Ocular hypertension and glaucoma in patients with viral anterior uveitis from Tunisia

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PURPOSE
To assess the prevalence and outcome of ocular hypertension (OHT) in patients with viral anterior uveitis (AU).

METHODS
- Retrospective study of 55 patients (57 eyes) with viral AU treated at the department of Ophthalmology, Fattouma Bourguiba University hospital, Monastir, Tunisia.
- All patients underwent detailed ophthalmic examination including best corrected Snellen visual acuity (VA), slit lamp examination, tonometry, gonioscopy, and fundus examination.

RESULTS
- Demographic data of patients and causes of viral AU are listed in table 1.
- Thirty five eyes (61.4%) had herpes simplex virus (HSV) AU and 22 eyes (38.6%) had varicella zoster virus (VZV) AU.
- AU was unilateral in all eyes.
- Mean follow-up was 14 months.
- Overall, 25 eyes (43.8%) suffered from IOP elevation. Seventeen eyes had HSV AU and 8 eyes had VZV AU.
- OHT occurred in 51.4% of eyes with HSV AU and 31.8% with VZV AU.
- Secondary glaucoma developed in 10 eyes (17.5%) (14.3% in HSV and 22.7% in VZV group).
- Mean initial VA was 20/63 (range, light perception-20/32).
- Mean intraocular pressure (IOP) was 29 mmHg (range, 23-54 mmHg).
- All eyes (25 eyes) were treated with systemic or topical antiviral therapy associated with topical corticosteroids and topical glaucoma therapy.
- Fourteen patients (56%) also received systemic glaucoma therapy.
- The IOP normalized (IOP ≤ 21 mmHg) within a few days after anti-inflammatory and anti-glaucomatous therapy in 24 eyes (96%). Long-term anti-glaucomatous treatment were required in 9 eyes (37%).
- Filtering surgical was performed in only one eye (1.75%).
- Mean final VA was 20/23 (range, counting fingers-20/20).

COMMENTS AND CONCLUSIONS
- Raised intraocular pressure is a common complication of viral AU, that may occur in 47 to 90% of cases.
- In our series OHT occurred in 43.8% of eyes and secondary glaucoma in 17.5% of eyes.
- Trabeculitis is considered as the principal mechanism of OHT in viral AU.
- The response to medical treatment in increased IOP secondary to viral AU was good and was easily managed with a combination of antiglaucomatous, topical steroids and antiviral agents.
- In conclusion, OHT and secondary glaucoma can be regarded as a frequent complications of viral AU. It has a good prognosis and surgical intervention for glaucoma is seldom required.

REFERENCES

Table 1: Demographic data and frequencies of OHT and secondary glaucoma in HSC et VZV groups.

<table>
<thead>
<tr>
<th></th>
<th>HSV Group N=17</th>
<th>VZV Group N=8</th>
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<tbody>
<tr>
<td>Gender</td>
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</tr>
<tr>
<td>M</td>
<td>47%</td>
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<tr>
<td>F</td>
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<td>37.5%</td>
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<tr>
<td>Mean Age</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>51.4%</td>
<td>31.8%</td>
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<tr>
<td>OHT elevation</td>
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<tr>
<td>Secondary glaucoma</td>
<td>14.3%</td>
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