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

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Background

Acute angle closure glaucoma (AAGC) 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
• Phoophobia
• Decreased vision
• Nausea and vomiting

6 H later

Emergency Department

Surgical and Medical therapy
1. Oral Acetazolamide
2. Mannitol i.v.
3. Topical timolol 0.5%
4. Topical pilocarpine 2%
5. Bilateral Iridotomy (5 h later)

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)

We concluded this to be a case of bilateral AAGC, 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 AAGC in patients with predisposing ocular anatomy. The growing number of AAGC cases associated with fluoxetine, paroxetine and venlafaxine reported in the literature in recent years, shows that may be is an important ophthalmological exam before initiating treatment with SSRIs, to exclude a narrow angle AC in these patients.

Bibliography

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