**ISOLATED Spleen (Liver) Injury Clinical Pathway Guideline**

**Inclusion Criteria**
- Single system abdominal trauma
  - or
- Multisystem injuries if patient has normal vitals for age and is hemodynamically stable

**Exclusion Criteria**
- Multisystem when spleen or liver is not the driving force behind the patient’s plan of care
  - or
- Hemodynamically unstable

**Pathway Diagram**

1. **Child arrives in ED with traumatic Injury (Class I or II)**
   - ATLS Trauma resuscitation per protocol

2. **Abdominal Trauma?**
   - By history
   - Pain on Exam
   - Hematuria
   - Unconscious or unable to cooperate
   - intubated
   - **No abdominal injury, treat as indicated**

3. **Abdominal CT**
   - IV contrast
   - Radiologist reads and Grades injury
   - **No; Further Work up as indicated**

4. **Liver Spleen Injury Grade I-IV**

*If patient is hemodynamically unstable consider operating room or embolization*
<table>
<thead>
<tr>
<th>CT Grade</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICU LOS</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>24 hours +</td>
</tr>
<tr>
<td>CBC</td>
<td>Q 6 hours</td>
<td>Q 6 hours</td>
<td>Q 6 hours</td>
<td>Q 2-4 hours</td>
</tr>
<tr>
<td></td>
<td>until stable*</td>
<td>until stable*</td>
<td>until stable*</td>
<td></td>
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<tr>
<td>Vitals</td>
<td>Q4 hours x24</td>
<td>Q4 hours x24</td>
<td>Q2 hours x 8 then q4 on monitor</td>
<td>Per ICU</td>
</tr>
<tr>
<td></td>
<td>On monitor</td>
<td>On monitor</td>
<td>Per ICU</td>
<td></td>
</tr>
<tr>
<td>Bedrest</td>
<td>Until CBC is stable</td>
<td>Until CBC is stable</td>
<td>Until CBC is stable</td>
<td>48 hours</td>
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<td></td>
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<td></td>
<td></td>
<td>Then ambulation for 12 hours prior to D/C</td>
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<tr>
<td>Minimum Hospital LOS</td>
<td>1 day</td>
<td>2 days</td>
<td>3 days</td>
<td>4 days</td>
</tr>
<tr>
<td>Routine pre/post discharge imaging**</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Restricted Activity non contact</td>
<td>4 weeks</td>
<td>4 weeks</td>
<td>4 week</td>
<td>4 weeks</td>
</tr>
<tr>
<td>Restricted Activity contact</td>
<td>3 months</td>
<td>3 months</td>
<td>3 months</td>
<td>3 months</td>
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<tr>
<td>Return to School</td>
<td>&lt;1 week</td>
<td>1 week</td>
<td>2 weeks</td>
<td>2 weeks</td>
</tr>
<tr>
<td>Follow up</td>
<td>1 month</td>
<td>1 month</td>
<td>1 month</td>
<td>1 month</td>
</tr>
</tbody>
</table>

*Stable is when 3 HCT/HB are within 10% of each other

** US imaging may be performed if injury involved hilar area and concerned about pseudoaneurysm. Please note that this is not supported or refuted in the literature.

Hospital LOS / Minimum Stay = Grade of Injury
References


