

## Antepartum and Postpartum Pulmonary Cryptococcosis: A Case Report and Systematic Review

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**Abstract :** Study objective: To report a case of postpartum pulmonary cryptococcal infection (CCI) in an otherwise healthy 35-year-old woman. Additionally, the cases of pulmonary cryptococcal infections either in the antepartum or the postpartum period with pregnancy outcomes, were systematically reviewed. Methods: A systematic search of Cochrane Library, MEDLINE, and EMBASE was conducted for peer-reviewed studies without date restrictions, published in English and relating to CCI during pregnancy or postpartum period. Conference press, editorials, opinion pieces and letters were excluded. Two authors independently screened citations and full-text articles, extracted data and assessed study quality. Given the heterogeneity of study designs, a narrative synthesis was conducted. Results: The search identified 128 references, of which 22 case reports and series met the inclusion criteria. This is a total of 29 women (including the current case) . The mean age of the women was  $28.3 \pm 12.3$  years. Nine (31.03%) presented and were diagnosed in the postpartum period. Two (6.90%) of the patients were reported as immunocompromised with HIV. Four maternal deaths (13.79%) were found in this case series with one (4.3%) patient with severe neurological deficits. Four (17.4%) infant deaths were reported. Women primary presentation varied with chest pain 13 (44.82%), headache 10 (35.70%), dyspnea 19 (65.51%), or fever 12 (41.38%). Three studies reported placental pathology positive for *C. neoformans*. Conclusion: This case of pulmonary cryptococcal infection in the postpartum period is an important addition to the literature of this rare infection in pregnancy. The patient is not immunocompromised. The patient was successfully treated with 4 months of Fluconazole 400 mg and continued to breastfeed the healthy baby.

**Keywords :** pulmonary cryptococcus, pregnancy, cryptococci , postpartum

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