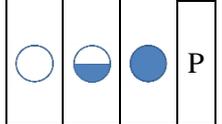


PERFORMING PARACENTESIS

Creating a direct communication with the abdominal cavity by means of a transcutaneous puncture.



1.	Assess patient's condition (<i>consciousness, movements, speech, breathing</i>): <i>vital functions present</i> <input type="checkbox"/> ; <i>cardiopulmonary arrest</i> <input type="checkbox"/> Prepare the necessary materials – the harvesting kit Good morning/afternoon. My name is I am your doctor / nurse.				0 2 5
2.	Can you tell me your name, please (or, check patient's ID bracelet, if available) And your date of birth Thank you. (<i>This is done to avoid performing the procedure on the wrong patient as several patients may have the same name. Also, do not ask e.g. "Are you Mr. Smith?" to avoid receiving false confirmation from patients distracted by their symptoms or other reasons</i>).	ESSENTIAL			
3.	Providing an environment for private examination (<i>salon with a single bed, curtains, etc.</i>) Do you agree to the sampling of your biological products? (<i>evaluation of personal beliefs regarding the sampling of biological products</i>)	ESSENTIAL			
4.	If present, any people accompanying the patient are kindly asked to leave the room, They cannot remain in the room during the procedure.				0 1 3
5.	Position patient comfortably. (<i>reclining in an armchair or lying down in bed</i>) We will perform a paracentesis, which is a medical procedure by means of which we can access that area of your abdomen where, because of the illness, large amounts of fluid accumulated. Have you had paracentesis before?				0 1 3
6.	This involves inserting a needle into the left lower side of your abdomen just enough to penetrate the skin and reach into the abdominal cavity where, because of the disease, fluid accumulated. To allow for an easier and safer puncture, you will kindly lie on your left side on the bed, so that the fluid moves closer to the puncture place. It is important that your position be comfortable, as you will have to keep completely motionless during the procedure. Any movement may result in pricking other structures than originally intended. That is why we urge you not to move or speak before warning us first by raising a hand. Also, as far as possible, try not to cough. The overall procedure may take up to 30-45 minutes. You will feel some pressure while the needle is inserted but this will soon disappear, and then there should not be any other major discomfort, except perhaps having to keep motionless for a longer time. (<i>what the procedure consists of</i>)				0 1 3
7.	It is extremely important that you stay relaxed and calm throughout the maneuver and that you remove any clothing covering the abdomen and position yourself as I explained before. Very important also, do not make sudden movements while the needle is in your immediate vicinity. (<i>how the patient can contribute to performing the procedure</i>)				0 1 3
8.	The fluid we collect will be tested in the lab, and this will give us a lot of information on your medical status. Based on this, we will decide what medicines to recommend further. (<i>how the procedure is useful to the patient</i>)				0 1 3
9.	Now, are you clear about the procedure? Would you like to ask me anything else?	ESSENTIAL			
10.	Evaluate patient's medical records from the standpoint of: associated diagnoses				0

	(e.g. coagulopathies, etc.), laboratory parameters (e.g. platelets <150,000, INR> 1.5, etc.) and associated medication (e.g. Sintrom, Trombostop, Aspirin, Plavix, etc.) – to assess the risk of prolonged bleeding.				1 9
11.	Are you allergic to anything, rubber products, iodine, adhesive tape maybe? (evaluating possible allergies to the materials commonly used in the procedure)				0 1 9
12.	If they have not been recently evaluated: BP measurement, pulseoximetry, thermometry: BP..... mmHg, SaO ₂ %, T °C. Hand wash. Apply clean medical gloves as part of standard precautions. Decontamination with a tampon with alcohol the surfaces of furniture they interact during the maneuver.				0 1 3
13.	Dispose of gloves previously used in the infectious waste container. Hand washing. Applying a new clean pair of medical gloves as part of standard precautions.				0 1 3
14.	Review paracentesis indications and, as the case may be, indications for subsequent administration of intraperitoneal medication (inside the abdomen).				0 1 3
15.	Will you please remove your clothes now so that your abdomen to be completely uncovered. Raise patient's bed to the waist level of the staff performing the manoeuvre. Position yourself at the left side of the bed. Lower the lateral limiters.				0 1 3
16.	Inspect abdominal skin for signs of local infections (associated risks for intraperitoneal dissemination of the infectious agent from skin lesions).				0 1 9
17.	Checking patient's medical file for the diagnosis that may have led to the accumulation of peritoneal fluid (localization, type, echographic character a.s.o). Using bedding protection (absorbent blanket or other waterproof material placed below the level of the patient's abdominal region and hip). Now please lie on your left side, as I explained before.				0 1 9
18.	Identifying the location of the anterior superior iliac spine and of the navel.				0 1 9
19.	Identifying the point located at external one third with the two third internal of the straight line linking the anterior superior iliac spine with the navel, which is the exact site to puncture the abdomen on paracentesis (this is the optimal position for paracentesis due to: on the left side the colon is positioned more to the back; peritoneal serous membrane being slippery the intestinal loops tend to slip away from the way of the needle, and the lateral decubitus helps to place the abdominal fluid onto puncture area)				ESSENTIAL
20.	Mark the puncture site with an X sign realized with the tip of the fingernail.				0 1 9
21.	Percuss abdomen to confirm the presence of fluid at the selected area (it helps to associate abdominal echography to objective clinical examination in order to better determine the puncture site for paracentesis) and for the final selection of the puncture site.				0 1 6
22.	Wipe clean a 5 cm ² area by exerting pressure on the skin surface starting from the point selected as site for paracentesis on a spiral shaped path, using a tampon with iodine solution (this will result in a chemical decontamination – i.e. the alcoholic iodine solution along with a mechanical one – cleaning the tegument by rubbing it in a helical pattern). Dispose of the tampon in the infectious waste container. Repeat decontamination maneuver with a new iodine solution tampon. Dispose of this second used tampon in the infectious waste container.				0 1 9
23.	Repeat decontamination maneuver using a third iodine solution tampon, then dispose of the used tampon in the infectious waste container.				ESSENTIAL

