

COCCIDIOIDAL CHORIORETINITIS

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INITIAL PRESENTATION

- ▶ **27 YO Filipino man**
 - ▶ **CC: “Progressively enlarging masses, Back pain, Lower extremity weakness, and decreased vision in left eye.”**
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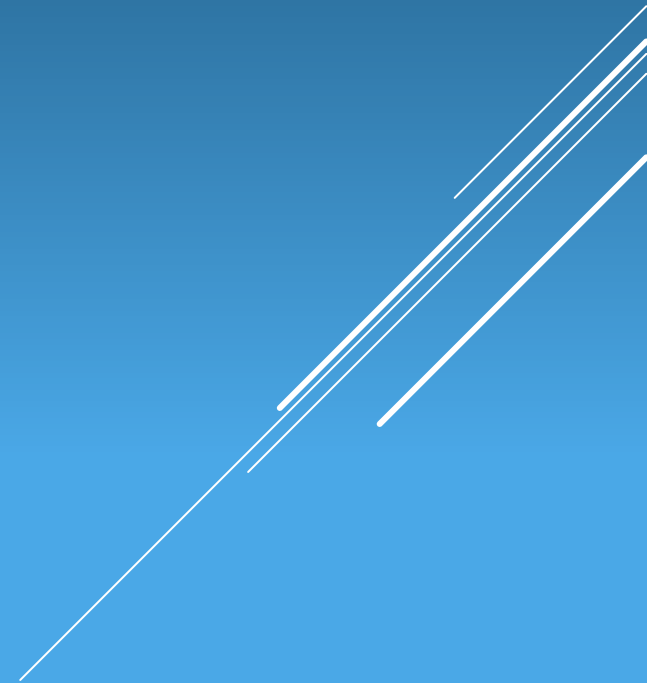
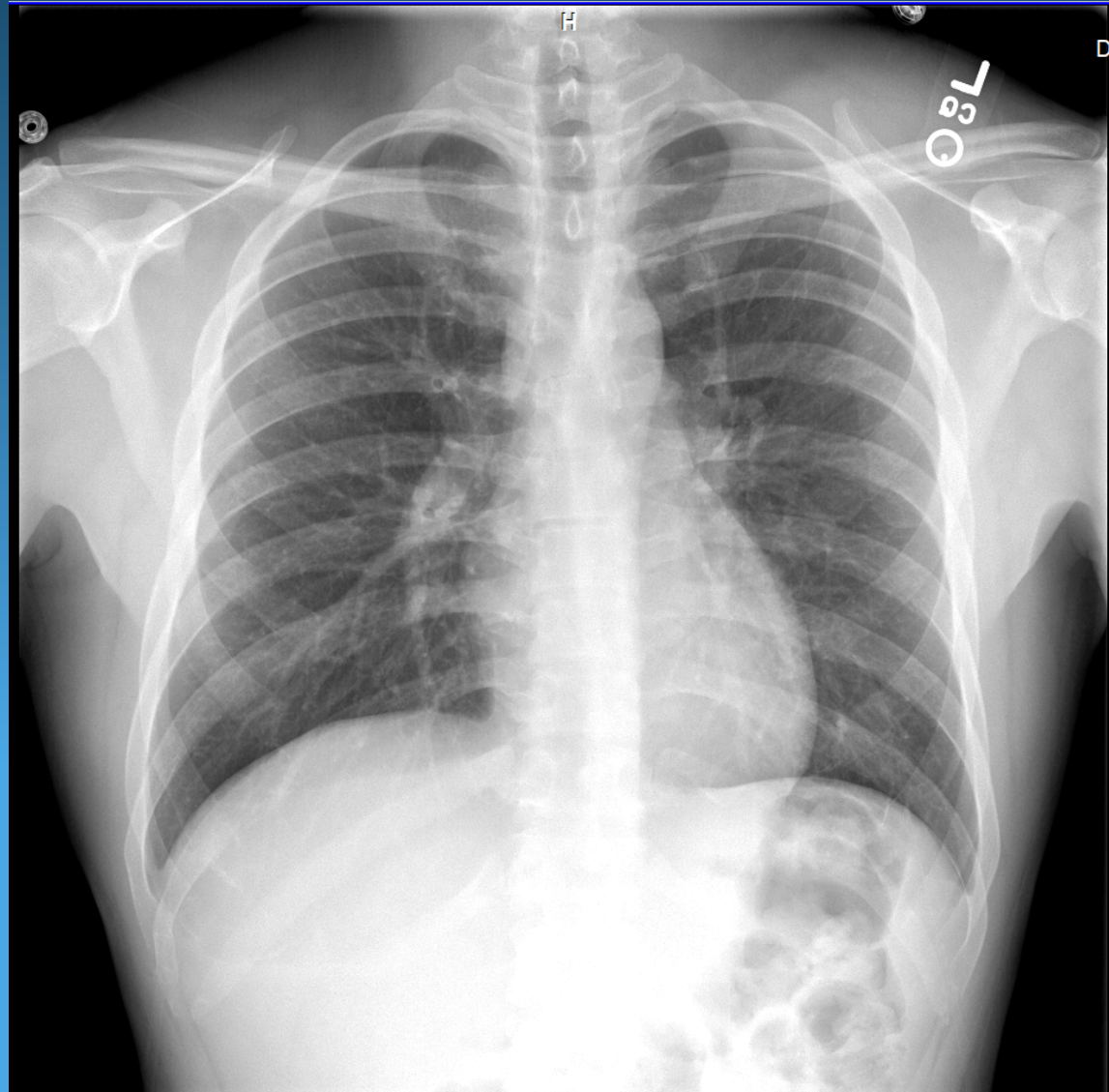
HISTORY OF PRESENT ILLNESS

