

Children's Mercy Kansas City

SHARE @ Children's Mercy

Posters

10-2023

Candida Chorioretinitis in Immunocompromised Patient with Candida Tropicalis Fungemia Secondary to Chemotherapy

Jourdan Valkner Krause

Let us know how access to this publication benefits you

Follow this and additional works at: <https://scholarlyexchange.childrensmercy.org/posters>



Part of the **Pediatrics Commons**

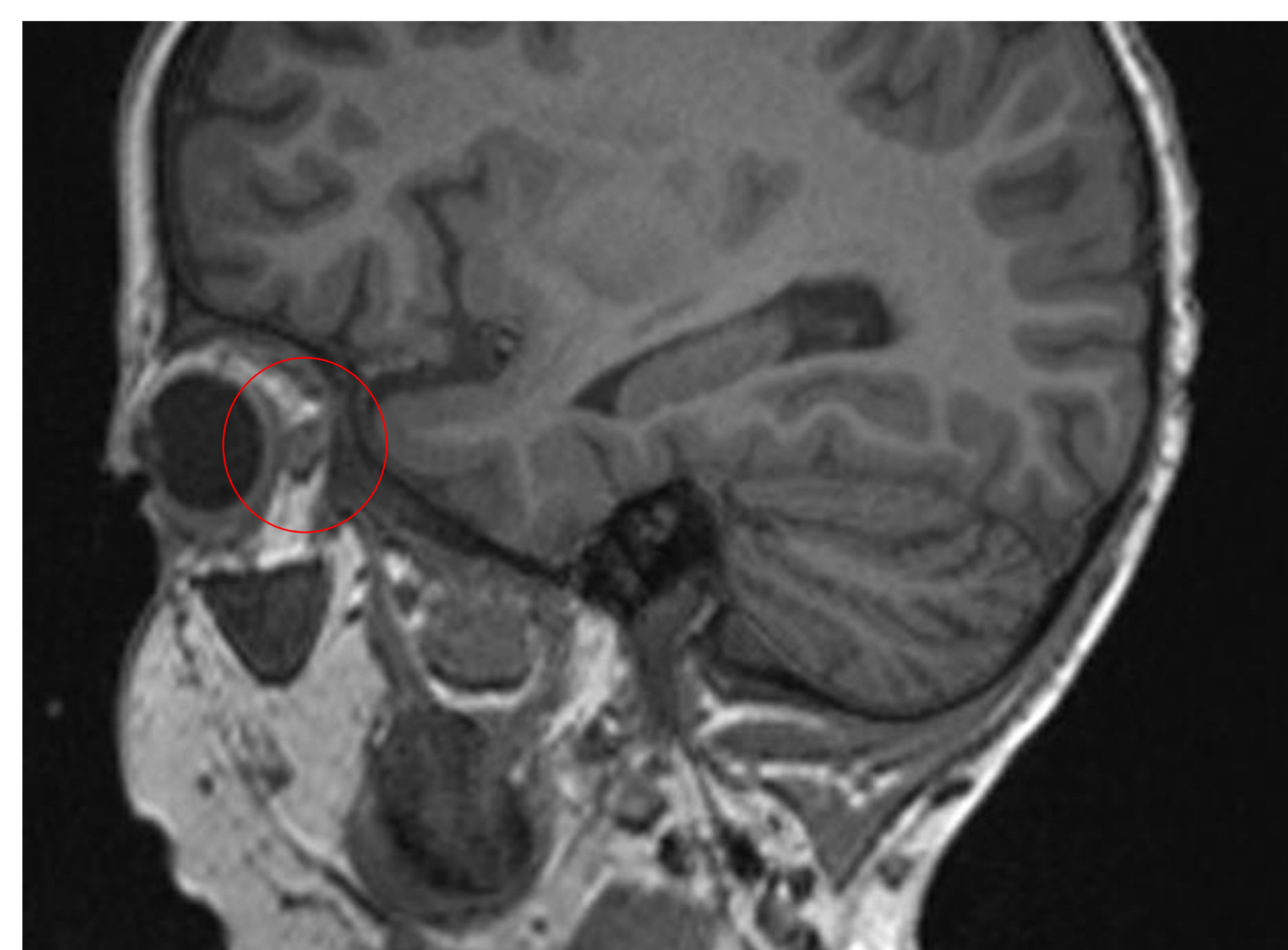
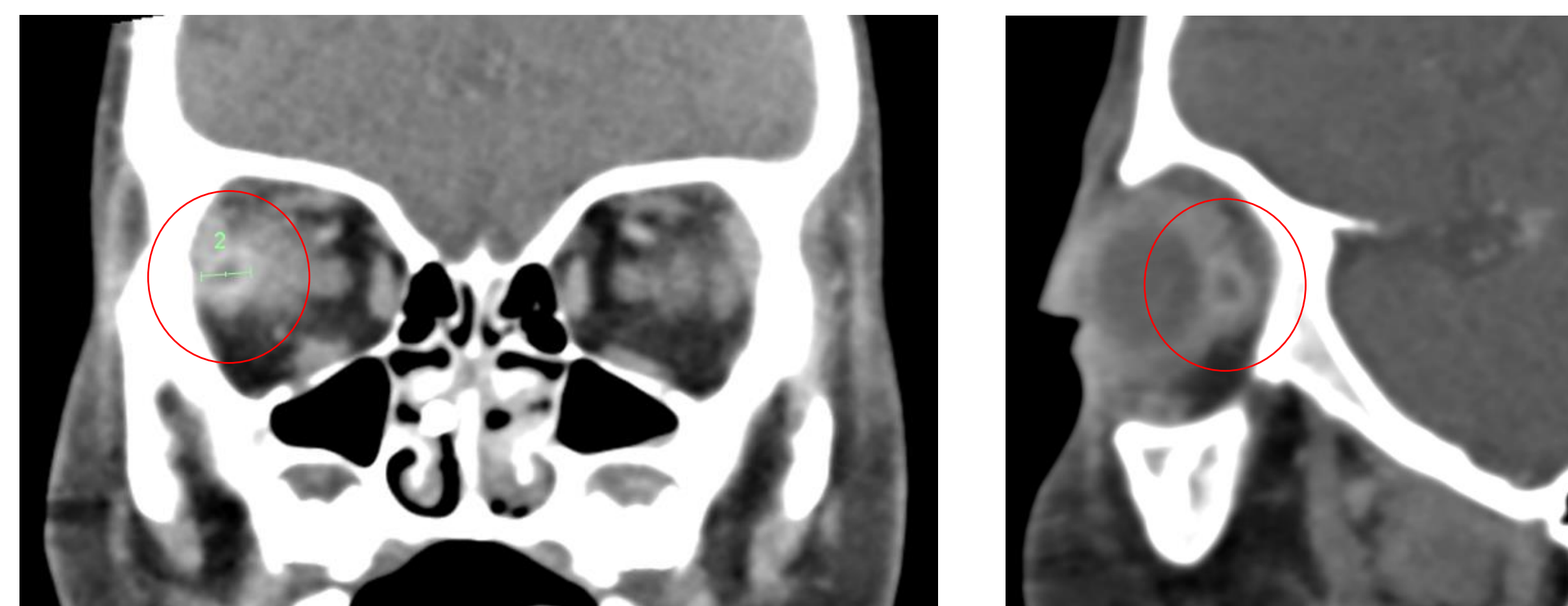
Candida Chorioretinitis in Immunocompromised Patient with Candida Tropicalis Fungemia Secondary to Chemotherapy

