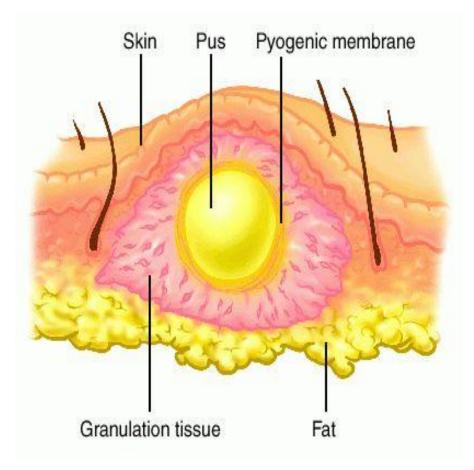
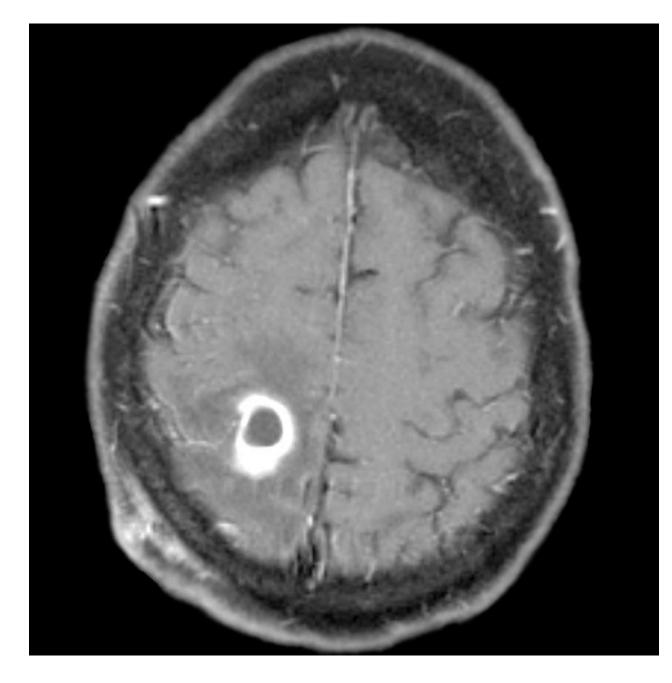
#### Adult Nursing II Nursing management of patients with nervous system disorder: Brain Abscess

Dr. Mohammed Jawd 2025

# What is a brain abscess?

 Brain abscess is an accumulation of pus within the brain tissue that can result from a local or a systemic infection.





This image is an CT scan of a brain abscess.

#### CAUSES

\*\* Direct extension from from ear, tooth, mastoid, or sinus infection is the primary cause. \*\* other causes for brain abscess formation include:
\*septic venous thrombosis from a pulmonary infection,
\*infective endocarditis
\*skull fracture
\* Nonsterile neurological procedure.

\*\* streptococci and staphylococci are the primary organism.

### **Clinical manifestations**

- Are similar to those of meningitis and encephalitis and include headache and fever.
- Signs of ICP may include drowsiness, confusion, and seizures.
- Focal symptoms may be present and reflect the local area of the abscess.

#### The treatments of choice

- Antimicrobial therapy is the primary treatment for brain abscess.
- Other manifestation are treated symptomatically.
- If drug therapy is not effective, the abscess may need to be removed if it is encapsulated.

#### A few statistics

- In untreated cases the mortality rate approaches 100%
- Seizures occur in approximately 30 % of cases

## **Nursing interventions**

- Nursing interventions are similar to those for management of meningitis or increased ICP.
- If surgical removal is the treatment of choice, nursing interventions are similar to those described under intracranial tumors.

#### Nursing interventions

- Preoperative
- Preparation of patient and the family
- Base line neurological assessment
- Explaining treatment and procedures (eg. shaving of hair)
- Hair is shaved in operating room and may be saved for pt to make wig.
- Family needs to be prepared for the appearance of the pt after surgery

- Postoperative
- Care is determined by the pt's condition.
- Most pts spend one or two nights in ICU under close nursing observation with frequent neurological checks
- Assess carefully for indications of increased ICP
- Monitor pts residual motor and sensory problems as a result of the tumor or surgery.