- ▶ **May 2017:** pneumonia
- ▶ **July 2017:** Back pain and Bilateral Lower extremity weakness
- ▶ **September 2017:** enlarging Masses: R submandibular, Left supraclavicular, and Paraspinal Thoracic region
- ▶ **October 2017:** Medical discharge from army
- ▶ **December 2017:** Kern medical center

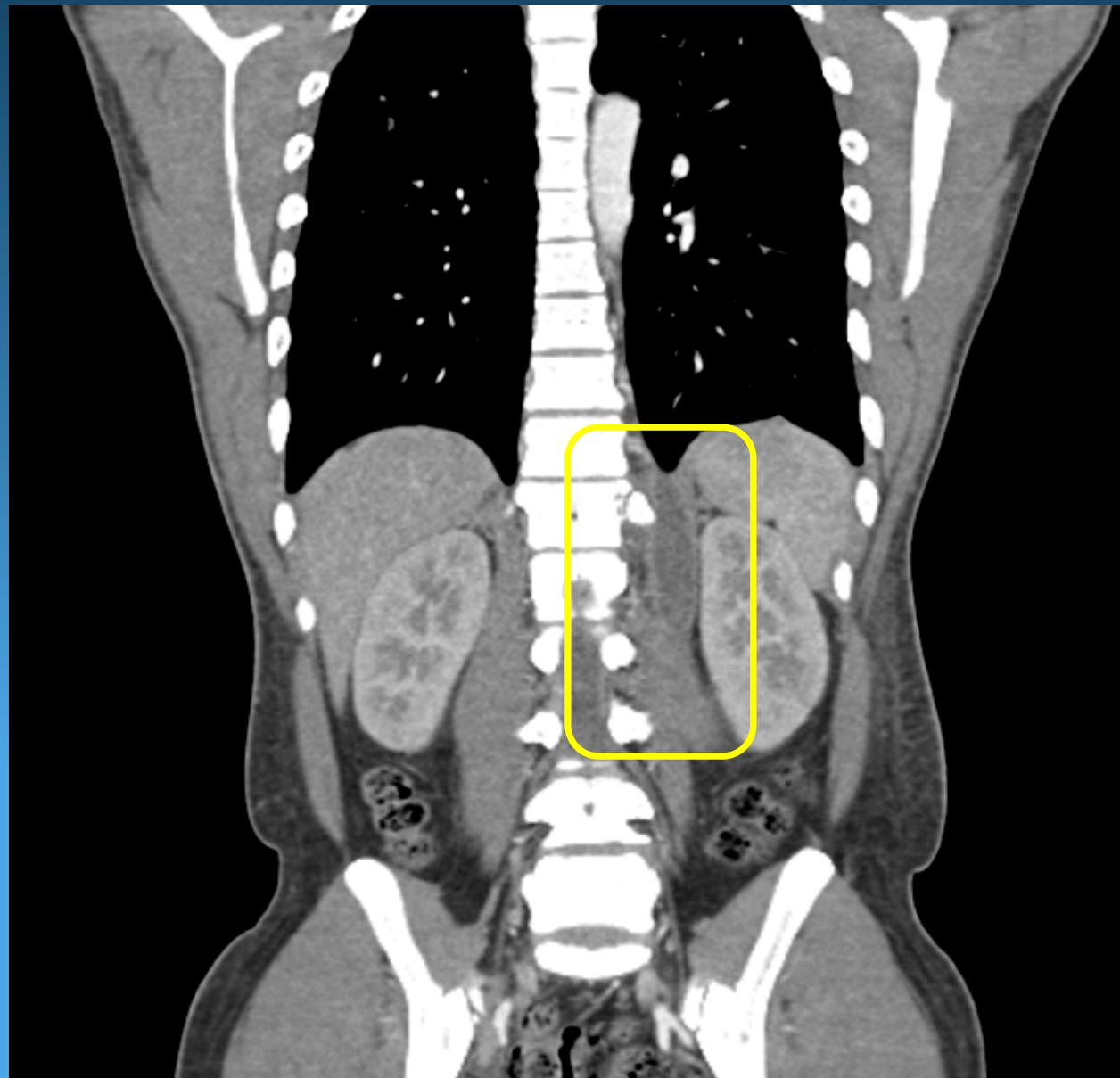
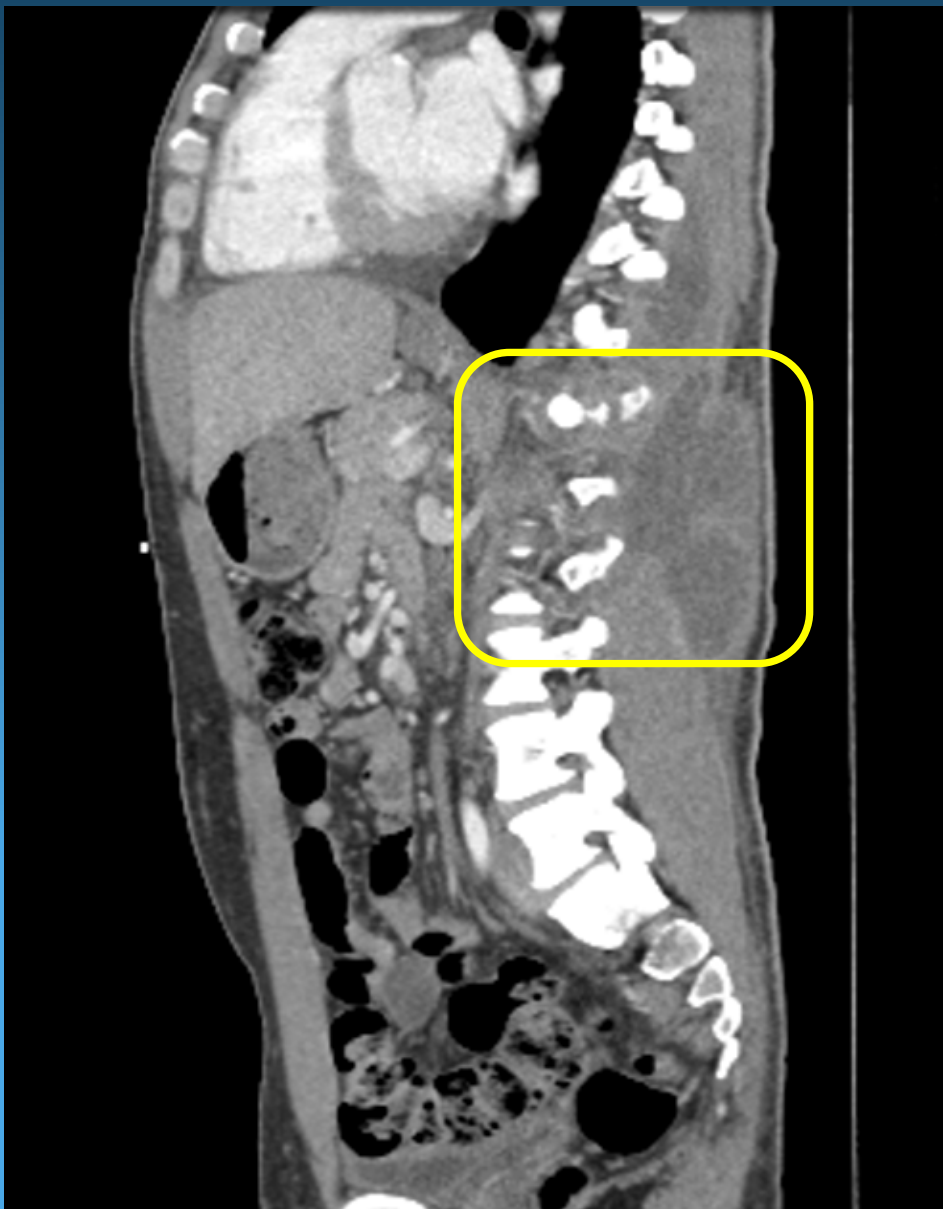
PHYSICAL EXAM