Jourdan Valkner Krause, O.D.

Children's Mercy Hospital, Kansas City MO

INTRODUCTION

Fungal chorioretinitis is a rare complication that can be seen in patients with fungemia. One of the most common etiologies of fungemia is Candida. Candida infections are largely caused by *Candida albicans*, but in this specific case, the identified agent was *Candida tropicalis*. In patient's with Candidemia, approximately 14% have ocular complications. Major complications include CNVM formation resulting in permanent vision loss. Prompt diagnosis and initiation of treatment is crucial for best visual outcome.



Patient's CT (top) and MRI (bottom) showing right orbital abscess

CASE HISTORY

- August 7, 2023 patient presents to clinic
- 3 y.o. female
- **CC:** Candida chorioretinitis follow up
- **POH:** Bilateral orbital chloromas and optic nerve atrophy
- **PMH:** Acute myeloid leukemia, Candida tropicalis fungemia
- **Meds:**
 - Amphotericin B liposomal 85 mg 42.5 mL, IV, q24hr
 - Flucytosine 500 mg Capsule *NF* 1,000 mg 2 capsule, PO/NG, q6hr
 - Micafungin 100 mg 100 mL, IV, q24hr
- *Plus numerous chemotherapy, pain and other systemic medications.

FINDINGS

- **Physical:** Immunocompromised
- **Clinical:** One small, <1/2 disc diameter, white lesion inferior to macula OD. Slightly elevated with pigmented borders
- **Laboratory testing:** Positive culture for Candida tropicalis fungemia
- **MRI:** innumerable foci most compatible with CNS dissemination of fungal disease. Additional dissemination of fungal disease with involvement of the orbits and scalp. The presence of restricted diffusion within the rim-enhancing collection of the right orbit as described on the CT examination is most compatible with an abscess.

