INTRODUCTION

Leptomeningeal Carcinomatosis is a complication of advanced cancer with spread to the meninges. It is rare, progresses quickly and is often detrimental.

CASE DESCRIPTION

75-year-old otherwise healthy female with three weeks of L ear pain, fullness, dizziness, hearing loss, rhinorrhea and headache.

Initial PCP visit:
- Ear irrigated & given seven day course of Abx for otitis media and sinusitis

Follow-up PCP visit:
- No improvement in hearing/headache
- Mentioned painful mass in abdomen; CT ordered but not completed.

ED Presentation (1wk later):
- Two days of double vision
- R eye droop and R eye drifting inward (per grandson started two days ago as well)
- Nausea/vomiting with decreased appetite
- Diarrhea for five days
- Eight-pound weight loss in three weeks
- Fevers, chills, hot flashes
- Sinus pain, rhinorrhea with clear mucus

HOSPITAL COURSE

- Admission exam showed
  - Multiple erythematous, firm, fixed, fungating masses on R breast, large palpable R axillary lymph node Hepatomegaly and palpable,
  - Firm RUQ mass.
  - R-sided ptosis and medial deviation of eye. All other CNs intact, 5/5 strength, normal sensation.
  - CT Head showed Complete opacification of bilateral sphenoid sinus and near complete opacification of the left mastoid air cells and left middle ear.
  - ENT consulted; Started on IV Abx and steroids.
  - CT Chest/Abd/Pelvis showed multiple bilateral breast nodules, a large liver mass and multiple enlarged lymph nodes.
  - Percutaneous liver biopsy came back positive for metastatic moderately differentiated carcinoma of breast origin; ER, PR, Her2/neu negative
  - MRI brain showed Slight nodular/irregular dural enhancement surrounding the left cerebellar hemisphere and along the undersurface of the left tentorium. Minor dural enhancement overlying left cerebral hemisphere.
  - Pt diagnosed with meningeal carcinomatosis.
  - High dose steroids were initiated.
  - Pt underwent emergent radiation therapy with memantine for neuro protection.
  - Symptoms continued to worsen.
  - Pt and family met with palliative care and ultimately decided on home hospice.

DISCUSSION

Breast cancer is the most common cause of leptomeningeal carcinomatosis, with infiltrating lobular carcinoma topping the list. Other causes include: lung, melanoma and GI cancers. Common presenting symptoms are headache, nausea/vomiting, leg weakness, cerebellar dysfunction, AMS, diplopia and facial weakness, cranial nerve dysfunction, mass effect +/-hydrocephalus or ICP. Diplopia is the most common side effect seen. Neuro symptoms do not follow typical patterns. Symptoms will occur and progress over days to weeks. Prognosis is poor. Left untreated patients will die in days to weeks. XRT and steroids can be used as palliation. In patients with little or no symptoms intrathecal chemotherapy is used. Regardless of treatment prognosis is a few months.

IMPLICATIONS

- Be careful of anchoring bias. She came in with continued sinusitis but actually had leptomeningeal carcinomatosis.
- Common misconception: tumor size can flux and some even get smaller as they develop.
- When presented with a patient with neuro changes in a atypical pattern consider leptomeningeal carcinomatosis.
- Breast cancer is the leading cause of leptomeningeal carcinomatosis.

IMPLICATIONS

- Be careful of anchoring bias. She came in with continued sinusitis but actually had leptomeningeal carcinomatosis.
- Common misconception: tumor size can flux and some even get smaller as they develop.
- When presented with a patient with neuro changes in an atypical pattern consider leptomeningeal carcinomatosis.
- Breast cancer is the leading cause of leptomeningeal carcinomatosis.