- ▶ **Fluctuant Masses noted:**
 - ▶ R sub mandibular
 - ▶ L supraclavicular
 - ▶ Thoracic paraspinal
 - ▶ **Decreased temporal visual fields**
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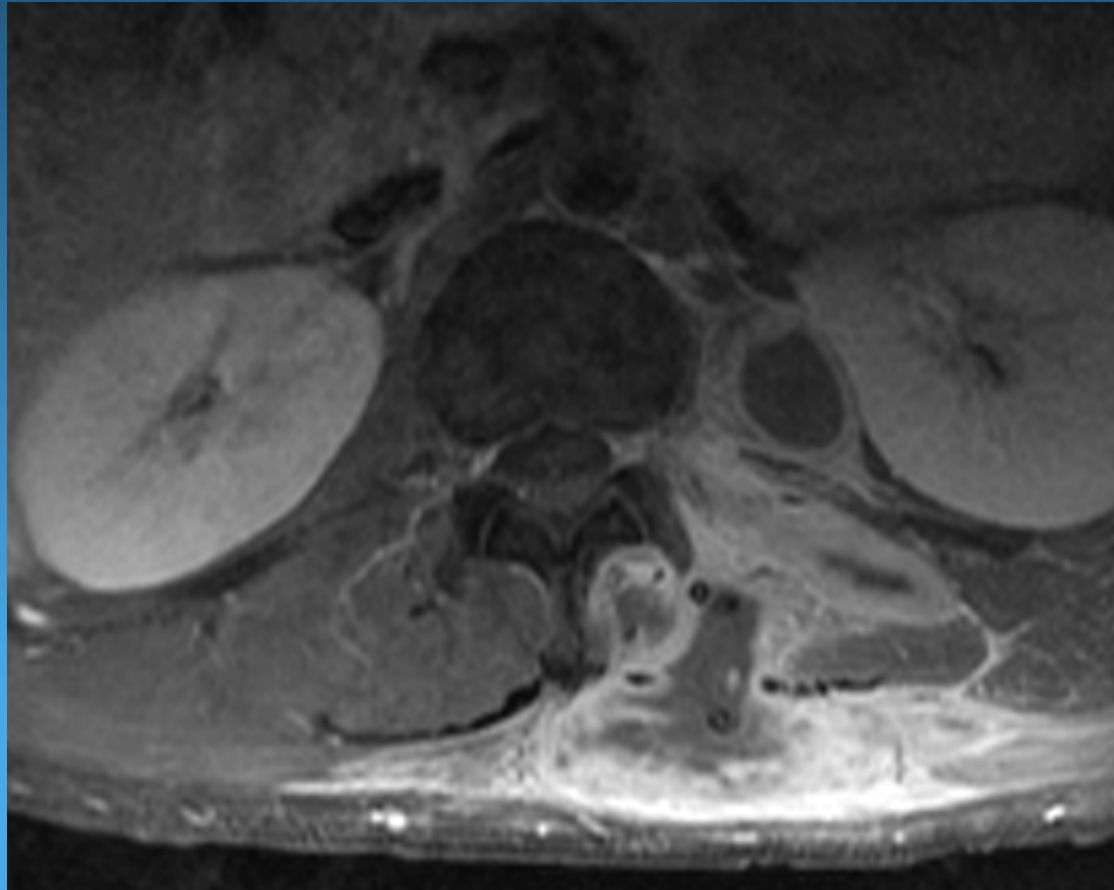
CHEST X RAY



