



## INTRODUCTION

- ❖ Cerebral mucormycosis is a rare but fatal infection, primarily seen in immunocompromised individuals.
- ❖ It is caused by the fungi of the class *Mucormycetes*.
- ❖ We describe a case of cerebral mucormycosis in a patient with uncontrolled diabetes mellitus

## CASE DESCRIPTION

- ❖ A 38 year old Pakistani man with a history of poorly controlled diabetes mellitus was admitted with a 4 week history of generalized lethargy, night sweats and weight loss.
- ❖ On initial examination, he was pyrexial and had enlarged supraclavicular lymph nodes.

## HOSPITAL COURSE

### Week 1:

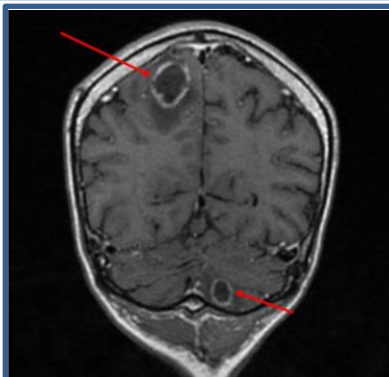
- ❖ The patient was initiated on antibiotics for pneumonia, and insulin for his diabetes
- ❖ He underwent bronchoscopy to rule out tuberculosis(TB)

### Week 2:

- ❖ He developed sudden onset left leg weakness
- ❖ CT head demonstrated right sided brain lesions with surrounding vasogenic edema
- ❖ MRI brain confirmed ring –enhancing lesions, likely tuberculomas.
- ❖ He was initiated empirically on TB treatment and intravenous steroids

### Week 3 -4:

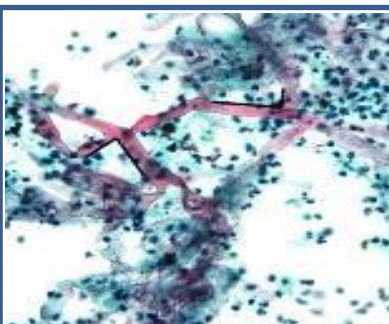
- ❖ He developed signs of meningism and bulbar weakness
- ❖ Repeat CT head now revealed bilateral ring enhancing lesions with worsening of vasogenic edema.
- ❖ Neurosurgeons performed mini-craniotomy, with aspiration of a right parietal brain abscess.
- ❖ Histology and culture confirmed the presence of hyphae of *Apophysomyces variabilis* , a mucoraceous mold.



MRI showing ring enhancing lesions



CT head showing worsening vasogenic edema



Pauci septate hyphae  
Source: [www.wikidoc.org](http://www.wikidoc.org)

## HOSPITAL COURSE (continued)

- ❖ TB treatment was ceased, and antifungal treatment was commenced.
- ❖ **Week 5:**
- ❖ Patient progressively deteriorated with significant impairment of his level of consciousness.
- ❖ Multidisciplinary team and family made a unanimous decision for palliation.

## DISCUSSION

- ❖ Currently, there is no standardized non-culture-based test of serum or CSF.
- ❖ There is no NICE UK guideline for the management of mucormycosis
- ❖ Diagnosis is on the basis of clinical suspicion, imaging and sampling.
- ❖ Etiological agent identification is via direct microscopy, culture and immunohistochemical staining.
- ❖ Management involves prompt institution of antifungal treatment and surgical intervention, such as debridement.

## TAKE-HOME POINTS

- ❖ Cerebral mucormycosis can present clinically and radiologically as cerebral tuberculosis.
- ❖ It is imperative to maintain an elevated level of clinical suspicion for atypical infections, especially fungal infections, in immunocompromised patients presenting as TB.
- ❖ Cerebral mucormycosis is difficult to diagnose, difficult to treat and difficult to survive.

## REFERENCES

- [1] Rachna Palnitkar, Michael Sands- Mucormycosis: Symptoms, diagnosis and treatment. BMJ Best Practice , 2021
- [2] Seong Rok Han, Chan Young Choi, Mee Joo, Choong Jin Whang. Isolated Cerebral Mucormycosis. Journal of Korean Neurosurgical Society,2007.
- [3] Garg D, Muthu V, Seghal IS, Ramachandran R, Kaur H, Bhalla A, et al. Coronavirus Disease associated Mucormycosis (CAM)