

Endogenous endophthalmitis: A report of 7 cases

Hajer BEN AMOR, Amal KADRI, Imen KSIAA, Mariam SAHLI , Bechir JELLITI,
Moncef KHAIRALLAH

Department of Ophthalmology, Fattouma Bourguiba University Hospital,
Faculty of Medicine, University of Monastir, Monastir, Tunisia
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Purpose: To investigate the etiology, microbiological spectrum, and visual outcomes of endogenous endophthalmitis managed in Ophthalmology Department, Fattouma Bourguiba University Hospital Monastir, Tunisia between January 2011 and March 2017.

Patients & Methods:

- Retrospective study of 10 eyes of 7 patients with endogenous endophthalmitis.
- The clinical characteristics, etiology, microbiological spectrum, and management, as well as the visual outcomes, were analyzed.
- Mean follow-up was 8.4 months (Range, 6–16).

Results:

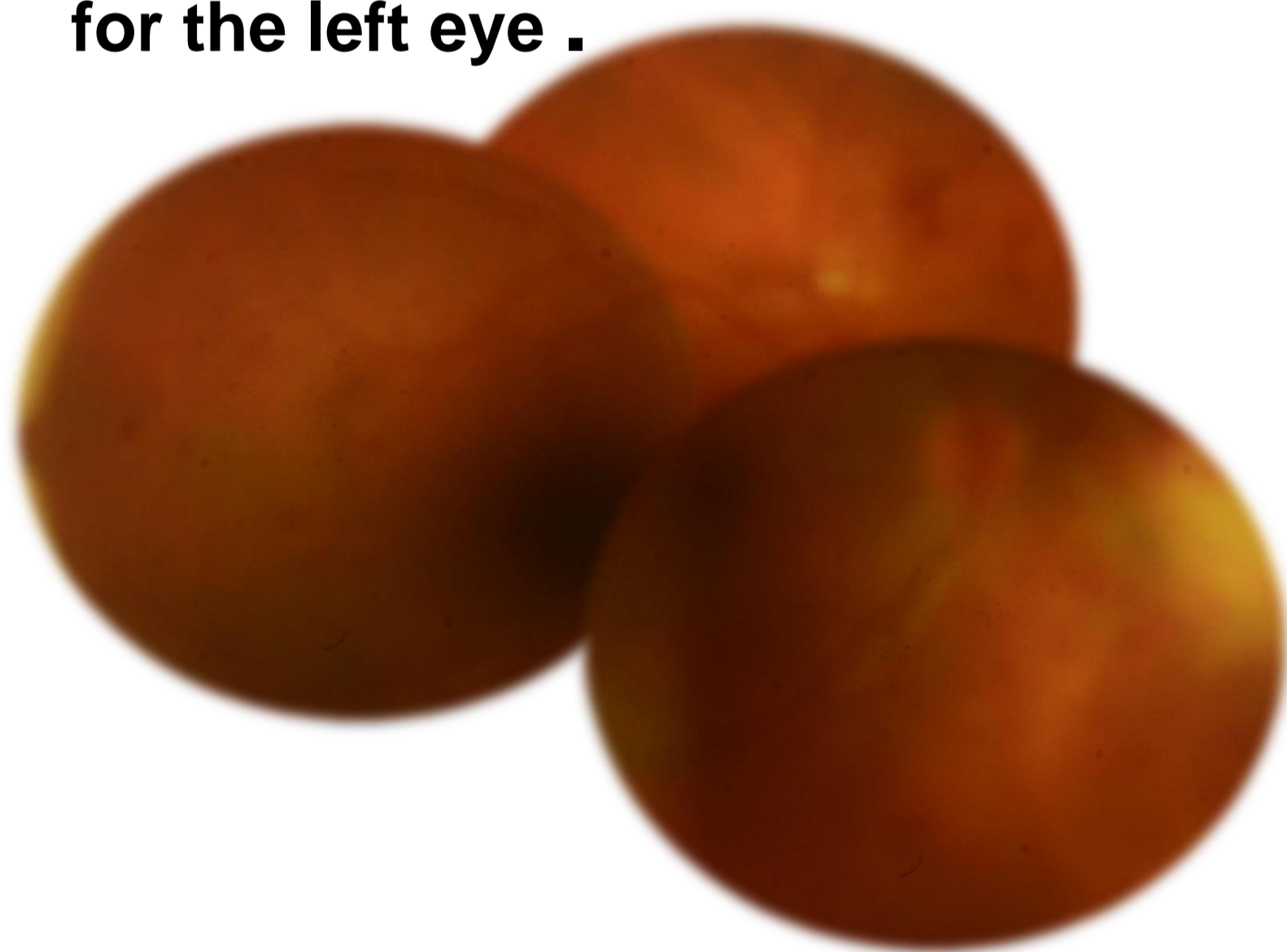
- Mean age of our patients was 52.3 years (range, 40-67).
- Six patients (85.7%) were male, and one patient was female.
- Bilateral involvement was recorded in 3 patients (42.8%).
- Mean initial best-corrected visual acuity (BCVA) was 20/200 (range, light perception – 20/50).
- Clinical findings included vitritis in 100% of eyes and foci of chorioretinitis in 8 eyes (80%).
- All patients were treated with systemic and intravitreal antibiotics and/or antifungal agents. Two eyes (20%) underwent vitrectomy.
- Final BCVA was 20/1000 in 6 eyes (60%): light perception in 2 eyes (20%) and hand motion in 2 eyes (20%).
- Risk factors were: diabetes mellitus, urinary tract infection, liver and kidney abscess, psoas abscess and dental abscess (Table 1).
- Causative organisms were: *Candida albicans*, *Staphylococcus aureus* and *Klebsiella pneumoniae*.
- Complications included tractional retinal detachment in 2 eyes (20%), rhegmatogenous retinal detachment in one eye (10%), and phthisis bulbi in one eye (10%).

