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CASE STUDY: IMPORTANCE
OF EARLY DIAGNOSIS OF
TUBERCULOUS MENINGITIS
USING GENEXPERT MTB/RIF
OF CSF SAMPLES

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INTRODUCTION

Tuberculous meningitis is the most devastating consequence of infection with *Mycobacterium tuberculosis* (TB). Approximately a third of patients die soon after presenting to hospital, and many of those surviving are left with severe neurological sequelae. However, many patients are diagnosed late because initial signs are not specific, and rapid and sensitive diagnostic tests are lacking.

CASE REPORT

A 27 year old Burmese gentleman presented with fever, loss of appetite and headache with diplopia for one month. He had vomiting for ten days and altered behavior (increased agitation) for three days. On examination, patient had neck stiffness with positive meningeal signs and 6th nerve palsy bilaterally. He was treated as meningoencephalitis and commenced on intravenous Ceftriaxone and Acyclovir on arrival. CT Brain with contrast done showed diffuse leptomeningeal enhancement with communicating hydrocephalus. We proceeded with lumbar puncture, which showed a very high opening pressure (above 50 mmHg). Cerebrospinal fluid (CSF) showed elevated protein (1.310) and significantly reduced glucose level. However, CSF cell count

was nil with no acid fast bacteria detected on Ziehl-Neelsen smear. CSF GeneXpert MTB/RIF showed MTB detection at low level with no rifampicin resistance. Patient was commenced on anti-TB medications (Isoniazid, Rifampicin, Streptomycin and Pyrazinamide). A ventriculo-peritoneal shunt was inserted by Neurosurgery Team, which improved patient's level of consciousness. He completed intensive phase of anti-TB treatment for two months and is under maintenance phase for next ten months. His CSF Culture done in Mycobacterial Growth Indicator Tube (Bactec), which took about two weeks to be processed showed no growth.

DISCUSSION AND CONCLUSION

This case illustrates that early diagnosis of TB Meningitis is pivotal for early initiation of treatment and surgical interventions, if needed to prevent severe neurological sequelae. This case also reiterates the role of GeneXpert MTB/RIF as the most sensitive method in diagnosing TB Meningitis compared to other available diagnostic tests.

PP 3
CASE STUDY:
HYPERTROPHIC
MENINGITIS WITH
MULTISYSTEM
INVOLVEMENT AS INITIAL
PRESENTATION OF BEHCET'S
DISEASE

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INTRODUCTION

Behçet's disease (BD) is a multisystem recurrent vasculitic disorder of unknown origin, which manifests as recurrent oral and genital ulcers, skin and eye alterations. Hypertrophic pachymeningitis is a rare disease characterized by localized or diffuse thickening of the dura mater of brain associated with infections, systemic autoimmune/vasculitic disorders, malignancy and meningioma.

CASE REPORT

A 35-year-old gentleman presented with two-year history of bilateral trismus and jaw pain which did not resolve, despite oral surgery was done. He also had fever, headache, blurring of vision with restricted left eye movement for three months. CT Brain and Orbit with contrast showed extensive pachymeningeal enhancement, bilateral retrobulbar mass and right infratemporal fossa lesion. MRI of Brain and Orbit showed diffuse pachymeningeal enhancement and inflammation of left recti muscles, right infratemporal and masticator spaces. Patient was empirically covered with antibiotics for meningitis. Subsequently, he was started on anti-tuberculous treatment (anti-TB) due to high ESR and unresponsiveness to antibiotics. CSF results (cell count, biochemistry, C+S, acid-fast bacteria, MTB PCR, viral screening, GeneXpert) were not suggestive of infection. Despite being on anti-TB for eight months, fever did not resolve. Therefore, he was given trial of oral steroids (Tab Prednisalone) and his general condition improved. Due to worsening restriction of extraocular movement of left eye, left orbitotomy and retrorbital mass incisional biopsy were done. Left periorbital and orbital

fat sent for histopathological examination showed neutrophilic vasculitis suggestive of Behçet's disease. Currently, patient is started on Tab Azathioprine and being followed-up as outpatient.

DISCUSSION AND CONCLUSION

There should be high degree of suspicion about Behçet's disease in patients with hypertrophic pachymeningitis with multisystem involvement although certain typical features such as recurrent oral and genital ulcerations are absent. Such atypical isolated cases has been reported worldwide. Early treatment with steroids are essential to halt progression of the disease and prevent serious complications.

PP 4 PRIMARY SPONTANEOUS TENSION HEMOPNEUMOTHORAX: CASE REPORT AND LITERATURE REVIEW

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Primary tension hemopneumothorax is a life threatening condition rarely encountered nowadays. This entity is defined as the accumulation of more than 400 mL of blood in pleural cavity associated with spontaneous pneumothorax in a previously healthy patient with no underlying lung disease. We described a case report of a young gentleman presenting with progressive worsening of breathlessness and chest pain associated with tachycardia and