

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
- o —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.



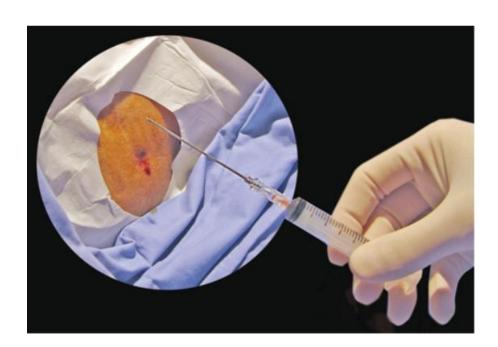
• Technique:

- —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.
- o —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.
- $_{\circ}\,\,$ —Samples of the fluid are sent for diagnostic studies as warranted.



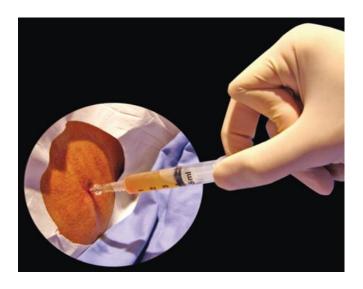
• Complications:

- —Gastric or bowel perforation
- —Peritonitis
- —Post-paracentesis hypotension secondary to volume redistribution



Draping for Paracentisis



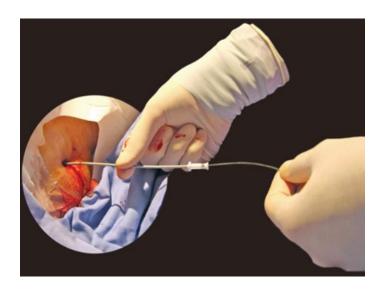


Ascitic fluid aspiration.

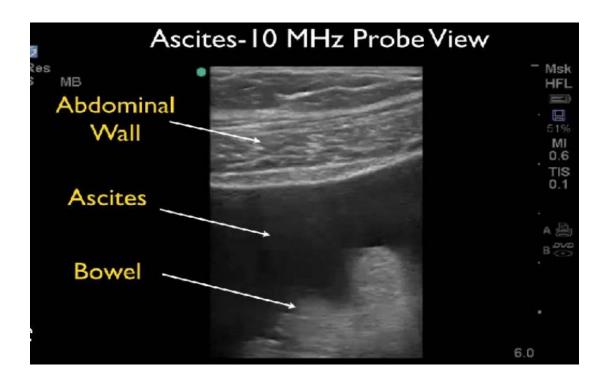


Introduction of Seldinger exchange wire through needle into abdomen.





Catheter introduction over wire.





ASCITIC TAP/DRAIN INSERTION CHECKLIST

SIGN IN To be completed by the individual conducting the procedure prior to scrubbing	TIME OUT To be completed by the assistant at the appropriate time before/after the procedure	SIGN OUT To be read out loud by the assistant before anyone leaves the procedural area
☐ Confirm all individuals have introduced themselves.	☐ Confirm the operator is wearing hat, gown, mask and	☐ Confirm sharp count performed.
☐ Confirm patient identity.	gloves after scrubbing?	☐ Operator disposes all sharps safely.
Procedure: □ Ascitic drain insertion □ Ascitic tap	Skin cleaned with Chloraprep?	Confirm:
Indication: ☐ Chronic liver disease ☐ Malignancy	☐ Yes ☐ No, give reason:	☐ Ascitic fluid output chart available.
Albumin cover required?		☐ Albumin prescribed if available with clear instruction
□ No □ Yes, confirm albumin ordered/available: □		on the required albumin/ascitic fluid drainage ratio.
Clinical setting: ☐ Medical Day Unit ☐ Ward	Confirm:	
Procedure performed in working hours: ☐ Yes	Sterile drapes in place.	
Medical personnel available for removal: ☐ Yes	Skin infiltration with lidocaine.	Confirm clear instruction on the estimated time or
Recent blood results: ☐ Platelets>50 ☐ PT<25	☐ Ascitic fluid aspirated freely with a green needle. ☐ Small incision with scalpel made.	amount of ascitic fluid drained before removal:
Haematology consulted if abnormal Yes	Ascitic drain cannula inserted with the needle advanced only to the distance where ascitic fluid was obtained with the green needle.	□ Documented in the notes. □ Staff nurses aware. □ Medical staff available to review patient after 1 hour.
Need for platelet or FFP cover? ☐ Yes ☐ No ☐ N/A		
Recent imaging confirms ascites:		
Any evidence of organomegaly? □ No □ Yes	☐ Cannula needle stationary whilst plastic catheter advanced.	☐ Medical personnel responsible for removal aware.
Previous abdominal surgery? ☐ No ☐ Yes		
If Yes, confirm site marked by ultrasound:		
Check consent: ☐ Verbal ☐ Written		
☐ Unable, document best interest decision	Confirm (post procedure):	Confirm:
Does the patient have a known allergy?	 □ Needle and introducer have been removed. □ Ascitic bag connected under low pressure. □ Ascitic drain securely attached with sterile dressing. □ Ascitic fluid draining freely. □ No visible blood in the ascitic fluid. 	□ Procedure recorded clearly in the notes. □ If any investigations are required after the ascitic drain is removed (e.g. U&Es). □ That the patient's diuretics are withheld for 2 days following the drainage of ascites.
☐ No ☐ Yes, specify:		
Confirm operator appropriately:		
☐ Trained OR ☐ Supervised		
Confirm:		
☐ All equipment available. ☐ Safe drain insertion site.	If blood visible, consider referral to senior colleague.	
☐ Patient positioned appropriately.		