Table 1 : Risk factors	%
Diabetes mellitus	6 (85.7)
Urinary tract infection	2(28,6)
Liver and kidney abscess	1(14,3)
Psoas abscess	1(14,3)
Dental abscess	1(14,3)

Table 2 : Causative organisms	%
<i>Candida albicans</i>	4 (40%)
<i>Staphylococcus aureus</i>	1 (10%)
<i>Klebsiella pneumoniae</i>	1 (10%)

Case 1 :

A 43 year-old diabetic man with a recent history of urinary tract infection diagnosed as bilateral endogenous endophthalmitis (1A ,1B). He was treated with systemic and intravitreal antibiotics with a good outcome on the right eye (1C) and without improvement for the left eye .

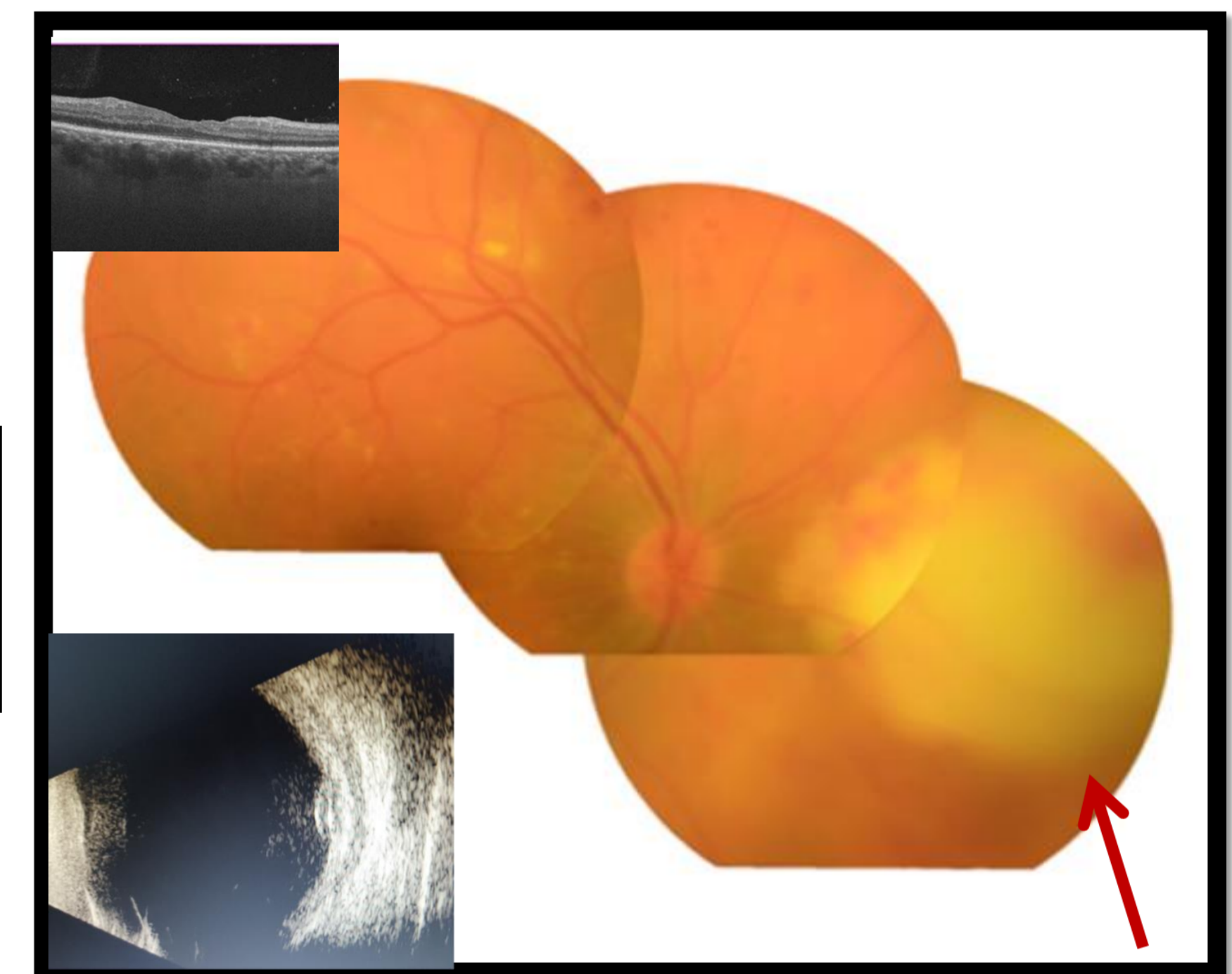


1A: OD Fundus photography showing a retinal lesion



1B: OD B scan ultrasonography showing vitreous exudate, thickening of the choroid and subretinal lesion

