



Standard of Procedure for USG-guided Paracentesis:

Paracentesis is performed in the intensive care unit (ICU) for diagnostic or therapeutic purposes to drain free fluid from the peritoneum.

- **Indications:**

- —Diagnostic:
 - • To determine the etiology of ascites.
 - • To diagnose infection in chronic ascites (ie, spontaneous bacterial peritonitis).
 - • To diagnose intra-abdominal malignancy.
- —Therapeutic:
 - • To relieve respiratory distress due to ascites.
 - • To decrease intra-abdominal pressure and improve venous return.



- **Contraindications:**

- —Coagulopathy
 - —Acute abdominal process requiring surgical management
 - —Skin cellulitis over the proposed incision site
 - —Distended bladder or bowel
 - —Previous abdominal surgery with adhesions
 - —Pregnancy
- Ultrasound and/or physical examination (ie, the presence of a fluid wave) can be used to diagnose the presence and/or location of ascetic fluid.
 - ▪ Prior to the procedure, patient consent should be obtained, the site should be prepped and draped, and universal protocol should be performed.
 - ▪ The bladder and stomach should be emptied prior to the performance of the procedure.

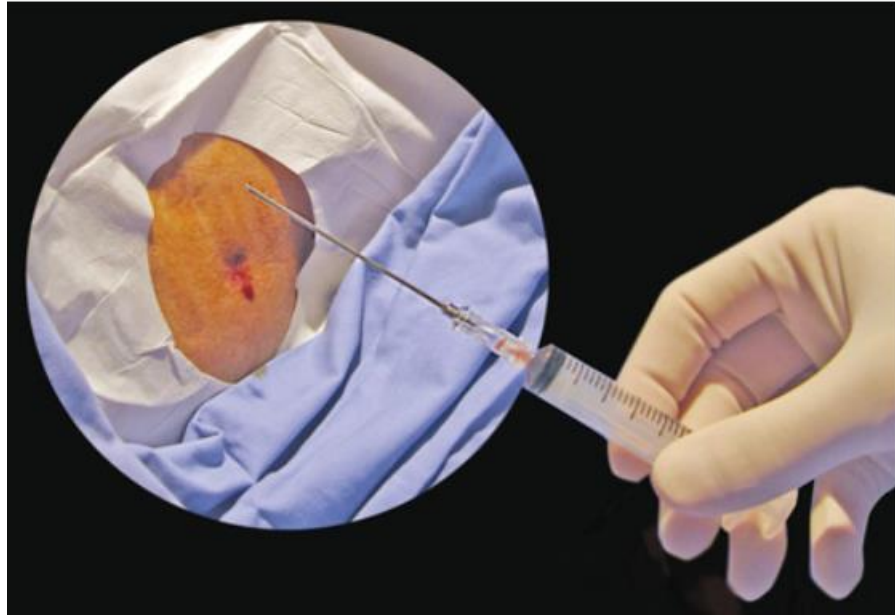


- **▪ Technique:**

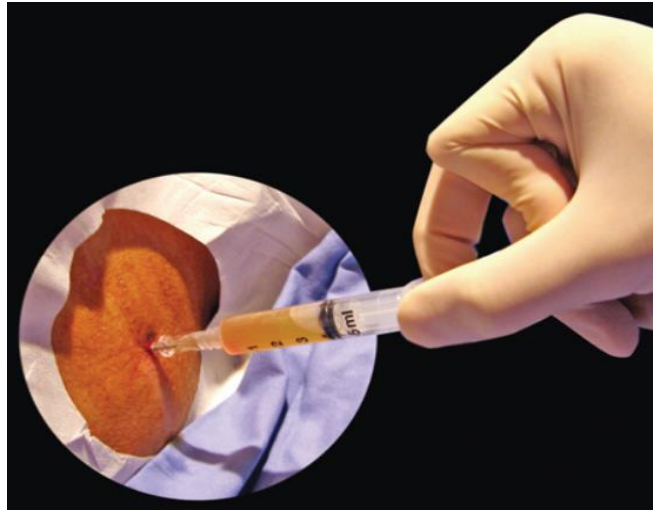
- —Patient should be positioned supine or in lateral decubitus position in order to bring free ascites below the proposed insertion spot as determined by examination or ultrasound.
- —Local anesthetic is infiltrated into the skin over the proposed paracentesis site, typically paramedian in the anterior axillary line or in the midline below the umbilicus.
- —A needle or Angiocath is inserted into the abdomen and aspirated.
- —When free ascites fluid is obtained, a wire may be introduced into the needle or Angiocath according to the Seldinger technique, and a catheter is introduced over the wire for fluid drainage.
- —Samples of the fluid are sent for diagnostic studies as warranted.



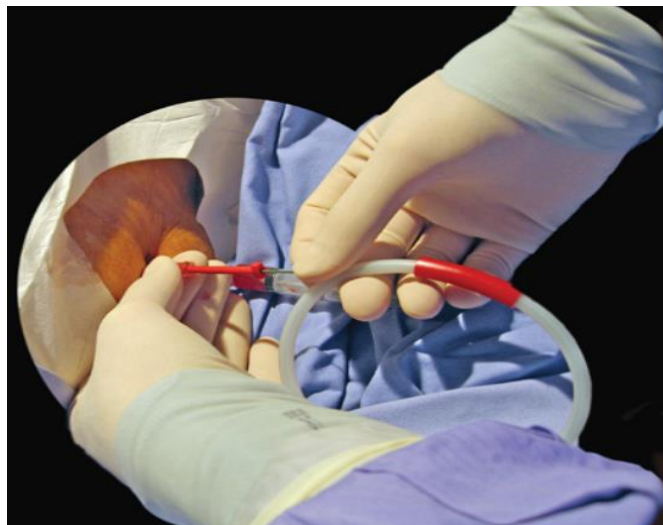
- Complications:
 - —Gastric or bowel perforation
 - —Peritonitis
 - —Post-paracentesis hypotension secondary to volume redistribution
 - —Intra-abdominal bleeding



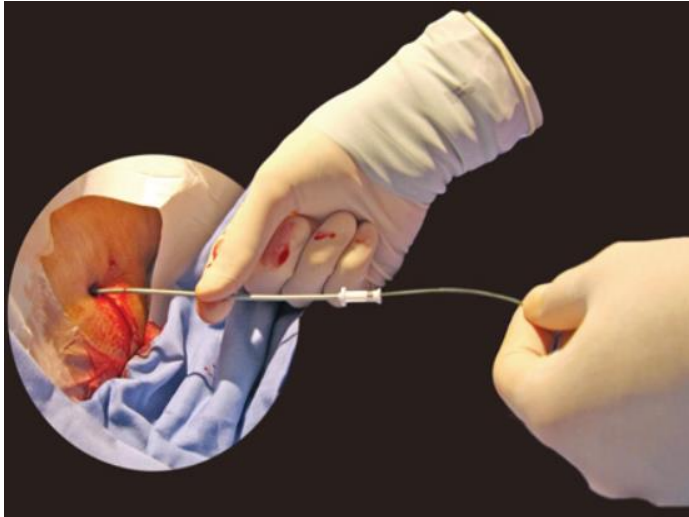
Draping for Paracentesis



Ascitic fluid aspiration.



Introduction of Seldinger exchange wire through needle into abdomen.



Catheter introduction over wire.

