

Bilateral Acute Angle Closure Glaucoma Caused by Fluoxetine – a Case Report

Pina S., Silva F., Alves S., Azevedo, A.R. Santos M.J., Vaz F., Kaku P., Esperancinha F.
Ophthalmology Department – Hospital Prof. Doutor Fernando Fonseca E.P.E.
Head of Department: Dr. António Melo

Background

Acute angle closure glaucoma (AACG) occurs in patients with narrow iridocorneal angle, being more prevalent in the elderly, hyperopic and asian.

Mydriasis, induced by factors such as darkness, stress or drugs, may be a triggering factor for this disease.

Case Report



55 year-old, black.
Hypertension (treated with Lisinopril)
Depressive mood, treated with Fluoxetine for 1 month.

- Intense eye pain
- Photophobia
- Decreased vision
- Nausea and vomiting

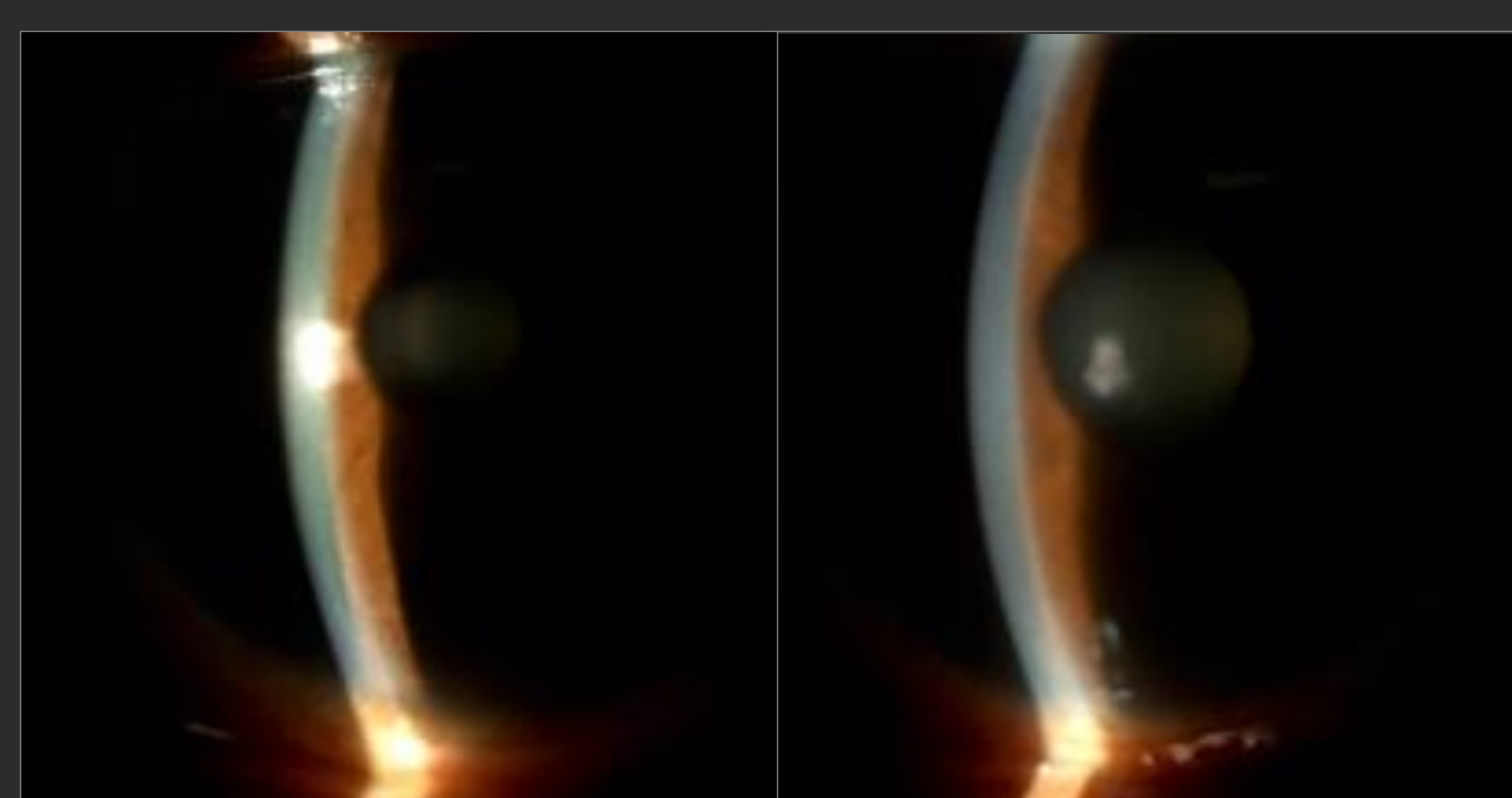


**Emergency
Department**

- Conjunctival injection OU
- Corneal oedema OU
- Mid mydriasis OU
- Narrow anterior chamber OU
- IOP : 58 OD; 47 OS (mmHg)