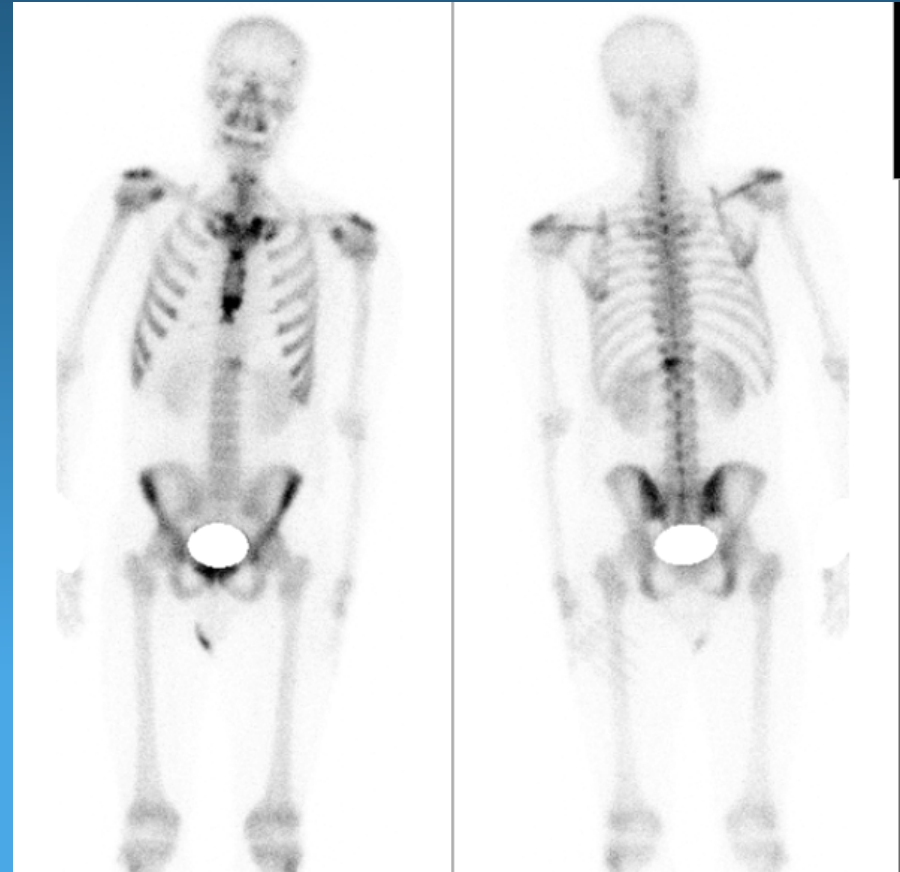
Abdominal/thoracic CT

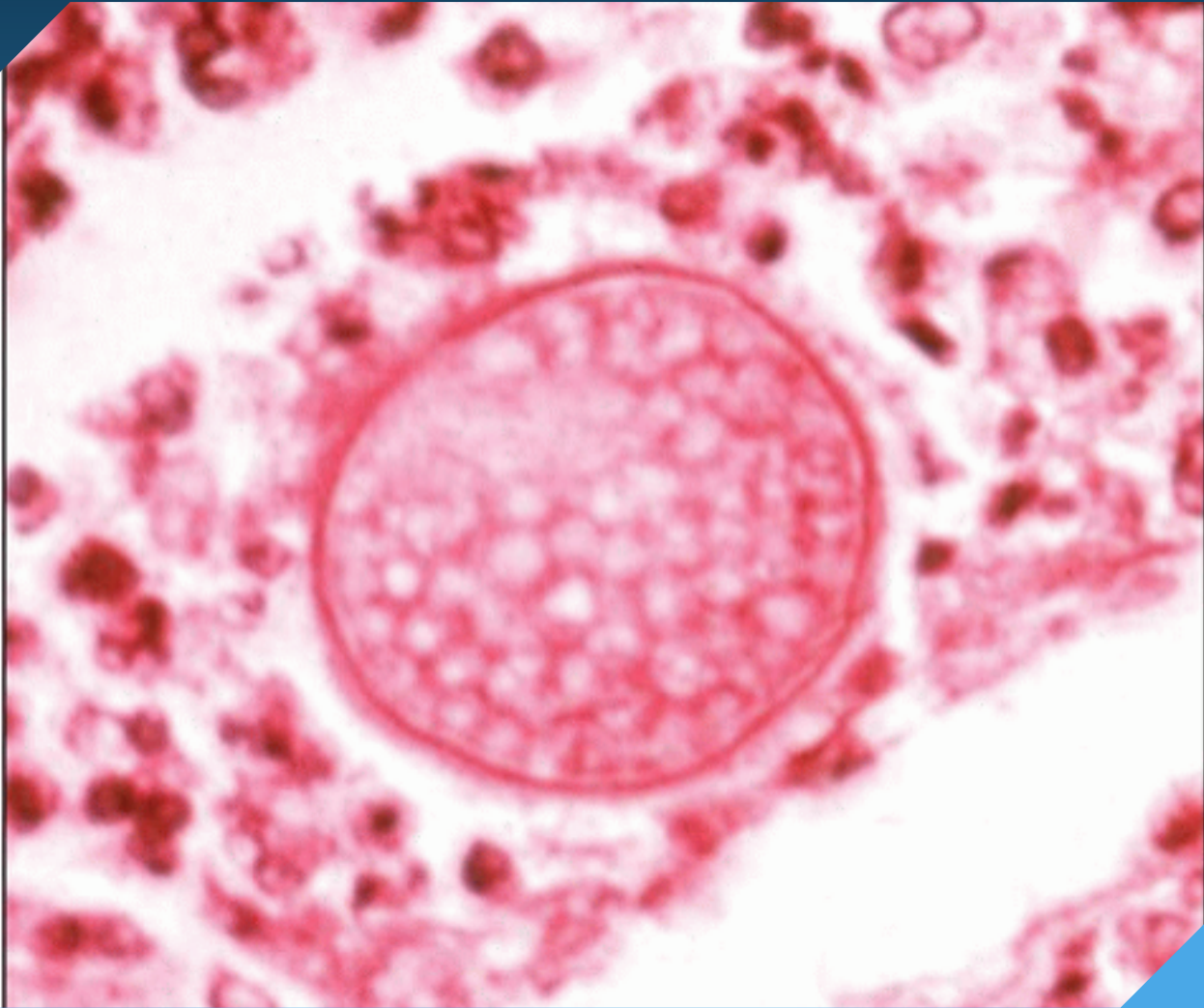


MRI



WBBS



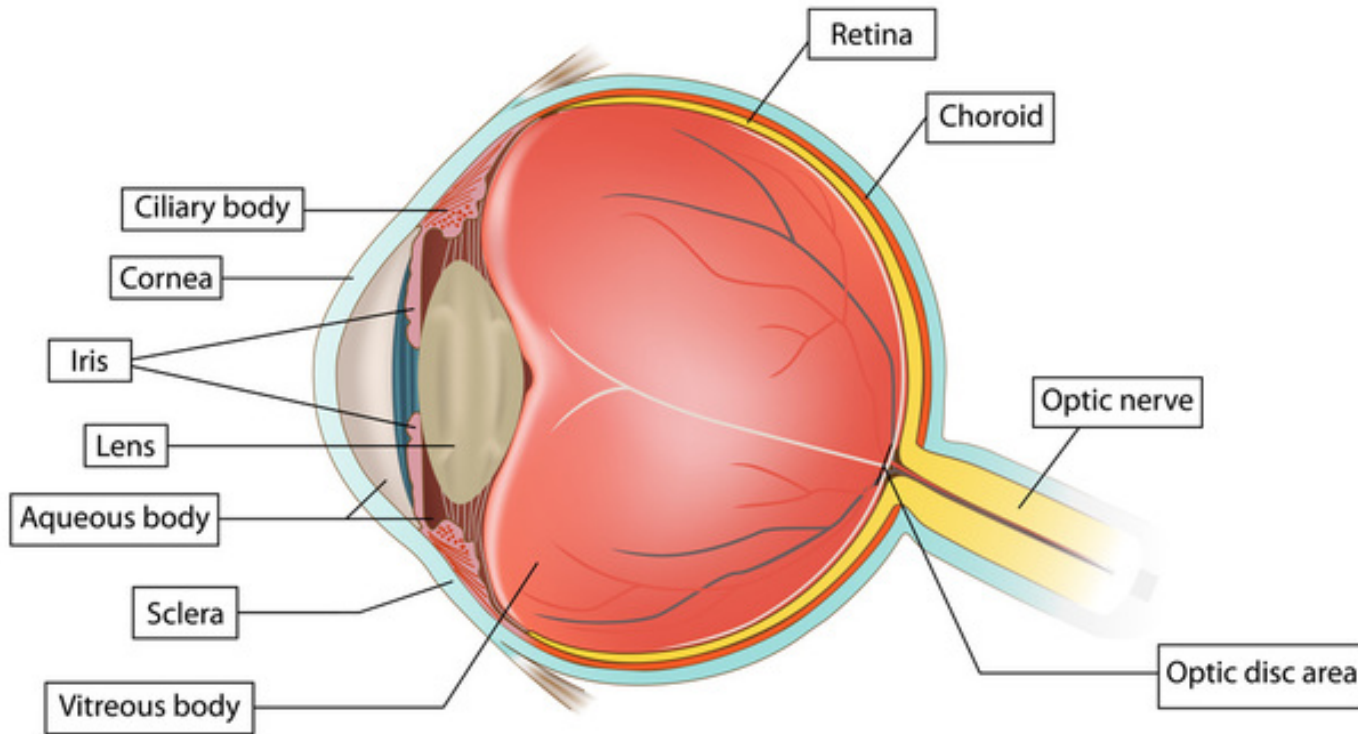


- ▶ IgM & IgG reactivity
- ▶ comp fx >1:512
- ▶ Double walled spherules with endosporulation

OCULAR MANIFESTATIONS

- ▶ **Floater**s in his left eye
- ▶ **Decreased visual fields** temporal region
- ▶ **Ophthalmologic examination**: “puff balls” in the vitreous