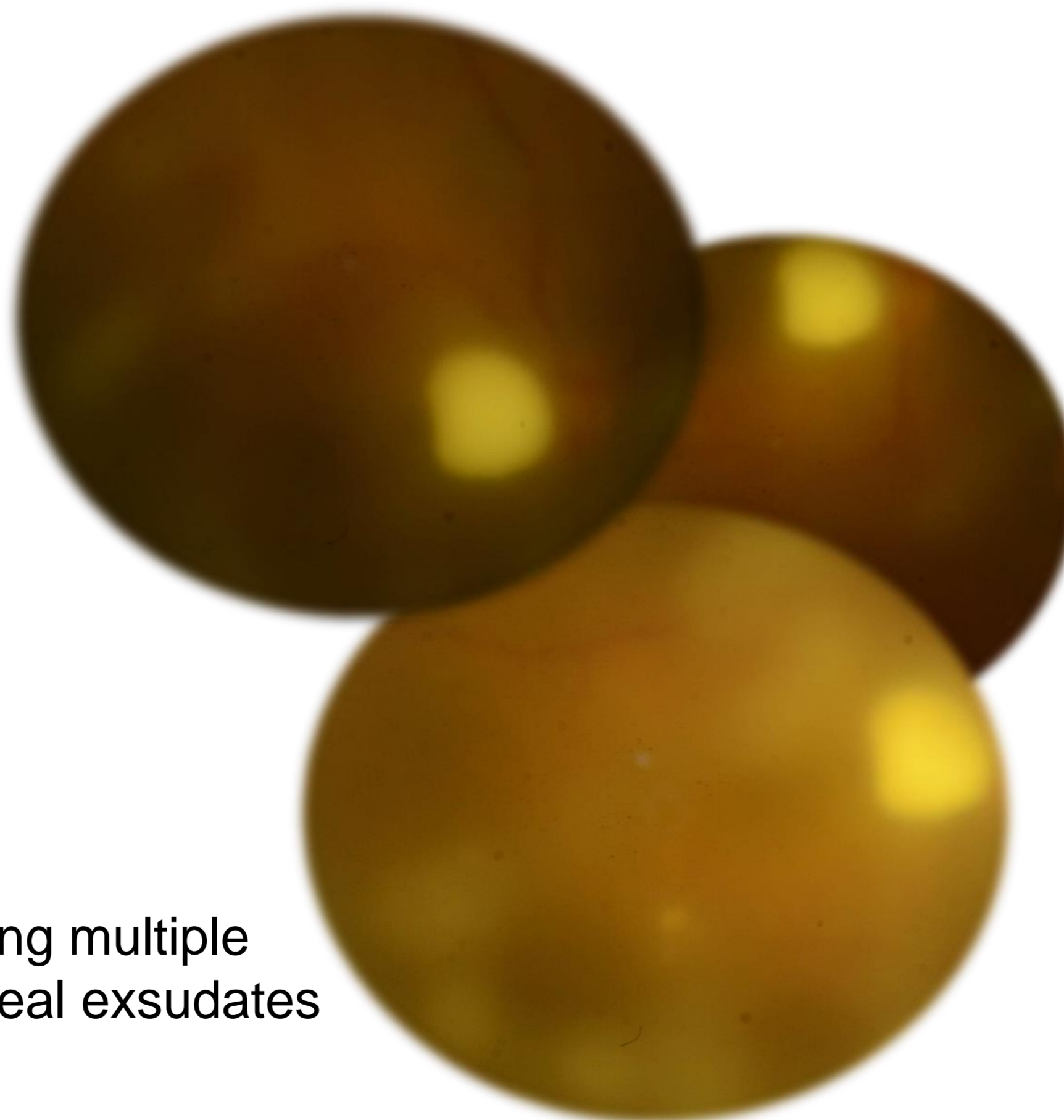
3 weeks after systemic and intravitreal antibiotics



1C: fundus photography become more visible and retinal lesion started to decrease in size (red arrow).

Casee 2 :

A 53 year-old man diagnosed with unilateral endogenous endophthalmitis of the right eye was treated with systemic and intravitreal antibiotics and antifungal agents (2A,2B)



2A: fundus photography showing multiple yellowish retinal lesions with vitreal exsudates



2B :B scan ultrasonography showing vitreous exudate and posterior vitreous detachment

Conclusions:

Endogenous endophthalmitis is a rare and severe intraocular infection which can be vision threatening. Diabetes mellitus was the most common causative risk factor of endogenous endophthalmitis. Despite adequate treatment, outcome is often poor, and loss of vision occurs in the most of cases.