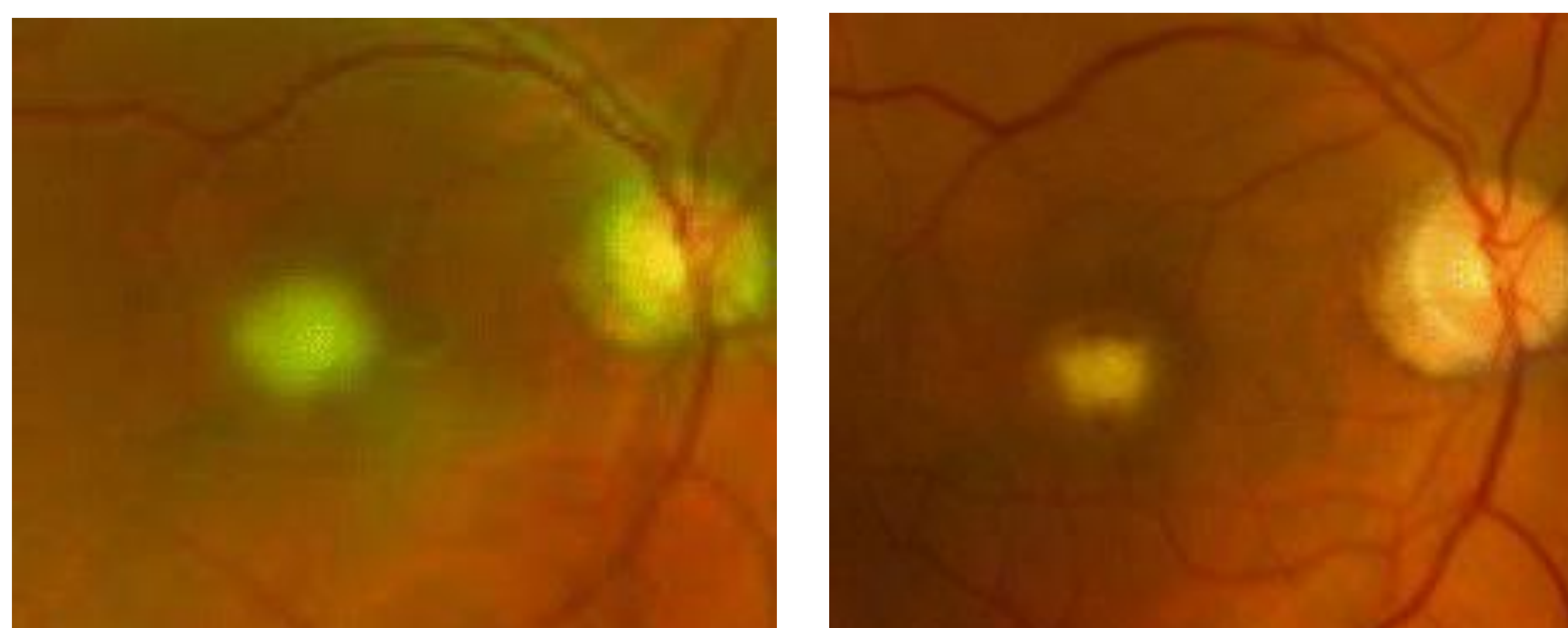


Image representing active Candida chorioretinitis (left) and inactive (right)

MANAGEMENT

- **Diagnosis:** Inactive Candida chorioretinitis
- **Treatment:** Continue anti-fungals as prescribed
- **Follow up:** Every 6 weeks to monitor for reactivation, CNVM formation, vision development

CONCLUSION

Immunocompromised patients are predisposed to life threatening infections. In individuals with a history of infection, it is imperative to follow them closely, no matter if the infection is active or inactive. This group is at a higher risk of reactivation, thus should be monitored until the immune system recovers. In patient's with any form of chorioretinitis, there is a risk of CNVM formation, even once immunonormal. Careful DFE and imaging should be performed at every follow up.

References

1. Cruzado-Sánchez, D et al. "Subretinal abscess due to Candida tropicalis in a patient with acute myeloid leukaemia: case report." "Absceso subretinal por Candida tropicalis en un paciente con leucemia mieloide: reporte de caso." Archivos de la Sociedad Espanola de Oftalmologia, S0365-6691(21)00027-7. 21 Feb. 2021, doi:10.1016/j.oftal.2020.12.015
2. Hautala, Nina et al. "Effect of first-line antifungal treatment on ocular complication risk in Candida or yeast blood stream infection." BMJ open ophthalmology vol. 6,1 e000837. 16 Sep. 2021, doi:10.1136/bmjophth-2021-000837
3. Lavine, Jeremy A, and Mihai Mititelu. "Multimodal imaging of refractory Candida chorioretinitis progressing to endogenous endophthalmitis." Journal of ophthalmic inflammation and infection vol. 5,1 (2015): 54. doi:10.1186/s12348-015-0054-z
4. Sakai, Daiki et al. "Factors associated with the development of ocular candidiasis and ocular prognosis with echinocandin therapy for candidemia." Journal of ophthalmic inflammation and infection vol. 11,1 17. 14 Jun. 2021, doi:10.1186/s12348-021-00248-0
5. Siddiqui, Mohammad Z et al. "Incidence of chorioretinitis and endophthalmitis in hospitalized patients with fungemia." Eye (London, England) vol. 36,1 (2022): 206-208. doi:10.1038/s41433-021-01477-2