EYE ANATOMY AND NOMENCLATURE

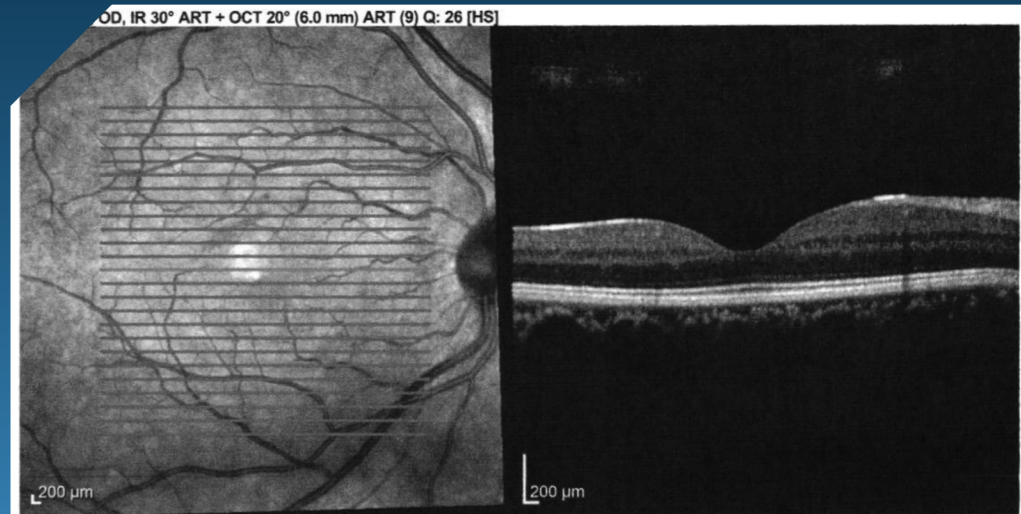


Anterior segment:
Ciliary body, cornea, iris, and lens

Posterior segment:
vitreous body, retina, choroid, and optic nerve

Uvea:
Iris, ciliary body, and Choroid

Right eye: normal

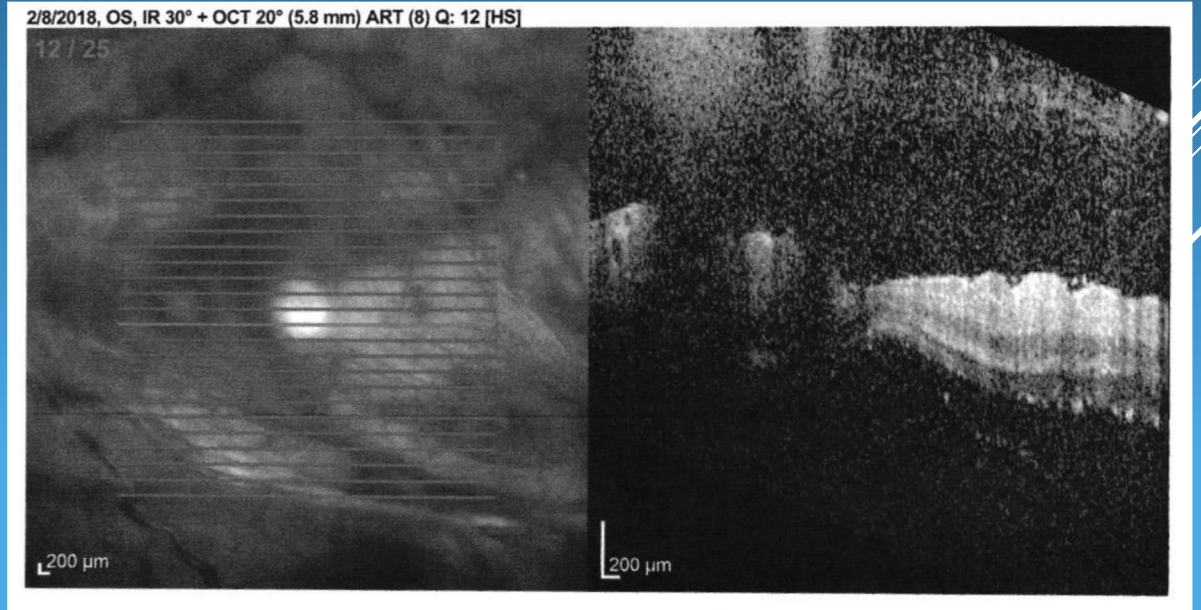
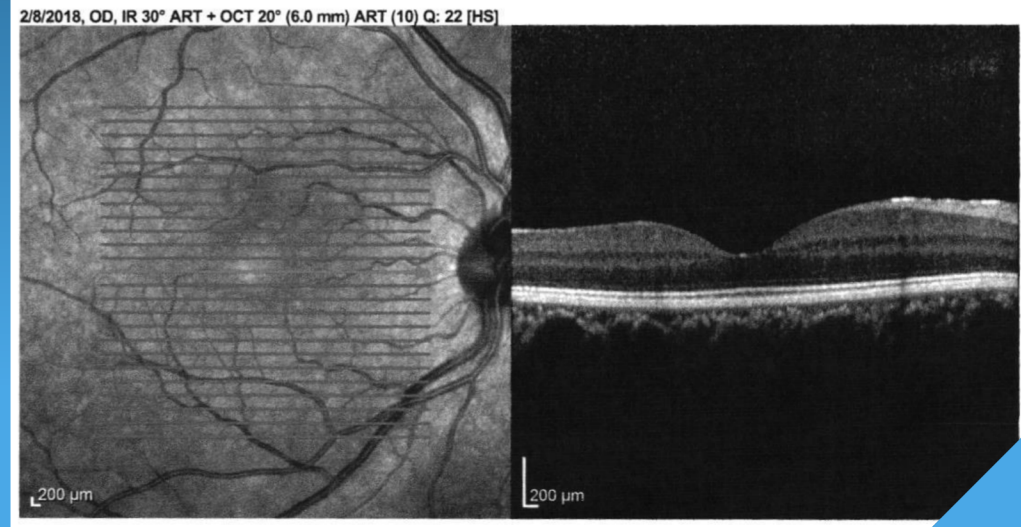


