

Brain abscess

Brain abscess is a very common problem encountered by the neurosurgeons in almost all age groups. Thanks to cranial imaging, microbiological technique and minimally invasive procedure and effective antibiotic treatment the outcome is far better than before.

An Indian study in recent years shows male predominance in age group 20 to 30 years of age. Presenting symptoms were headache most common associated with or without fever focal neurological deficit, seizure, nausea and vomiting.

There are four stages in the development of the disease

1. Early cerebritis days 1 - 3.
2. Late cerebritis days 4 - 9
3. Early capsule formation days 10 - 13
4. Late capsule formation after a day 14

A well developed abscess consists of five distinct histological zones :

- a. Necrotic centre
- b. Peripheral zone of inflammatory cells
- c. Dense collagenous capsule
- e. Layer of neovascularisation
- f. Cerebral oedema external to the capsule

Common causes of brain abscess :

Middle ear infection

Congenital heart disease

Post traumatic

Neurosurgical procedure

The incidence of brain abscess is high in Bangladesh and needs to be properly evaluated and managed.