Brain Abscess: The Great Mimicker

INTRODUCTION

- Brain abscess is a life-threatening condition.
- It requires high index of suspicion for early diagnosis and management.
- It could present without the classic signs and symptoms of infection.

OBJECTIVE

- Demonstrate that patients with brain abscess may not present with the typical clinical features of abscess collection.
- Recognize that pulmonary Arterio-Venous Malformation (AVM) can be a risk factor for brain abscess.

CASE DESCRIPTION

- A 79 yr old female patient presented with two days duration of diplopia.
- Prior to the onset of diplopia, patient had progressively worsening dizziness, unsteadiness and headache for three weeks.
- Patient had no fever, motor weakness or sensory changes.
- The only abnormal physical findings were subtle dysconjugate gaze, central vision loss and loss of balance.
- Two days after admission, patient started to have slurred speech, lethargy and confusion.
- Vital signs and basic labs were all unremarkable.
- MRI of brain showed 1.5 cm lobular peripherally enhancing midbrain mass with mass effect.
- Primary midbrain glioma and metastatic lesions were considered likely causes.
- CT of chest-abdomen-pelvis was obtained for surveillance of possible primary tumor and it revealed pulmonary AVM.
- The finding of AVM raised concern for brain abscess.
- MRI spectroscopy of the brain was obtained and the finding was consistent with brain abscess than a tumor.
- Patient was empirically placed on broad spectrum antibiotics and started to show gradual improvement.
- Extensive infectious disease work up did not reveal source of infection.
- On further inquiry, the patient reported having dental cleaning two months prior to admission.

CONCLUSION

- Brain abscess can easily mimic brain tumor. Fever is generally present in less than half of the cases.
- A high index of suspicion is crucial for early diagnosis.
- Simple procedures like dental cleaning can increase the risk of brain abscess especially in patients with pulmonary AVM.

REFERENCES: