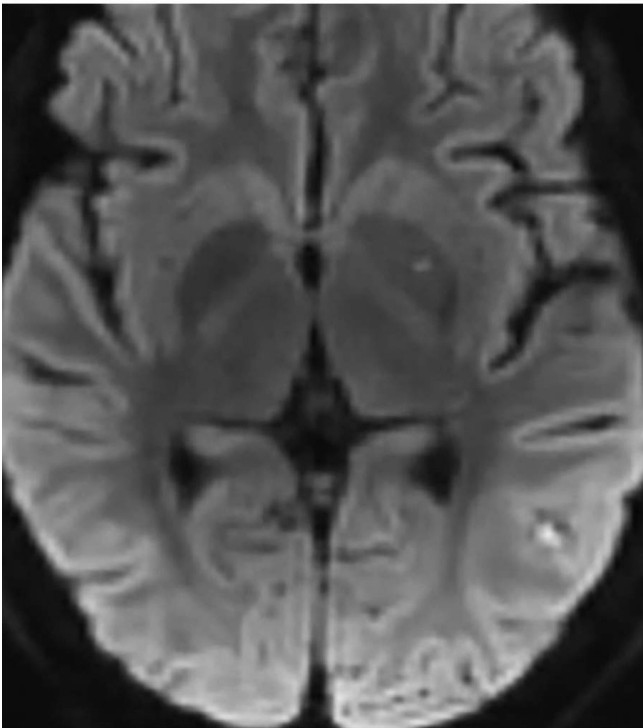
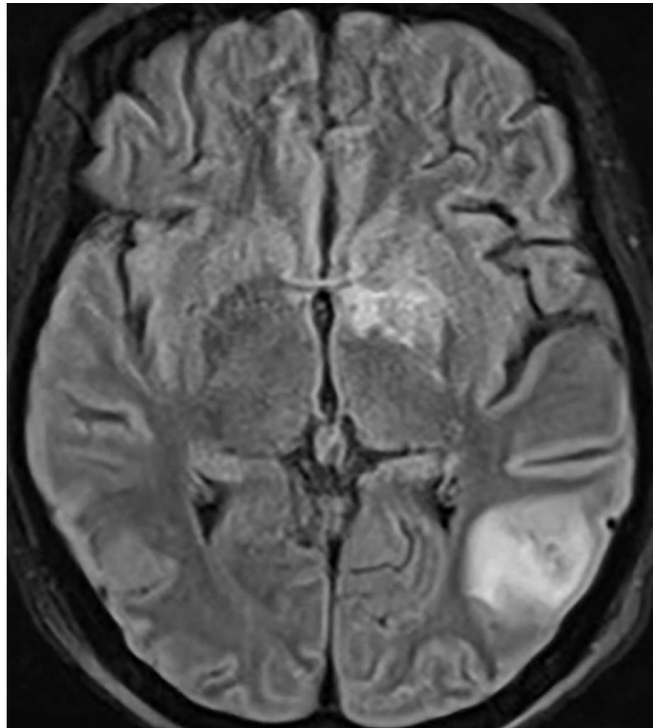
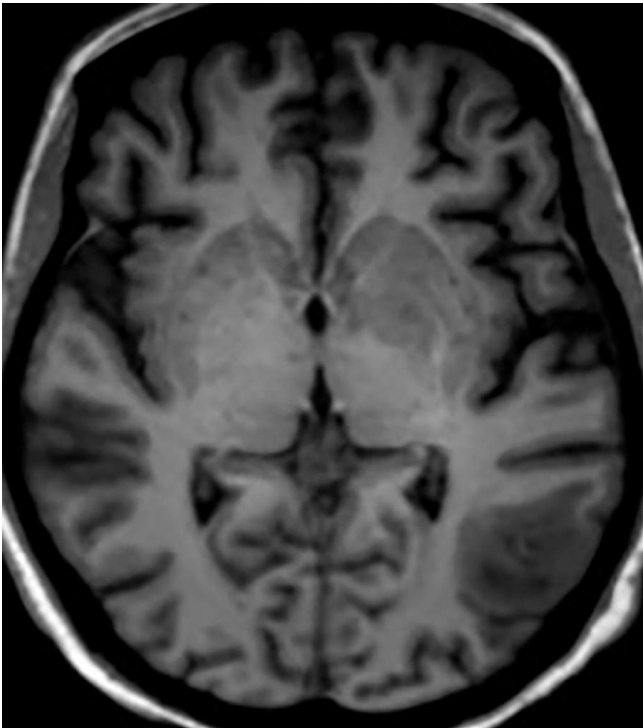




