Ehlers-Danlos syndrome (EDS) is an inherited collagen disorder that, based on the subtype, comes with varying risks of life-threatening hemorrhage. The risk of post-operative adenotonsillectomy (T&A) tonsillectomy hemorrhage should be scrutinized in patients with EDS. Better risk assessment will aid in medical optimization before surgery, counseling families of surgical risks, and may decrease admission costs in lower-risk EDS patients.

**INTRODUCTION**

Children with EDS experience increased rates of postadenotonsillectomy bleeding when compared to children who have no increased post-operative T&A hemorrhage risk factors.

**METHODOLOGY**

- Children undergoing a T&A for a diagnosis of periodic fever, aphthous stomatitis, pharyngitis and adenitis syndrome were also excluded.
- Bleeding risk in children with EDS was assessed by EDS subtype, prior echocardiograms, electrocardiograms, and laboratory data.

**RESULTS**

<table>
<thead>
<tr>
<th>Variables</th>
<th>EDS subtype (n=72)</th>
<th>Control (n=72)</th>
<th>All Patients (n=144)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>BMI</td>
<td>19.7</td>
<td>4.7</td>
<td>20.5</td>
</tr>
<tr>
<td>BMI Percentile</td>
<td>46.4</td>
<td>30.7</td>
<td>57.5</td>
</tr>
<tr>
<td>PT level</td>
<td>13.8</td>
<td>8.6</td>
<td>80.6</td>
</tr>
<tr>
<td>INR level</td>
<td>1.1</td>
<td>0.1</td>
<td>1.06</td>
</tr>
<tr>
<td>Factor V assay level</td>
<td>70.6</td>
<td>2.6</td>
<td>1.06</td>
</tr>
<tr>
<td>Hemoglobin</td>
<td>13.1</td>
<td>1.4</td>
<td>13.6</td>
</tr>
<tr>
<td>Hematocrit</td>
<td>40.9</td>
<td>5.8</td>
<td>40.9</td>
</tr>
</tbody>
</table>

**DISCUSSION**

- Of 62 patients with EDS and 72 controls, those with EDS were more likely to be female (p=0.033), younger (p=0.051), and non-Hispanic white (p<0.001, p=0.01).
- Post-operative hemorrhage rates were unaffected by post-operative admission in both controls and EDS patients (p=0.609).
- EDS patients had no differences in blood loss during the T&A (p=0.669) and no significant risk of a post-operative hemorrhage (p=0.118).
- Isolated bleeding disorders did not increase postoperative hemorrhage (p=0.092); however, EDS patients had more comorbid bleeding disorders (p=0.005).
- While controlling the differences in the exposure and control population, there was no difference in bleeding risk.

**REFERENCES**