Cryptococcomas: Diagnostic dilemmas with increasing incidence

Dear Editor,

I have read the case report entitled "Disseminated Cryptococcal Infection in Apparently Immunocompetent Child: a Case Report" by Basnet et al. in Vol 6, No 1 (2023) in your esteemed journal [1].

I would like to applaud the authors for the humble presentation of the entire clinical scenario and diagnostic dilemma in this case along with retrospective evaluation which indeed has been a valuable message for every doctor regarding the timely diagnosis of Cryptococcosis.

Cryptococcus infection is principally caused by two species namely *Cryptococcus neoformans* and *Cryptococcus gattii* [1]. Immune compromised patients are mostly affected with *C. neoformans* infections whereas apparently immune competent patients can be affected with either of these species [2]. Hence, Cryptococcosis must be considered as one of the differential diagnoses during central nervous system involvement, irrespective of the immune status of the patient [1].

Bone marrow infiltration is not a common presentation and is mostly observed in patients with severe immune deficiency [2]. Bone marrow involvement in this case despite apparent immune competency of the host is therebya rare incidence. A chronic granulomatous reaction against Cryptococcus infection in immune competent hosts can lead to formation of cryptococcomas [3] as observed in the bone marrow biopsy of this case.

The presentation of cryptococcoma depends on the organ involved. Headache, altered sensorium, focal neurological deficits, cranial nerve dysfunction and seizures are the most common symptoms of Central Nervous System (CNS) cryptococcomas [3] and were also observed in this case, though they were sadly missed in the light of normal Cerebrospinal Fluid (CSF) findings. The definitive evidence of cryptococcomas had however not been documented with a Magnetic Resonance Imaging finding in this case. CNS cryptococcomas are often mistaken with neoplasms in immunecompetent patients [4].

Regarding CSF, it can be normal in immune compromised patients as they do not possess an adequate inflammatory response, hence India ink stain and antigen testing with latex agglutination should always be done [5]. I am glad the authors have acknowledged this part very well in their retrospective evaluation of the case.

Pulmonary cryptococcomas have been associated with pleuritic chest pain and fever and an intra-abdominal cryptococcoma has been reported to cause chronic abdominal pain, intestinal thickening, lymphadenopathy and perforation. Multi organ involvement can also occur due to disseminated infection. Biopsy is the gold standard for diagnosis for cryptococcoccomas [4].

Early diagnosis and treatment can prevent both mortality as well as morbidity related to disseminated cryptococcal infections [1] as it goes with other diseases. Hence, the norm of reporting challenging cases along with literature review and critical evaluation of every aspect of the case as done here is indeed of great advantage to the entire medical community and deserves both appreciation and encouragement.

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Declarations

The author declares that she has no conflict of interest.

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