**Adult Paracentesis**

*This practice algorithm has been specifically developed for MD Anderson using a multidisciplinary approach and taking into consideration circumstances particular to MD Anderson, including the following: MD Anderson’s specific patient population; MD Anderson’s services and structure; and MD Anderson’s clinical information. Moreover, this algorithm is not intended to replace the independent medical or professional judgment of physicians or other health care providers. This algorithm should not be used to treat pregnant women.*

---

**Provider identifies patient need for therapeutic paracentesis and pages proceduralist via on-call calendar.**

**Procedure indicated?**

- **Yes**
  - Proceduralist to proceed with therapeutic paracentesis.
  - Procedure must be logged in Mobile Procedure Team (MPT) SharePoint log.
  - Maximum fluid removal is 3 liters for first time paracentesis patient.
  - Blood pressure must be monitored during procedure and reassessed after each liter of fluid is removed. Abort procedure if SBP is less than 95 mmHg.
  - Notify primary team and consider albumin transfusion for post procedure hypotension (SBP less than 90 mmHg).
  - For high volume taps (greater than 5 liters):
    - Ordering attending must approve procedure.
    - Patient must have history of documented multiple prior high volume taps, otherwise recommend repeat next day tap.
    - Patient must receive post-procedure care to include transfusion of albumin.

- **No**
  - Refer to interventional radiology (IR) if patient unstable or encourage primary team to re-consult when more fluid re-accumulates.

---

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Minimum platelet threshold</th>
<th>Threshold to infuse platelets during procedure</th>
<th>INR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paracentesis</td>
<td>20 K/microliter</td>
<td>10-20 K/microliter</td>
<td>2</td>
</tr>
</tbody>
</table>

---

**Nursing communication given to notify primary team and MPT if findings of site leak, bleeding or unstable vitals.**

---

**Coagulopathy Threshold**

- **Proceduralist assessment of patient (all calls for paracentesis must be evaluated by proceduralist with ultrasound):**
  - Ultrasound must show greater than 3 cm zone of bowel free, fluid-filled area.
  - Anatomical site limited to right lower quadrant (RLQ) and left lower quadrant (LLQ).
  - Coagulopathy:
    - INR greater than 2 and/or
    - Platelets less than 20 K/microliter
    - If patient has tense ascites with warning signs of respiratory distress, procedure should not be delayed to correct coagulopathy (discuss with surgical fellow).
    - Post-surgical scars, wounds, catheters or ostomies to procedure site.

---

1. Heart rate greater than 65 bpm, oxygen saturation greater than 90% (unless decreased oxygen saturation due to ascites) and systolic blood pressure greater than 100 mmHg.

2. Refer to Peri-Procedure Management of Anticoagulants algorithm prior to procedure.

---

*Note: This algorithm is used by Acute Care Procedures Team.*
SUGGESTED READINGS


DEVELOPMENT CREDITS

This practice consensus algorithm is based on majority expert opinion of the Acute Care Services Department at the University of Texas MD Anderson Cancer Center. It was developed using a multidisciplinary approach that included input from the following members:

- Ivy Bertram, PA-C
- Wendy Garcia, BS
- Susanna Girocco, PA-C
- Tam Huynh, MD
- Paul Mansfield, MD
- Amy Pai, PharmD
- Christina Perez
- Kimberly Tripp, MBA, BSN, RN

† Core Development Team
* Clinical Effectiveness Development Team

Adult Paracentesis

This practice algorithm has been specifically developed for MD Anderson using a multidisciplinary approach and taking into consideration circumstances particular to MD Anderson, including the following: MD Anderson’s specific patient population; MD Anderson’s services and structure; and MD Anderson’s clinical information. Moreover, this algorithm is not intended to replace the independent medical or professional judgment of physicians or other health care providers. This algorithm should not be used to treat pregnant women.