

## CASE REPORT

# CRYPTOCOCCAL LYMPHADENITIS: ATYPICAL PRESENTATION IN HIV INFECTION

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**Case Study:** 41years male patient, goldsmith by occupation, resident of Kolhapur, presented with 8 days history of cough which was progressive in nature, productive with yellowish expectorant, 8-10 tsf/day, foul smelling, non-blood stained, aggravated on exertion and on supine position and relieved at rest and on sitting upright associated with breathlessness which was also progressive in nature, initially on exertion and later at rest. Patient gave 6 days history of low grade, intermittent fever, mostly in the evening hours not associated with chills. Patient had small sized multiple swellings around neck and inguinal region since 2 ½ months, which had progressive growth. Patient also gave history of oral ulcers since 1 year for which patient has being taking medication from private doctor, but not responding.

Patient denied history of common cold, nasal blockage, allergic rhinitis, ear ache/discharge, sore throat, chest pain, sweating, palpitation, orthopnoea, PND, pedal oedema, burning micturition, pain in abdomen, bladder/bowel discomfort, any bleeding manifestation.

Patient has no medical illness like HTN, DM, TB, BA in the past. History of intermittent bleeding piles since 1 ½ years, taking treatment for the same. No significant family history. No history of any addictions.

On examination patient was dyspnoeic, irritable, afebrile. Patient had tachycardia(HR-120/min, regular), tachypnoea(RR-26/min). Blood pressure was normal, JVP was not raised, Pallor present in bilateral palpebral conjunctiva and nails. Patient had significant generalised lymphadenopathy involving all groups of lymph nodes including bilateral submandibular, sub mental, supraclavicular, infraclavicular, anterior, central, posterior group of axillary lymph nodes and inguinal lymph nodes which were of varying duration. Oral ulcers were present over tongue, soft palate and hard palate, non-bleeding, foul-smelling with indefinite margins.

On systemic examination patient was tachypnoeic, decreased respiratory movement bilaterally more in the right infra scapular and infra axillary areas, dull note on percussion and decreased air entry on auscultation in right infra scapular and infra axillary areas, bilateral wheeze and coarse crepitation in infra scapular and infra axillary areas. Abdomen was soft, non-tender with splenomegaly 3cms below left costal margin and shifting dullness. Heart sounds were normal with tachycardia, no added sounds. No focal neurological deficit.

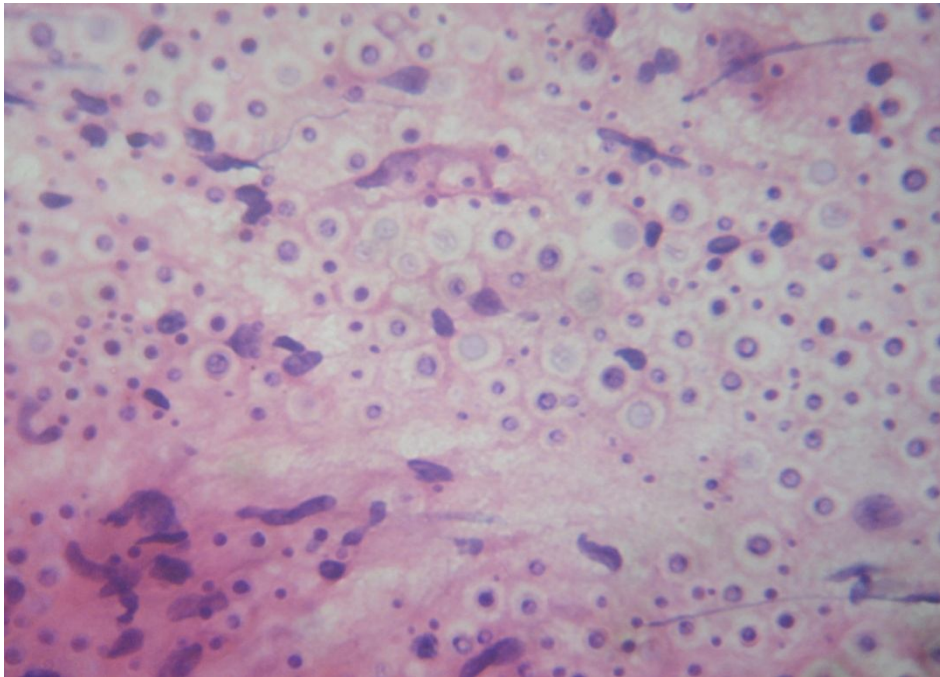
Patient was evaluated clinically and with laboratory investigation. On admission ABG reflected acute lung injury and metabolic acidosis which was corrected accordingly. All routine blood and urine investigations came out to be normal except for low hemoglobin and borderline

thrombocytopenia, LFTs and RFTs were within normal. Chest X-ray showed non-homogenous opacities bilaterally. Patient was started on antibiotics, diuretics, nebulization and O<sub>2</sub> support. Patient responded well to the treatment, breathlessness improved. Patient was hemodynamically stable. Further sputum examination showed pus cells and gram positive cocci in clusters and in chain and diplococci. USG abdomen showed moderate hepatosplenomegaly with bilateral pleural effusion and gall bladder sludge. FNAC of cervical LN was done which revealed cryptococcal lymphadenitis. Later CSF analysis was done which also showed capsulated budding yeast cells of *Cryptococcus neoformans* on India ink preparation. Fundus was normal. 2D echo revealed mild pericardial effusion. Patient was further evaluated for his immune status, Tri-dot and ELISA for retro-viral infection was negative, Western blot done was indeterminate. PCR for HIV was done which showed viral load of 1,27,000 copy/ml with a CD4 count of <20. Accordingly anti-retroviral and anti-fungal therapy was started.

