ORIGINAL RESEARCH PAPER
Volume - 11 | Issue - 10 | October - 2022 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

A RARE PRESENTATION OF CRYPTOCOCCAL MENINGITIS IN NON HIV NON DIABETIC AND NON TRANSPLANT RECEIVER PATIENTS.

General Medicine

Dr. Swapnil Sadashiv Sapre* Junior Resident III Dept of Medicine Dr.VMGMC Solapur *Corresponding Author

Dr. Ashwin Sanjay Pund Junior Resident I Dept of Medicine Dr.VMGMC Solapur

ABSTRACT

An elderly female presented to casualty with presentation of high grade fever for 5-6 days and altered sensorium since 2-3days; On examination patient was conscious but irritable and disoriented with presence of high grade fever and neck rigidity. Patient did not have co morbidities like Diabetes mellitus or hypertension .Patient did not give any history of major surgeries or past medications; on further evaluation with CT brain and CSF studies it was found on India ink and fungal culture patient is suffering from cryptococcal meningitis . HIV status for patient is non reactive indicating patient is immune-competent (2) .This case highlights rare presentation of cryptococcal meningitis in non HIV non diabetic and non transplant receiver patients.

KEYWORDS

INTRODUCTION :
Cryptococcal meningitis is one of the deadly type of meningitis most commonly seen in immunocompromised patients like HIV positive, Diabetic and Organ transplant receivers (1). Most common species responsible for cryptococcal meningitis are C. neoformans and C. gattii; having strong affinity towards central nervous system.

The duration of symptoms from onset to a presentation is usually 1 to 2 weeks in HIV positive cases and 6-12 weeks in Non-HIV patients. Symptom presentation varies with some patients having symptoms for months while some presenting with acute illness. Early clinical suspicion, diagnosis and prompt treatment with intravenous antifungals with nutritional support provide good outcome in this fatal condition.

Case presentation :
A 70 yrs old female patient presented in casualty with high grade fever since 6-7 days, altered sensorium since 2-3 days and irrelevant talk since 1 day. There was no associated history of headache, vomiting and convulsions. Patient did not have any associated comorbid condition like Diabetes mellitus or hypertension. Patient did not give history of previous surgeries or long term medications.

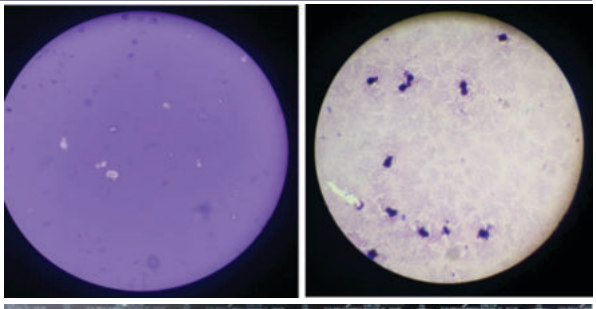
On admission patient was conscious but irritable and disoriented to time place and person . Patient was lying in bed with propped up position with blood pressure 130/80 mmhg and pulse rate 114/min regular with body temp 40.3 degrees.

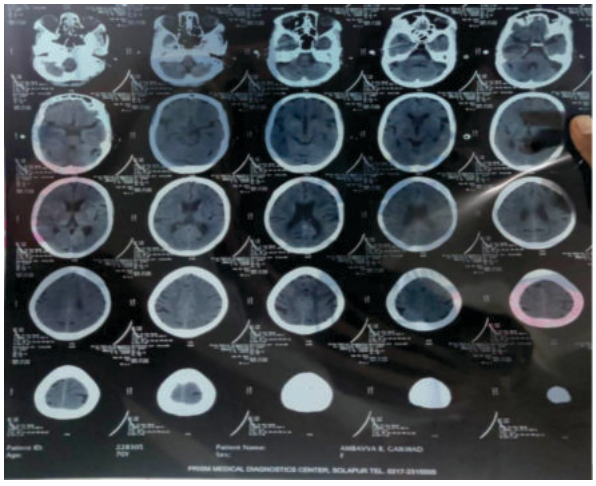
On head to toe examination patient was having high grade fever with significant neck stiffness, spontaneous eye opening and all four limb movements were present .No obvious neurodeficit observed. Kernig's sign and Brudzinki's sign both were Positive suggestive of meningismus. Cardiovascular, Respiratory and Gastrointestinal system showed no significant abnormalities.

Investigations :
Laboratory values as follows- hemoglobin 11.8gm/dL, leucocyte count 13060/mcgL,Platelets 288000/mcgL, AST-43 U/L, ALT-34 U/L, Creatinine-1.4mg/dl, Bsl Fasting-108 mg/dl Bsl PP2- 142 mg/dl Csf studies- Protein - 40 mg/dl (15-45) Sugar- 53 mg/dl (40-85) Cytology- 40 nucleated cells with 100 % lymphocytes India ink preparation shows multiple budding yeast like cells s/o cryptococcal species with fungal culture report followed s/o growth of cryptococcal species

Csf ADA and CBNAAT for Tuberculosis Negative CT Brain plain –Chronic ischaemic changes in bilateral periventricular white matter with age related cortical atrophy

HIV-Non Reactive
Following are india ink and Gram staining slides of cerebrospinal fluid studies done under microscope in the institute





DISCUSSION-
Cryptococcal meningitis is rare presentation in immune-competent patients (4/5); It is most commonly seen in HIV reactive patients or patients on immunosuppressive drugs or diabetic patients, early clinical suspicion and diagnosis along with prompt treatment with intravenous amphotericin B shows better prognosis .After receiving intravenous antifungals like amphotericin B(3) for 1 week along with antipyretics and abtibiotics patient improved clinically with sibsidement of fever, improvement in level of consciousness and orientation to time place and person. Parenteral and Enteral nutrition played crucial role in managing such patient

CONCLUSION :
Cryptococcal meningitis is one of the fatal form of meningitis and delay in initiation of antifungal might hamper the prognosis of patient hence clinical suspicion early diagnosis and prompt treatment with intravenous antifungal with good nutritional care shows prominent improvement in outcome of patient with cryptococcal meningitis in immune-competent patients

REFERENCES :

1. Park BJ, Wannemuehler KA, Marston BJ, et al. Estimation of the current global burden of cryptococcal meningitis among persons living with HIV/AIDS. AIDS. 2009;23(4):525–30. [PubMed] [Google Scholar]
2. Pappas PG, Perfect JR, Cloud GA, et al. Cryptococcosis in human immunodeficiency virus-negative patients in the era of effective azole therapy. Clin Infect Dis. 2001;33(5):690–9. [PubMed] [Google Scholar]
3. Dromer F, Bernede-Bauduin C, Guillemot D, Lortholary O. Major role for amphotericin B-flucytosine combination in severe cryptococcosis. PLoS ONE. 2008;3:1–9. [PMC free article] [PubMed] [Google Scholar]
4. Grossi PA, Fishman JAAST Infectious Disease Community of Practice. Donor-derived infections in solid organ transplant recipients. Am J Transplant. 2009;9(suppl 4):S19–26. [PubMed] [Google Scholar]
5. Grossi PA, Costa AN, Fehily D, et al. Infections and organ transplantation: new challenges for prevention and treatment&em;a colloquium. Transplantation. 2012;93(suppl 5):S4–39. [PubMed] [Google Scholar]