

Into the unknown: Navigating orbital cellulitis to reveal retinal metastasis of a hidden primary tumor

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Introduction: This is a rare patient presentation of retinal metastasis with an unknown primary tumor.

Case Presentation: A 65-year-old woman with a past medical history of left breast carcinoma stage 1 status post left mastectomy in 2014, iron deficiency anemia, anxiety, and depression presented to the emergency department with 1-2 weeks of worsening lower abdominal pain and left-sided chest pain. She also complained of right eye pain, blurry vision, and painful eye movement. Ocular examination demonstrated edema, mild proptosis, conjunctival chemosis, and conjunctival injection. Patient was started on bacitracin ointment and ceftriaxone due to concerns of orbital cellulitis. Ophthalmology was consulted, and their assessment was suggestive of bilateral metastatic neoplastic lesion in retina of both eyes, more pronounced in the right than the left eye. Left supraclavicular lymph node biopsy showed metastatic adenocarcinoma, likely of gastrointestinal or pancreaticobiliary primary. MRI brain was suspicious for calvarial metastatic disease, MRI abdomen showed multiple nodules in the liver suggesting metastases, and NM bone scan whole body suggested possible metastases in the hemithorax and bilateral femurs. After several goals of care discussions, the decision was made by the patient and her family to pursue comfort measures only and she was discharged home with home hospice.

Conclusion: Retinal metastasis is a rare condition due to the absence of lymphatic system in the eye (1). The most common primary tumors to metastasize to the eye are from breast (47%), lung (21%), and the gastrointestinal tract (4%) (2). In some cases, patients may have no other symptoms (1). Thus, retinal metastasis is important to include in the differential diagnosis, especially for patients with a history of treated primary cancer.

References

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