

CRYPTOCOCCOSIS

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Cryptococcosis (torulosis) is caused by a fungus *Cryptococcus neoformans* found in pigeon droppings. The organism is inhaled into the lungs, but in normal people it rarely produces pulmonary symptoms. The organism has an affinity for the central nervous system, and meningitis can result. Immuno-compromised patients are at greater risk of developing symptomatic disease.

Clinically, the majority of patients develop meningitis. Because of its seriousness, the diagnosis should be suspected in any patient with symptoms of indolent meningitis. Lumbar puncture is carried out to establish the diagnosis. An India-ink CSF preparation reveals the fungus in 25-50% of patients, while culture and use of serologic tests will improve the sensitivity to 90%. Repeat lumbar puncture may be necessary.

Primary pulmonary disease occurs in about 15-30% of patients with cryptococcosis. About a third are asymptomatic and are only detected on chest x-ray. Skin and bone lesions are less common, while spread to other organs such as prostate, eye, heart, liver and kidney are rare occurrences.

In recent years, the use of combination therapy with amphotericin B and flucytosine has gained general acceptance, and 50% to 70% of patients with cryptococcal meningitis can be cured. For some patients with no underlying illness, and who have only single focus in the lung, observation or excision of lesion may be all that is necessary.

In Singapore the first case of cryptococcal meningitis was reported in 1949.⁽¹⁾ Cases of cryptococcal infection appeared sporadically until the 1970s when there was an

apparent increase in incidence. It is uncertain how much of this was due to greater awareness of clinicians and better laboratory diagnostic capability. In 1974 and 1975 alone a total of 21 cases were confirmed. No clustering of cases was noted and examination of bird excreta from bird cages near the vicinity of cases were negative for *C. neoformans*.⁽²⁾ Since 1974 till 1987 the number of new cases confirmed by the Department of Pathology has been between 9 and 15 per annum.

In this issue are two papers which serve to remind us of the occurrence of extraneural cryptococcosis in Singapore. The first paper describes five patients with pulmonary cryptococcosis, four of them had respiratory symptom while one was completely asymptomatic. Percutaneous lung aspiration was used to arrive at the diagnosis in three patients. The second paper describes a patient with systemic lupus who had cryptococcosis of the liver. The diagnosis was achieved with a post-mortem needle liver biopsy.

The data thus far suggests that cryptococcosis is not uncommon in Singapore. As patients with underlying illnesses survive longer and there is greater use of steroid and cytotoxic drugs, the incidence may increase. Clinicians should be alert to the disease. If simple investigations do not yield positive results, then more invasive procedures may be necessary. The value of using a needle to obtain tissues for examination has been amply demonstrated in the two articles.

REFERENCES

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