Bilateral Abducens Palsy Secondary to Metastatic Breast Cancer.

Paul Secheresiu DO
Lehigh Valley Health Network, Paul.Secheresiu@lvhn.org

Yehia Y. Mishriki MD
Lehigh Valley Health Network, Yehia.Mishriki@lvhn.org

Follow this and additional works at: https://scholarlyworks.lvhn.org/medicine
Part of the Internal Medicine Commons, and the Medical Sciences Commons

Published In/Presented At

This Poster is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact LibraryServices@lvhn.org.
INTRODUCTION

- Worldwide, breast cancer is the most diagnosed malignancy with more than one million new cases annually.
- In the US, it is the most common malignancy in women and the second most common cause of death.
- The most common sites for breast cancer metastases include: bone, liver, brain, and lung.
- In postmortem studies, 70-90% of women with breast cancer will have metastatic bone disease.
- The clivus of the skull, a sloping midline surface of the occipital bone anterior to the foramen magnum, is involved in <1% of intracranial tumors.
- Metastatic lesions to the clivus have been reported in various cancers, however, they are extremely rare from breast cancer.

DISCUSSION

- Isolated abducens nerve palsies may be ischemic (most common in age >50) or neoplastic, while increased intracranial pressure can lead to physical stretching of CN VI.
- CN VI courses from its nucleus in the dorsal pons along the clivus, through a fibrous sheath (Dorello’s Canal) to innervate the lateral rectus muscle.
- The anatomic pathway renders the abducens nerves susceptible to injury if lesions involving the clivus are present.
- Endoscopic transsphenoidal needle biopsy is required with clival lesions to rule out other differential diagnoses: Chondrosarcoma, Paget Sarcoma, and Metabolic bone disease.
- Treatment of abducens nerve palsy involves steroids and management of underlying causative process.
- There have been isolated reports of unilateral abducens nerve palsies in patients with metastatic cancer, however, this is the first report of primary breast cancer as a cause of bilateral abducens palsy due to clival metastatic disease.

CASE

- A 63 year old Indian woman with history of T1N0M0 breast cancer, diagnosed one year prior, presented with diplopia and headache without recent trauma.
- She had been previously treated with lumpectomy, radiation, and Tamoxifen.
- Physical exam was normal, except for inability to abduct either eye.
- CN II-V and VII-XII were intact.
- Funduscopic exam was normal.
- MRI of the brain revealed a lytic lesion in the clivus (no other metastases were identified).
- Three months later, she presented with a cough and shortness of breath and was found to have metastatic disease to lung and liver as confirmed with pulmonary fluid cytology.
- A transsphenoidal biopsy was not performed given rapid degeneration of her condition which ultimately led to her death within months.

References: