



## REVERSIBLE NEUROVISUAL LOSS - RARE CASE OF CRANIOCEREBRAL ACTINOMYCOSIS

### Neurology

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### KEYWORDS

#### OBJECTIVE:

To document a rare case of neuro visual loss due to craniocerebral actinomycosis.

#### BACKGROUND:

craniocerebral actinomycosis is a rare presentation of actinomycosis. vision loss due to actinomycosis with complete recovery after medical management has not been described.

#### METHODS:

Case report from tertiary medical centre.

#### RESULTS:

56 years old female presented in February 2018 with history of occipital headache and blurring of vision of 2 weeks duration. Patient didn't have fever vomiting, seizures and other co morbidities.

On examination patient had bilateral papilledema in the form of blurring of disc margins. Basic investigations were normal. Ct brain was normal. MRI brain with contrast showed features suggestive of pachymeningitis. Patient didn't had any features suggestive of Centralnervous system tuberculosis and sarcoidosis. Cerebrospinal fluid analysis revealed protein of 60mg%. Patient was treated with iv methylprednisolone and iv antibiotics. Patient symptoms subsided and discharged with oral steroids with tapering of dose. Patient got readmitted with history of headache and visual loss. On fundus examination both sides hazy media with blurred margins-chronic papilledema. Readmission Routine investigations were normal. MRI brain revealed features of dural thickening, enhancing nodules, edema in brain parenchyma in both parieto occipital region with extension into the skull bone and scalp.

Radiologically diagnosed as a case of craniocerebral actinomycosis. Cardiac evaluation was normal. Patient was treated with inj crystalline penicillin for 7 days. No surgical intervention was done. Patient vision was improved. Patient was advised to continue oral penicillin for 6 months.

#### MRI IMAGES:



#### MRI FINDINGS:

- Diffuse calvarial thickening is noted in bilateral parieto occipital region.
- There is significant dural thickening with enhancing nodules seen in bilateral parieto occipital region.
- Largest nodule measures about 2.3\*1.3 cm
- There is extension of soft tissue to the scalp is noted in right occipital region
- There is edema noted in right parieto occipital and left parietal region
- Minimal left occipital and subdural collection is seen

#### DISCUSSION:

Actinomyces are gram positive bacteria belongs to genus of actinobacteria. They are facultatively anaerobic. Grows best in anaerobic condition. Actinomyces colonies form fungus like branched filaments of hyphae elements, So called as ray fungus. Certain species are commensals in skin flora, gut flora and vaginal flora. They used to get interior through wounds. Actinomyces are fastidious, not easy to culture and isolate. So negative result does not rule out infection.

Actinomycosis is a disease caused by actinomyces species characterized by formation of abscess in mouth, lungs, gastrointestinal tract. Sometimes may cause endocarditis. Oro-cervicofacial actinomyces presents as lumpy jaw. Pelvic actinomycosis is a rare but proven complication of intrauterine contraceptives.

Cerebral actinomycosis is a rare form of actinomycosis. It presents as cerebral abscess, encephalitis, meningitis, cystic brain tumours, subdural empyema and epidural abscess.

In this case patient presented with headache and visual loss. MRI features suggestive of craniocerebral Actinomycosis. Patient was treated with parenteral penicillin. Patient vision became normal. headache subsided, Patient was discharged and advised to continue oral penicillin. Patient is on followup.

#### CONCLUSION:

Clinical presentation, MRI findings, early treatment with proper antibiotics reverses the neurological complications due to craniocerebral actinomycosis.

#### References

1. Multiple brain abscess due to actinomyces species. Oluwadamilola et al., clinical neurology and neurosurgery volume 110, issue 8, September 2008, pages 847-849.
2. Intracranial actinomycosis case report and review of literature Alfonso pacheo Hernandez, Romanian neurosurgery, volume 31 issue 2. Published online 27 June 2017. pages 248 to 252.
3. Actinomycotic brain abscess, Maryam rahiminejad et al., Department of neuroradiology, Atkinson morley wing st George hospital London. BJR/case reports.