Abstract Title: The Effect of Pre-operative Vitreous Status on Visual Outcomes Following Epiretinal Membrane Surgery

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Abstract Body:

**Purpose:** To correlate clinically observed posterior vitreous detachment (PVD) with surgical status of the hyaloid and visual outcome following epiretinal membrane (ERM) surgery.

**Methods:** Charts were reviewed for 109 eyes of 109 consecutive patients undergoing vitrectomy and repair of idiopathic ERM between January 2006 and September 2008 by one of two surgeons at an academic retina practice. Preoperative exam notes were reviewed for presence or absence of a PVD. Operative notes were queried to whether the hyaloid was found attached or detached during the surgery. The postoperative visual acuity was correlated with intraoperative status of the hyaloid. Preoperative observation of PVD was correlated with hyaloid status at the time of vitrectomy.

**Results:** Hyaloid status was not found to impact postoperative visual acuity. Eyes with an attached hyaloid at time of surgery had an average postoperative best corrected visual acuity (BCVA) of 20/60 and those found at time of surgery to have a detached hyaloid (PVD) had an average BCVA of 20/60+1 (p-value 0.66). Of the 109 patients, 72 (66%) had a pre-operative fundoscopic examination that correctly correlated with the intraoperative status of the hyaloid. (Table 1)

<table>
<thead>
<tr>
<th>Hyaloid (condition)</th>
<th>Detached</th>
<th>Attached</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVD</td>
<td>38</td>
<td>28</td>
</tr>
<tr>
<td>no PVD</td>
<td>9</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>47</td>
<td>62</td>
</tr>
</tbody>
</table>

**Conclusions:** Having an attached versus detached hyaloid prior to surgery did not have a significant impact on postoperative visual outcomes in eyes undergoing ERM repair. Detection of a PVD on preoperative fundoscopic examination was highly sensitive for a “true” PVD, or actual detachment of the posterior hyaloid membrane as confirmed during surgery.