# Candidiasis

*Last Updated: June 30, 2021*



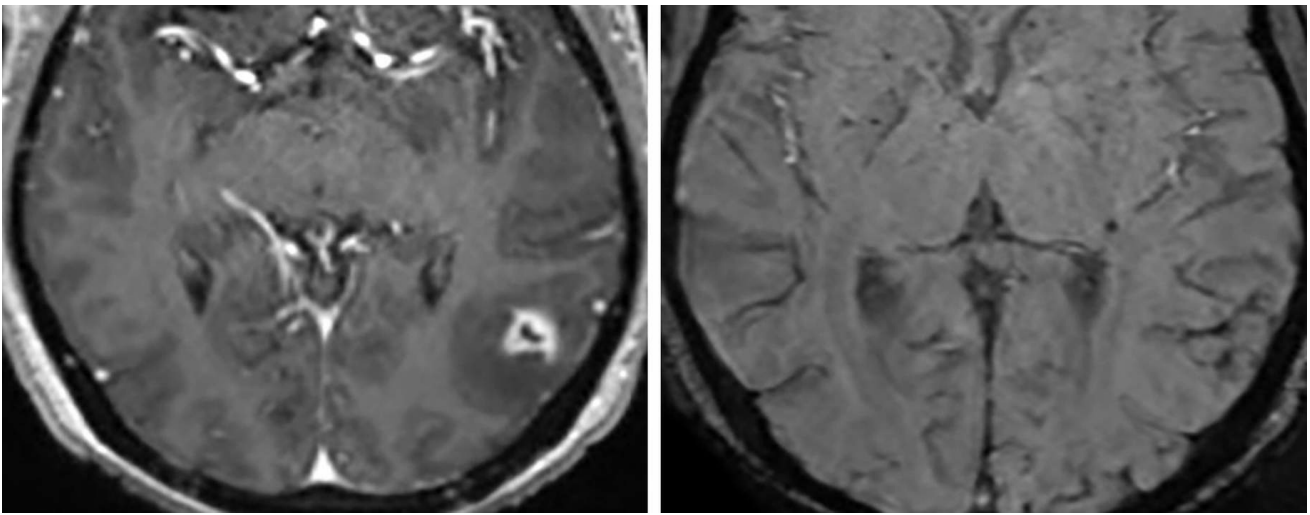


Figure 1: Patient with HIV with a low CD4 count who was not taking highly active antiretroviral therapy (HAART) around the time of imaging. These images demonstrate at least 2 T1-hypointense (top left), FLAIR-hyperintense (top right) lesions centered within the left parietal cortex and left basal ganglia. (Middle) Both lesions demonstrate punctate, central restricted diffusion. The lesion in the left parietal cortex has a rim of thick enhancement (bottom left), and there is minimal associated susceptibility artifact (bottom right), likely reflecting microhemorrhage.

## Description

- Most commonly caused by *Candida albicans*, although *Candida glabrata* and *Candida parapsilosis* are also common
- CNS infection almost always caused by hematogenous spread with disseminated systemic infection

## Pathology

- Small, round-to-oval, thin-walled, yeast-like fungi that reproduce by budding or fusion
- Pseudohyphae predominate, but true hyphae are also seen occasionally

## Clinical Features

- Symptoms
  - Variable but generally include insidious-onset lethargy and

altered mental status

- Age and gender
  - No predilection
- Prognosis
  - Mortality rate is high
- Risk factors
  - Treatment for bacterial sepsis, intravenous hyperalimentation, HIV with low CD4, immunosuppression, hematologic malignancy, and premature birth

## Imaging

- General
  - Most common findings are numerous microabscesses (<3 mm) occurring at the corticomedullary junction, basal ganglia, or cerebellum
  - Often demonstrate enhancement and less often demonstrate hemorrhage or infarction
  - Meningitis is a less common presentation
- Modality specific
  - CT
    - Usually normal
  - MRI
    - T1WI
      - Hypointense
    - T2WI
      - Hyperintense, isointense, or hypointense
    - DWI
      - Variable
    - SWI
      - Hypointensity seen in the setting of hemorrhage
    - Enhancement
      - Small ring-enhancing lesions
- Imaging Recommendations
  - Standard protocol MRI (including DWI) with intravenous

contrast

- Mimic
  - The most common presentation of numerous microabscesses is most difficult to distinguish from [metastatic disease](#) and other fungal processes. Clinical history with appropriate risk factors often provide the most help when narrowing the differential.

For more information, please see the corresponding chapter in [Radiopaedia](#).

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