Abstract:
Despite anatomical success following macular hole repair this patient’s vision continues
to decline. Thorough work up reveals occipital lobe and optic nerve tumors from renal
carcinoma metastases. This case illustrates the need for vigilant investigation.

I. Case History
A. 62 YO African American male presents for scheduled follow up
   1. Chief complaint is worsening vision OD>OS x 6 months
      post macular hole repair
B. Past ocular history:
   2. H/o BRVO OS with resultant extensive retinal
      collateralization (1995)
   3. Toxic optic neuropathy secondary to ETOH abuse
   4. S/p PPV/ERM/ILM resection 2/10, when ERM with
      pseudohole OD and vitreomacular traction progressed into
      full thickness macular hole, with anatomic success
         a. BVA pre-op: 20/400
         b. BVA post-op: 20/400
C. Past medical history/social history:
   1. HTN c meds poor control x 2 months
   2. ESRD on dialysis
   3. GERD
   4. Renal CA, s/p L nephrectomy (2001)
   5. Gallstones s/p cholecystectomy (1985)
   6. COPD
   7. ETOH abuse none since (1995)
D. Medications:
   1. Hydrocodone/Acetaminophen 500mg Tab
   2. Omeprazole 20mg bid
   3. Heparin 5000 units/ml inj
   4. Minoxidil 10mg bid
   5. Metpropolol tartrate 50mg q12h
   6. Dexamethasone 4mg q12h
   7. Flunisolide nasal bid
   8. Docusate 100mg bid
   9. Hydralazine HCL 50mg q12h
   10. Cinacalcet 90mg daily
   11. Losartan 100mg daily
   12. Nifedipine 120mg daily
   13. Temazepam 15mg qhs
   14. Dialyvite daily
15. Pamidronate disodium Inj

E. Other Salient Information
   1. Allergy to codeine with reaction of emesis

II. Pertinent Findings
   A. Clinical
      1. Visual Acuities (without correction)
         a. OD: 20/400 PH NI (previously 20/20 on 6/09)
         b. OS: CF @ 2 ft PH NI (previously 20/400 on 12/09)
      2. Pupils, EOMs: NL
      3. CVF: generalized constriction 360 OU
      4. Ant Seg evaluation: WNL
      5. IOP OD 12mmHg, OS 16mmHg at 9:05am by applanation
      6. Dilated Fundus Exam:
         a. OD: CD 0.2 mild pallor superotemporally, normal
            vasculature, retina flat, intact x 360, no SRF
         b. OS: CD: 0.2 mild pallor temporally, extensive
            collateralization, normal macula
      7. Pre- surgical OCT OD: VMT, large cystic spaces, atrophic
         retinal tissue
      8. Post- surgical OCT OD: Normal anatomical configuration, no
         evidence of VMT, atrophic retinal tissue, few tiny cystic spaces
      9. FA Review
         a. OD: no CME, no delayed filling
         b. OS: no CME, no delayed filling, collaterals OS
   B. Physical
      1. BP: 146/69 right arm sitting.
      2. Pulse 74 bpm; strong, regular
   C. Lab work ACE, ANA, RPR, MHA-TP, ESR, and lysozyme were NL, only
      elevated BUN and creatinine
   D. MRI of brain and orbits was ordered

III. Differential Diagnosis
   A. Primary/Leading – Cortical blindness
   B. Failed macular hole repair OD
   C. Progressive toxic/nutritional (ETOH abuse) optic neuropathy
   D. Cancer associated retinopathy
   E. Retinal Ischemia

IV. Diagnosis and Discussion
   A. MRI imaging: Evidence of metastasis to left optic nerve and bilateral occipital
      lobes
   B. Chest CT ordered on 06/2010 by general medicine: lung mass
      a. New primary vs. metastasis
   C. The incidence of the brain being the only area of metastases in renal cell
      carcinoma (RCC) is < 1% with prevalence of brain metastases from RCC is
      2.3%.
   D. Cortical blindness occurs because of an organic lesion in the visual cortex
E. Oncology unclear regarding exact etiology of metastasis.
F. Extensive ocular history of patient may have been easily mistaken for progression of past ocular conditions as cause for current symptoms. Therefore, vigilant investigation of possible co-morbidities is paramount to thorough patient management.

V. Treatment Management
A. Past measure: Started on hemodialysis (08/98), L nephrectomy (2/01)
B. LV option was offered but declined by patient.
C. Familial Counseling discussed
D. Fall precautions reviewed
E. Temazepam prescribed for antiepileptic prophylaxis
F. Dexamethasone 10mg IV x 1 given in ER and decreased to 4mg q6h x 2 days to decrease edema surrounding metastasis (6/10)
G. Palliative whole brain XRT performed (8/10)
H. Patient determined not a good candidate for chemotherapy because of poor performance status (8/10)
I. Currently home hospice: Palliative

J. Bibliography


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VI. Conclusion
A. It is the role of an optometrist as a primary care physician to always reevaluate the current diagnosis and make sure it holds true throughout the treatment of a patient. Signs and symptoms of worsening eye disease despite current treatment may indicate an underlying malignancy.