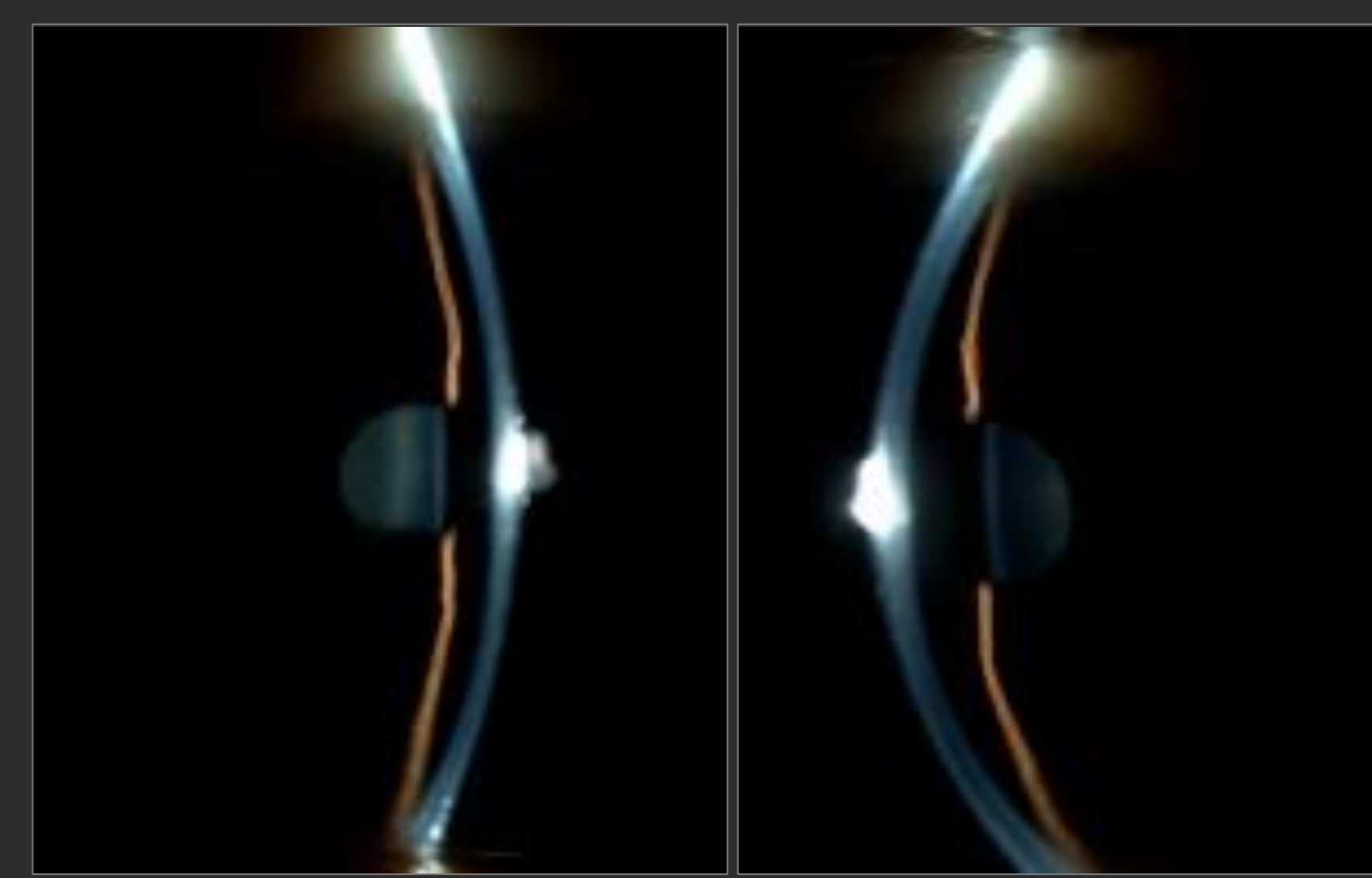