Retina

Retinal pigmented epithelium

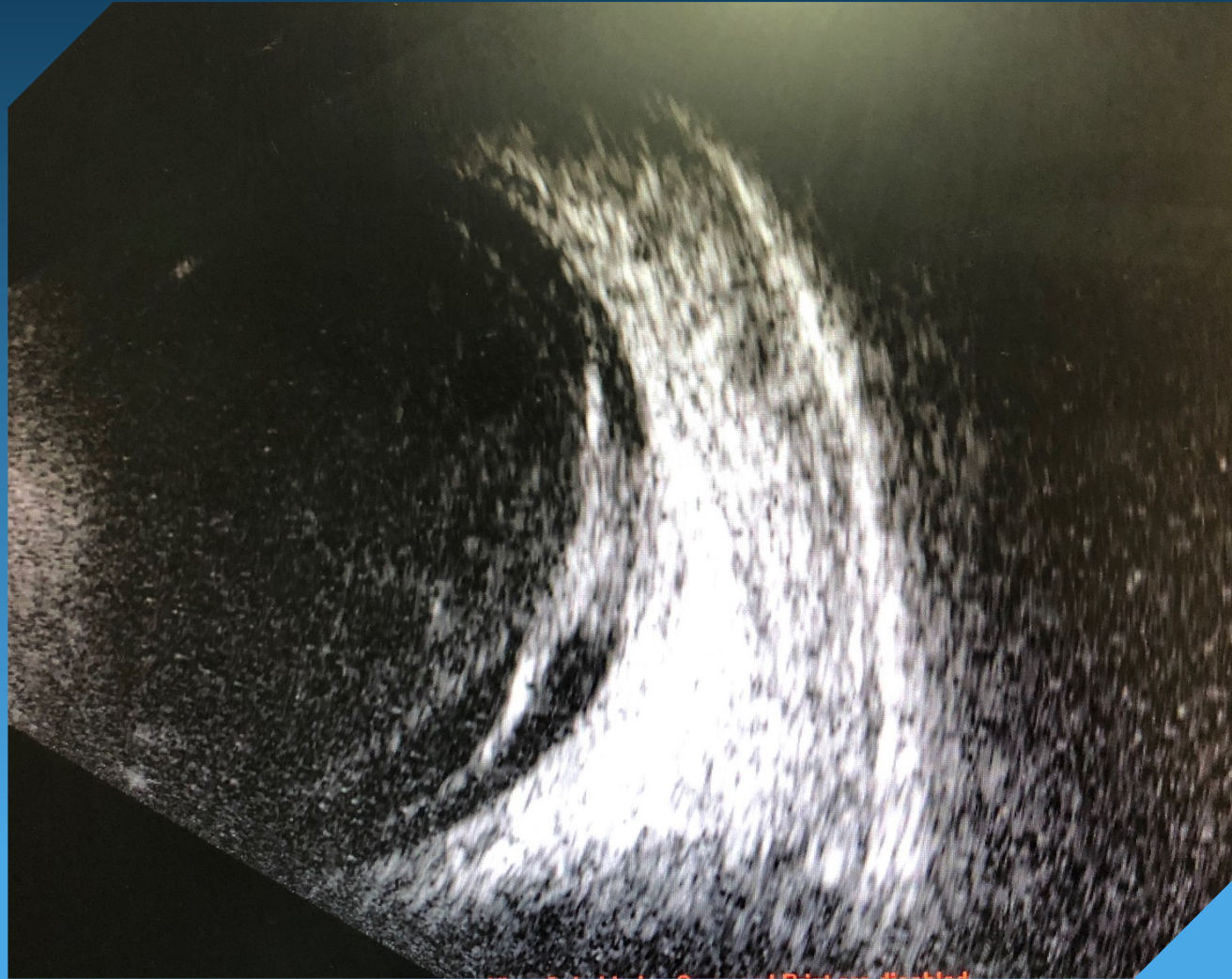
Choroid

Left eye: diseased



▶ Multiple vitreous opacities

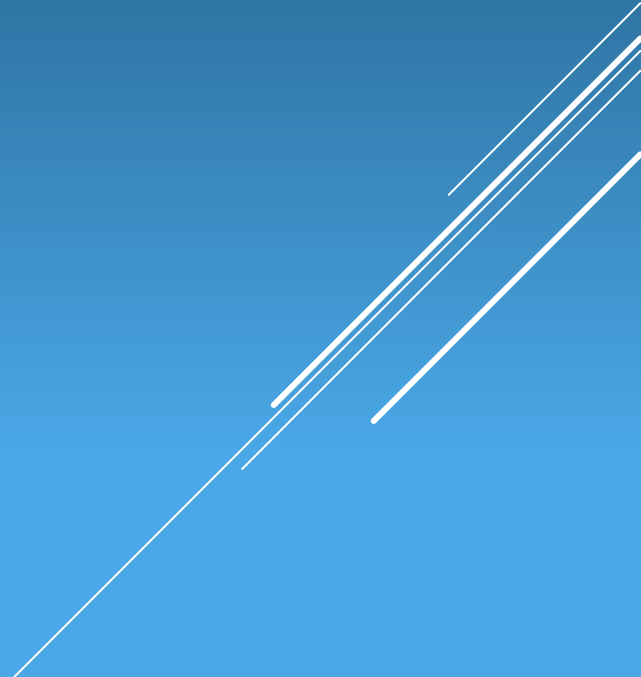
▶ Retinal detachment



B-SCAN

- ▶ **Tractional/exudative retinal detachment**

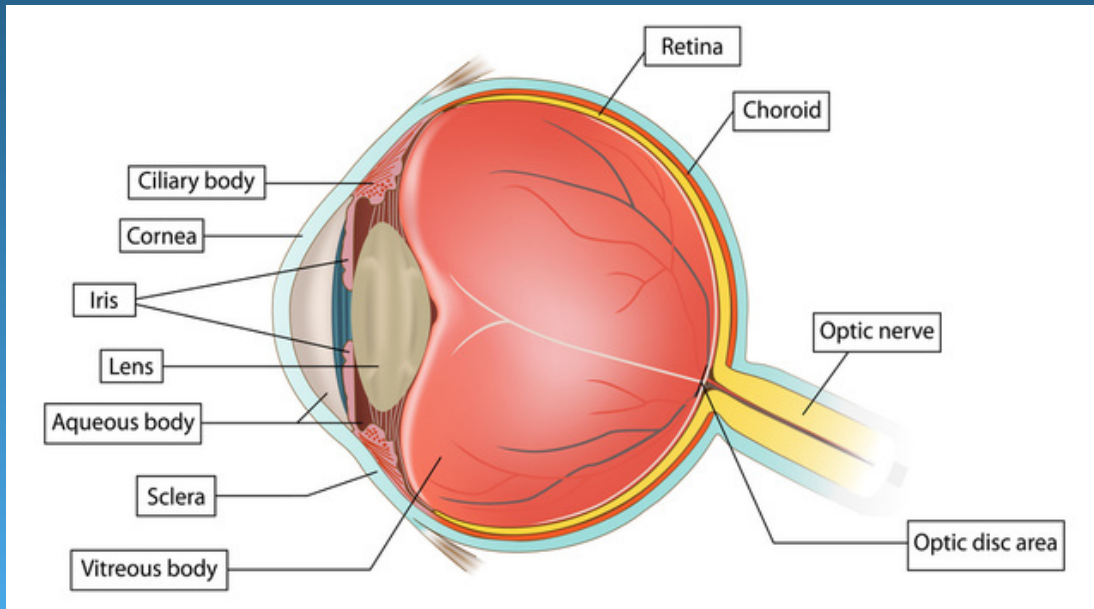
TREATMENT REGIMEN

- ▶ **Intravitreal Amphotericin B deoxycholate injections**
 - ▶ **Dosing: 5mcg/.1 mL every 3 days**
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CASES REPORTED

