

Brain abscess in Cyanotic Heart Disease

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Brain abscess (BA) is an intraparenchymal infection of brain parenchyma and begins with a localized area of inflammatory change stated as cerebritis, attain immature capsule stage and so to abscess, containing pus encapsulated by a vascularized membrane. The capsule serves to stop the infective process from becoming generalized and it also create within it an inflammatory soup which will impede resolution of the infection. The incidence of brain abscess is about 8% of intracranial masses in developing countries and in cyanotic cardiopathy its incidence varies from 5 to 18.7%. In patients with right-to-left shunts, absence of pulmonary phagocytic clearance of pathogens can occur and therefore the ischemic injury from hypoxaemia and polycythaemia, produce low perfusion areas within the brain which can act as a nidus for infection and anaerobic streptococci are the foremost common agents isolated in cyanotic cardiopathy with brain abscess. All abscesses that are greater than (>) 1 cm produce positive scans and CT brain appears to be adequate in most cases of brain abscess. Third generation cephalosporins combined with metronidazole for two weeks followed by 4 weeks of oral therapy is that the medical treatment of choice for cyanotic brain abscess. Surgical techniques like drainage via burr-hole, complete excision after craniotomy, migration technique and neuroendoscopic technique with freehand stereotaxy have also been practiced within the treatment of brain abscess (BA).

Introduction:

A brain abscess is a collection of pus that develops in response to an infection or the trauma. It remains serious and potentially life-threatening condition. Brain abscess is an intraparenchymal infection of brain parenchyma and begins with an localized area of inflammatory change that are referred as cerebritis. The effect varies depending on the size of the abscess and where it forms in the brain. There are some typical complications in patients with cyanotic congenital heart disease they are right-to-left shunts, cerebral bacterial spreading and an altered blood-brain-barrier permeability, brain abscesses (BA). The risk of Brain abscess (BA) complicating cyanotic heart disease is inconstant and it continuously increasing up to approximately age of 12.

The CT brain appears to be adequate in most cases of brain abscess. The Third generation cephalosporins combined with metronidazole for 2 weeks followed by 4 weeks of oral therapy is the medical treatment of choice for cyanotic brain abscess (BA). Surgical techniques such as drainage via burr-hole, complete excision after craniotomy, migration technique and neuroendoscopic technique with freehand stereotaxy have also been practiced in the treatment of brain abscess.

The person may need surgery if he has Pressure in the brain continues to build, The Brain abscess does not respond to medication, There is gas in the Brain abscess (BA), There is a risk that the abscess might burst.

Age groups affected by Brain Abscesses:

Brain abscesses (BA) are most likely to affect adult men aged less than 30 years, whereas in children's they most commonly develop in the age of 4-7 years and it is risk for newborns also. For young children the vaccination program for Brain Abscess (BA) has been reduced. A seizure can be the first sign of an abscess, whereas Nausea and vomiting tend to occur as pressure builds inside the brain. Pain usually starts on the side of abscess and it may begin slowly or suddenly. The symptoms of a brain abscess (BA) may result from a combination of infection, brain tissue damage, and it can also because of pressure on the brain. Sometimes the headache may suddenly become worse it may means that the abscess has burst. The symptoms will start from day 8. With respect to etiology the infectious endocarditis, infections per continuitatem, bacterial meningitis, bacterial lung diseases with intrapulmonary shunts, and also thromboembolic complications of systemic infections have to be differentiated. Other symptoms may include Stiff neck/back, Blurred/double. There will be a stepwise diagnosis that includes CCT to demonstrate the typical contrast enhancement and a lumbar puncture which shows the granulocytic pleocytosis.