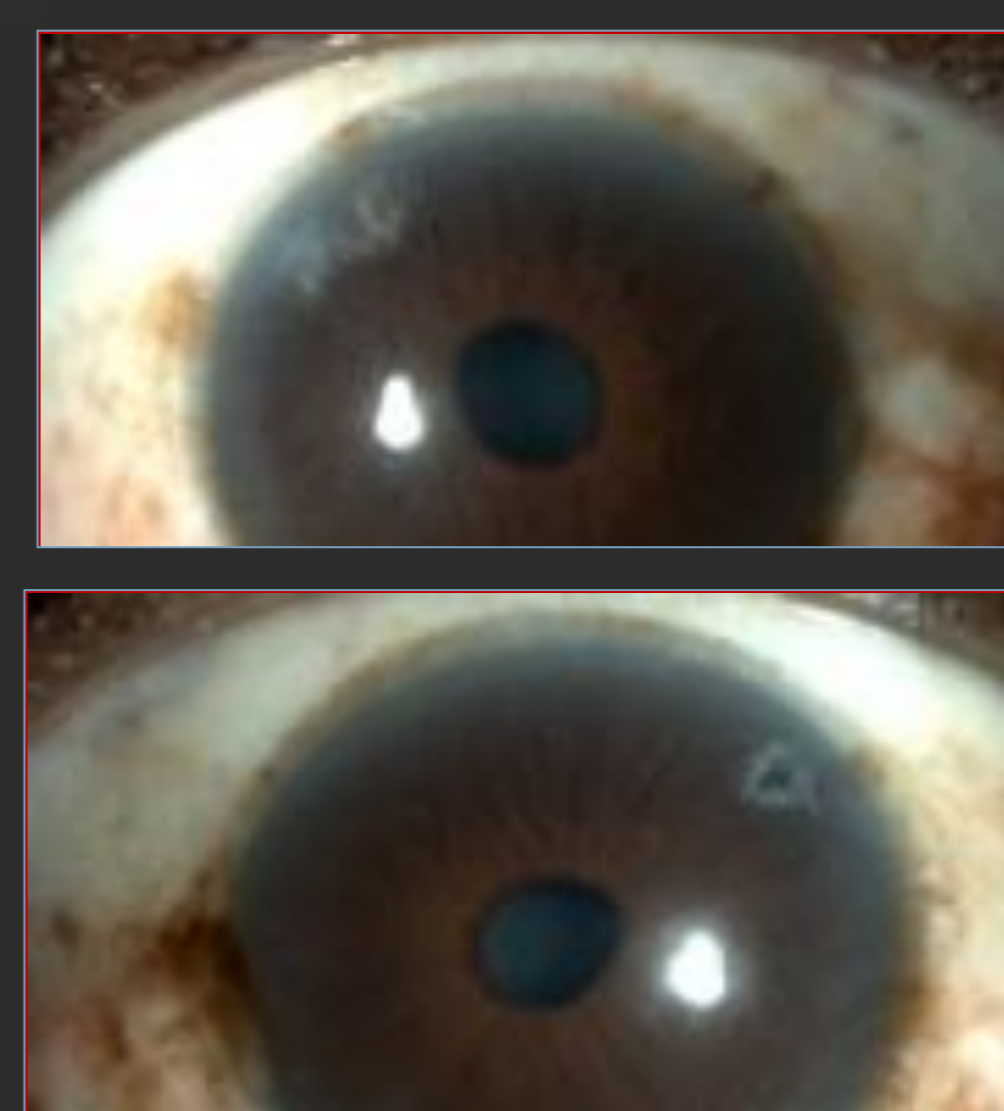
BILATERAL AACG



