Outcome of Vitreomacular Traction Syndrome: Natural Course vs Vitrectomy vs Ocriplasmin

Constantinos Demosthenous, Manish Gunda, Haider Manzar, Manzar Saeed
Ophthalmology Department: The Queen Elizabeth Hospital, King’s Lynn, Norfolk UK

PURPOSE
The purpose of this study is to compare the clinical course and outcomes of eyes with VMTS that had no intervention Vs eyes treated with Pars Plana Vitrectomy (PPV) Vs eyes treated with Ocriplasmin (PPV).

METHOD
This is a prospective study of all reported consecutive cases of VMTS in our department based on clinical symptoms and findings on optical coherence tomography (OCT, Heidelberg Spectralis) during a 6 month period. Eyes were categorised in three groups:
1. Eyes that had no intervention—Observation group
2. Eyes treated with Pars Plana Vitrectomy (PPV) - PPV group.
3. Eyes treated with pharmacological vitreolysis (intravitreal Ocriplasmin) - Ocriplasmin group

For symptomatic cases, PPV or Ocriplasmin treatment was offered. Patients given the choice. Observation was continued. Subjects with no symptoms were kept under observation (3 monthly) with OCT at each visit. Intervention with PPV or Ocriplasmin was offered if symptoms developed or progression to macular hole. If patient declined treatment, observation was continued.

Main outcome parameters

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>(Clinical Improvement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best corrected visual acuity</td>
<td>(OCT or Anatomical Improvement)</td>
</tr>
<tr>
<td>OCT evidence of relief of VMT</td>
<td></td>
</tr>
<tr>
<td>Complications</td>
<td></td>
</tr>
</tbody>
</table>

RESULTS

OBSERVATION GROUP

PPV GROUP

OCT at the start and end of observation

OCT pre-op vs 6 months post-op

OCT Improvement 47 %
Clinical Improvement 47 %
Complication 0 %

OCT INJECTION GROUP

OCT pre-injection vs 6 months post-injection

OCT Improvement 33 %
Clinical Improvement 33 %
Complication 6 % (Macular hole)

CONCLUSIONS
1. Significant number of eyes did not require treatment intervention due to spontaneous recovery
2. Intervention with either Vitrectomy or Ocriplasmin vitreolysis showed favourable and comparable results
3. Patients with symptomatic VMTS should be encouraged to have treatment to avoid progression of disease
4. Study is limited by the small number of patients

REFERENCES