- ▶ **2010: primary retinitis without disseminated disease: enucleation**
 - ▶ **1987: Disseminated Coccidioidomycosis: Retinal and vitreal involvement found on autopsy**
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- A decorative graphic consisting of several parallel white lines of varying lengths, slanted diagonally from the bottom right towards the top right, located in the lower right quadrant of the slide.

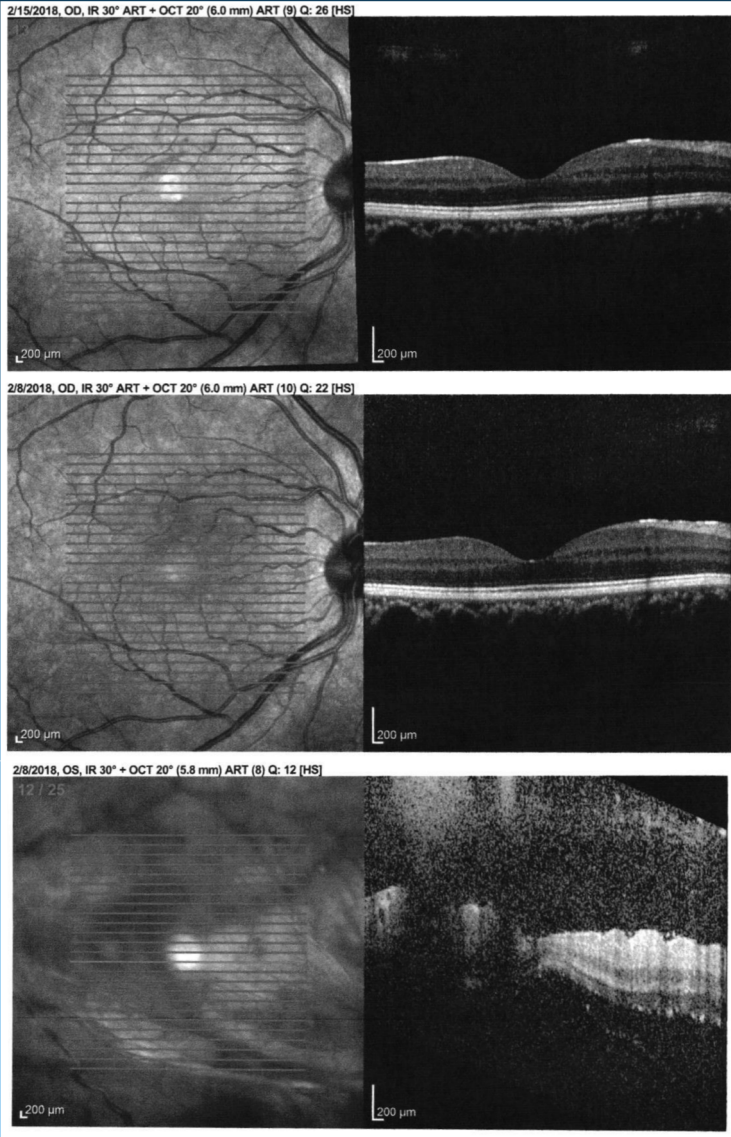
OTHER CONSIDERATIONS



- ▶ **Most commonly affects anterior segment structures**
- ▶ **Posterior segment disease: enucleation**
- ▶ **Vitrectomy= high risk for posterior segment seeding**

Kristen M Mondino, Gary N Hollad, Ben J Glasgow, Retinal seeding from anterior segment coccidioidomycosis after vitrectomy. BR J Ophthalmology 2007 Jun; 91 (6): 837–839

CONCLUSIONS



- ▶ Vision deficits in disseminated Cocci= Ophthalmology consult
- ▶ Tx for choroid/vitreal/retinal disease: intravitreal amphotericin B deoxycholate
- ▶ Vitrectomy in anterior segment disease= increased risk of posterior segment seeding
- ▶ Coccidioidomycosis endophthalmitis= poor prognosis

REFERENCES

- ▶ Ben J. Glasgow, Harry H. Brown, Robert Y Foos, Miliary Retinitis in Coccidioidomycosis. American journal of ophthalmology 1987 vol 104:1, 24-27
- ▶ Kristen M Mondino, Gary N Hollad, Ben J Glasgow, Retinal seeding from anterior segment coccidioidomycosis after vitrectomy. BR J Ophthalmology 2007 Jun; 91(6): 837–839
- ▶ L. Lamer, F. Paquin, G. Lorange, P. Bayardelle, G. Ojeimi, Macular coccidioidomycosis, Can J Ophthalmology 1982 June 17 (3) 121-123
- ▶ Daniel V. Vasconcelos-santos, Jennifer I. Lim, Narsing A. Rao, Chronic coccidioidomycosis endophthalmitis without concomitant systemic involvement. Ophthalmology 2010 Sep; 117 (9): 1839-1842
- ▶ Rodenbiker H T, Ganley J P. Ocular coccidioidomycosis. Surv Ophthalmol 1980;24:263–290