Case Outline:
I. Case History

- Patient demographics
  - 75 year-old Caucasian male, new patient
- Chief complaint
  - Blur OU over past 2-3 years at distance and near
- Ocular history
  - Cataracts OU
- Medical history
  - Coronary artery disease, hyperlipidemia, hypertension, idiopathic peripheral neuropathy, esophageal reflux, benign prostate hypertrophy, hearing loss
- Medications
  - Aspirin 81 mg, Atorvastatin calcium 80 mg, Finasteride 5 mg, Lisinopril 10 mg, Sildenafil citrate 100 mg, Tamulosin 0.4 mg

II. Pertinent findings

- Clinical
  - BCVA 20/40 OD and 20/40+ OS
  - EOMs, confrontations, pupils, and amsler grid all normal
- Physical
  - OD: Prominent dilated and tortuous iris vessels extending from iris root to peripupillary region in inferior temporal quadrant visible on slit lamp examination and into anterior chamber angle visible on gonioscopy
  - OD: 2+ NS and 2+ PSC centrally, OS: 2+ NS and 1+ PSC centrally
  - IOP 21 mmHg OD and 20 mmHg OS
  - C/D 0.55v/0.50h OD and 0.65v/0.60h OS
- Radiology studies
  - Anterior segment OCT
    - OD: large vessels through iris with normal iris and angle anatomy
    - OS: normal iris and angle anatomy
  - Optic Nerve RNFL OCT
    - OD: thinning inferior and nasal with average thickness of 55
    - OS: thinning inferior and superior with average thickness 53
- Others
  - Anterior segment photos taken

III. Differential diagnosis

- Primary/leading
  - Iris neovascularization
  - Dilated vessels from chronic inflammation
  - Feeder vessels to a malignancy including uveal melanoma
Other types of iris hemangiomas including capillary hemangioma, cavernous hemangioma, microhemangioma, and iris varix

IV. Diagnosis and discussion

- Elaborate on the condition
  - The patient was diagnosed with iris arteriovenous malformation (AVM) OD. Iris AVM, also called racemose hemangioma, is a form of iris hemangioma, which is a vascular tumor of the iris involving a benign, abnormal connection between an artery and vein. It can be viewed on physical examination with slit lamp as a dilated and tortuous vessel in an area of the iris extending as a vascular loop from the anterior chamber angle into the iris and back toward the angle.

- Other points
  - Anterior segment angiography, ultrasound biomicroscopy, and anterior segment OCT are useful in the diagnosis of iris AVM.

- Other diagnoses
  - Visually significant cataracts OD and OS; the patient was referred for cataract surgery
  - Glaucoma suspect OD and OS secondary to optic nerve appearance, RNFL OCT, and borderline high IOP; the patient was told to return to the clinic in 3 months for further testing

V. Treatment, management

- Treatment
  - Monitor in 3 months when patient returns for further glaucoma testing

- Bibliography
  - Arteriovenous Malformation of the Iris in 14 Cases
  - OCT and Ultrasound Biomicroscopic Findings in Iris Arteriovenous Malformation

VI. Conclusion

- Clinical pearls
  - Iris arteriovenous malformation is a rare, benign vascular tumor of the iris. It must be differentiated from other causes of abnormal iris vasculature and this can be accomplished by careful slit lamp examination and accompanying anterior segment OCT, ultrasound biomicroscopy and/or anterior segment angiography.