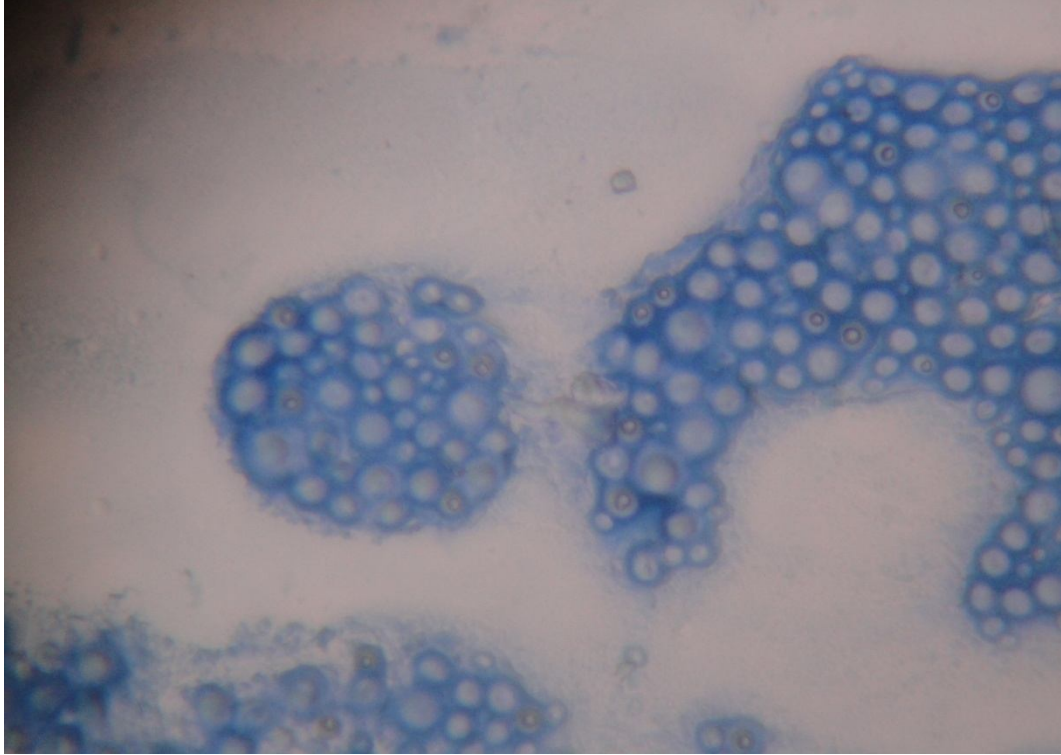
*Cryptococcus neoformans*, a yeast-like fungus, is the etiologic agent of cryptococcosis. Cryptococcosis was first described in the 1890s but remained relatively rare until mid-twentieth century, when advances in diagnosis and increase in the number of immunocompromised individuals markedly raised its reported prevalence. The spectrum of disease caused by *C. neoformans* consists predominantly of meningoencephalitis and pneumonia, but skin and soft tissue infections also occur. Serologic studies have shown that, although cryptococcal infection is common among immunocompetent individuals, cryptococcal disease is relatively rare in the absence of impaired immunity. Individuals at high risk for cryptococcosis include patients with hematologic malignancies, recipients of solid organ transplants who require ongoing immunosuppressive therapy, persons whose medical conditions necessitate glucocorticoid therapy, and patients with advanced HIV infection and CD4<sup>+</sup> T lymphocyte counts of <200/L. Since the onset of the HIV pandemic in the early 1980s, the overwhelming majority of cryptococcosis cases have occurred in patients with AIDS. To understand the impact of HIV infection on the epidemiology of cryptococcosis, it is instructive to note that in the early 1990s there were >1000 cases of cryptococcal meningitis each year in New York City—a figure far exceeding that for all cases of bacterial meningitis. With the advent of effective antiretroviral therapy, the incidence of AIDS-related cryptococcosis has been sharply reduced among treated individuals; however, the disease remains distressingly common in regions where antiretroviral therapy is not readily available, such as Africa and Asia, where up to one-third of patients with AIDS have cryptococcosis. Even though systemic cryptococcosis is frequently reported in patients of AIDS, the involvement of lymph nodes is not very commonly reported. So here we have reported case of cryptococcal lymphadenitis.



Extensive oral lesions



H & E preparation showing Cryptococcus



India Ink preparation showing Cryptococcus