Pre- Iridotomy

Surgical and Medical therapy

1. Oral Acetazolamide
2. Manitol i.v.
3. Topical timolol 0,5%
4. Topical pilocarpine 2%
5. Bilateral Iridotomy (5 h later)



Post- Iridotomy

Gonioscopy + Pentacam

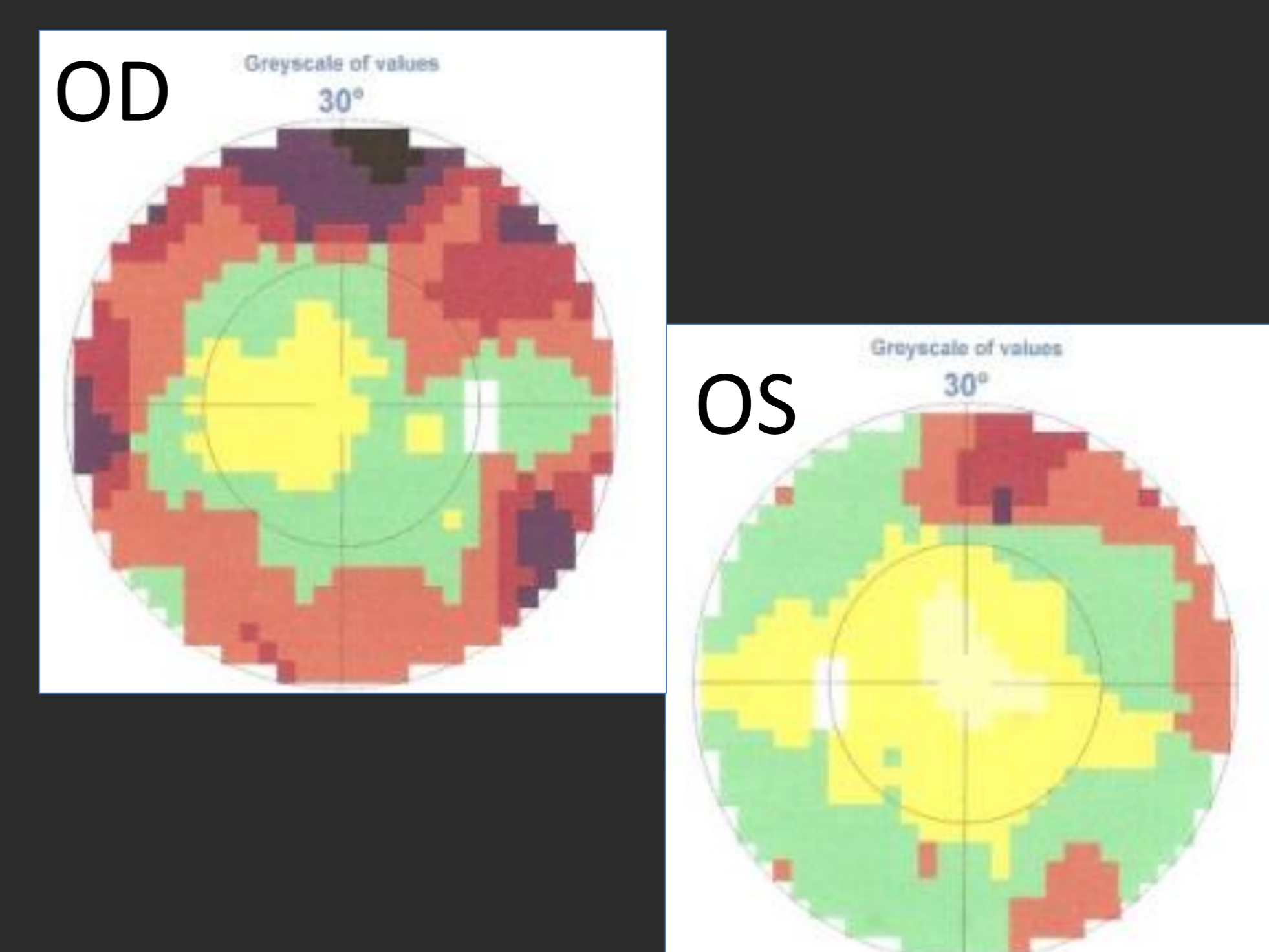
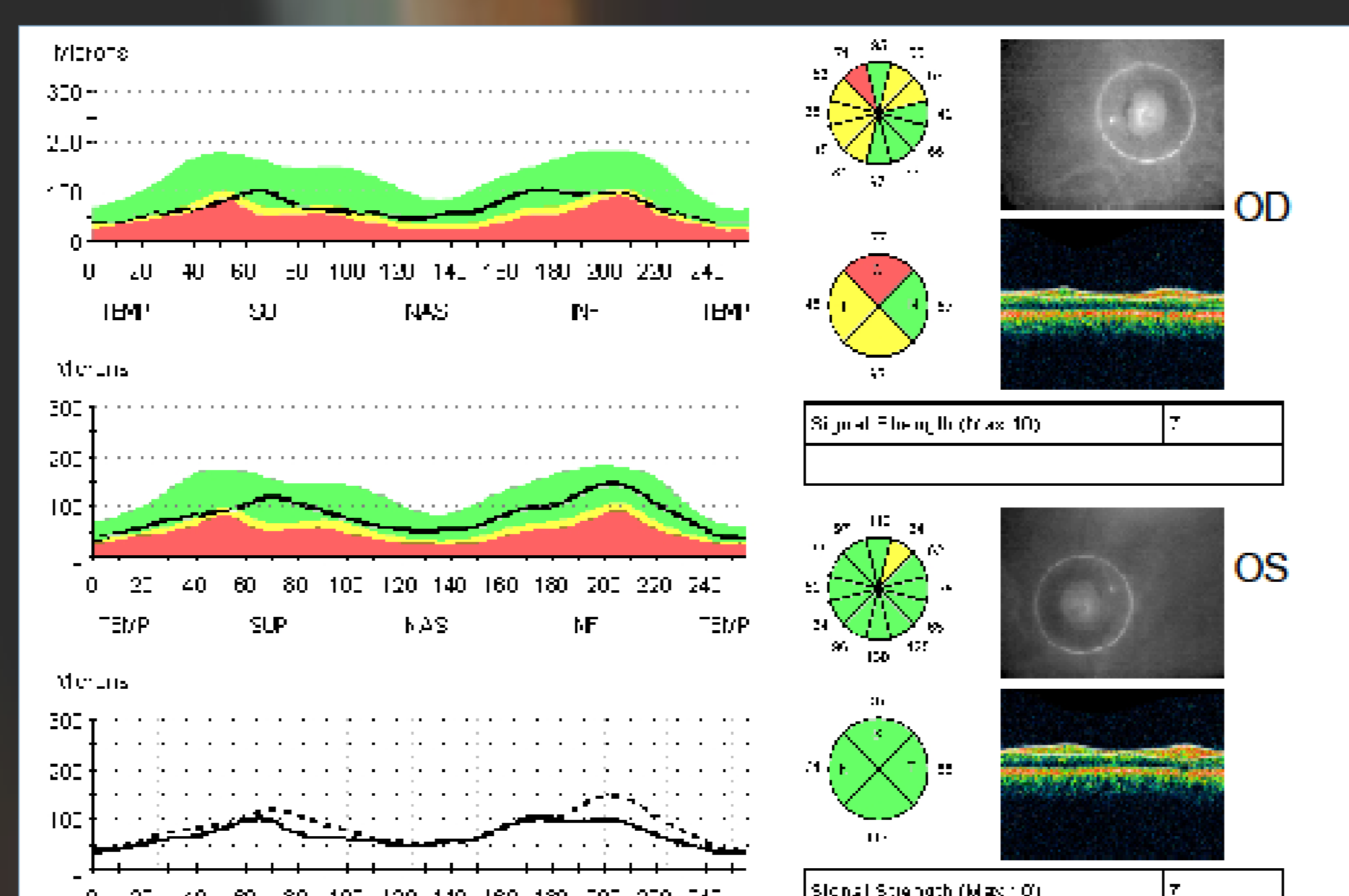
- ✓ narrow iridocorneal angle, grade II (Shaffer's classification)
- ✓ 20 - 22° (OU)

OCT RNFL:

- ✓ Pathological decrease of nerve fiber layer in the upper OD and suspicion in the upper OS

Perimetry:

- ✓ Changes in threshold sensitivity, especially in OD.



Outcome: IOP at 12-14 OU mmHg on Timolol 0,5% therapy (OD)

Conclusions

We concluded this to be a case of bilateral AACG, probably induced by fluoxetine, a selective serotonin reuptake inhibitor (SSRI). Some studies refer that there are serotonergic receptors in the iris-ciliary body complex which, once stimulated, could lead to pupil sphincter muscle relaxation. Thus, the increased serotonin levels associated with the anticholinergic effects inherent to these agents, appears to be an important factor in inducing mydriasis, triggering AACG in patients with predisposing ocular anatomy. The growing number of AACG cases associated with fluoxetine, paroxetine and venlafaxine reported in the literature in recent years, shows that may be important an ophthalmological exam before initiating treatment with SSRIs, to exclude a narrow angle AC in these patients.

Bibliography

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