24.	Wash hands and put on sterile, single use gloves.				0 1 6
25.	Connecting the sterile syringe with the needle. Possibly: 20-gauge syringe, please. (<i>requesting assistance from a medical colleague to display – i.e., open and expose – the sterile contents of the package containing syringe and needle, which will be handled directly by the staff performing the procedure via sterile gloves, in this way minimizing minimizing the risk of infection associated with the procedure</i>)				0 1 3
26.	Take needle cap off. Position needle-syringe complex perpendicular to the tegument, bevel up.				0 1 6
27.	We are about to start paracentesis. You will feel a little prick. Please stand still.				0 1 6
28.	The needle-syringe complex is pressed with a firm and controlled movement so as to puncture the skin and advance the needle subcutaneously, 5-7 mm depth.	ESSENTIAL			
29.	Using both hands positioned at the level of the syringe, advance the needle towards the peritoneal space in a perpendicular direction on the skin, while generating a negative pressure inside the syringe, by pulling back the piston (<i>the negative pressure generated inside the syringe allows for the exact identification of the moment of entry into the peritoneal space by promptly noticing the appearance of the fluid in the syringe. After this, in order to protect against the risk of accidental puncture of abdominal structures, it is important to maintain constant the length of needle insertion and its orientation perpendicular to the skin</i>)				0 1 9
30.	Very good. Now we will remove some of the fluid that makes breathing difficult for you. Keep your position a little longer please, do not move now.				0 1 3
31.	Aspirate the intended amount of fluid (<i>generally, in the initial assessment, the focus is on differentiating between exudate and transudate by means of biochemical explorations – proteins, lacticdehydrogenase (LDH), cholesterol, to which glucose, amylase et al. are added, plus cytological and microbiological explorations</i>) Staff will constantly monitor and ensure that the length of needle insertion and the perpendicular position of the needle to the tegumentary plane are maintained.				0 1 3
32.	As the case may be, the puncture needle may be connected to an aspiration system (when fluid is collected in a bottle having gradations), which allows for an easier removal of the intended amount of fluid (<i>as a rule, removing up to 5 liters of ascitic fluid does not trigger negative physiopathological consequences – electrolyte or colloidal imbalance etc.</i>)				0 1 3
33.	Very good. We are almost done here, but do not move yet, not just.				0 1 3
34.	Apply iodine solution tampon at the level of the puncture site and carefully remove the needle - syringe complex perpendicular to the tegumentary plane, while concomitantly pressing the iodine tampon firmly onto the entry site as soon as the needle is out.				0 1 9
35.	It's over now. You did very well.				0 1 3
36.	Dispose of needle in the infectious waste container for sharp objects and the syringe in the infectious waste container for non-sharp non-stabbing items.				0 1 6
37.	Roll over to your right side now. (<i>positioning the patient in the right lateral decubitus helps diminish the pressure of fluid on the abdominal puncture trajectory and leads to its closing without complications</i>)				0 1 9
38.	Use alcohol tampons to wipe away the iodine solution from the abdominal tegument (<i>prolonged presence of iodine solution on the tegument is both unpleasant to look at and may also generate the risk of local irritative reactions</i>)				0 1 9

39.	Apply alcohol tampon at the puncture site to replace the iodine solution tampon, which will be disposed of in the infectious waste container. Fasten the tampon with adhesive tape.				0 1 6
40.	We will send the samples for testing. Then we will know more about your condition and what we need to do next.				0 1 6
41.	Fill out the patient's medical record with all the details related to the realisation of the procedure, accidents, complications - as the case may be, volume and aspect (colour, clarity etc.) of evacuated liquid, date and time.	ESSENTIAL			
42.	Thank you, we have completed the procedure. You may put your clothes back on. As the case may be, secure the patient (<i>adjusting the bed to an inferior height, lifting the safety sides</i>), placing the patient's personal belongings (<i>e.g. mobile phone, book, crosswords etc.</i>), glass of water, remote control for the medical calling system within easy reach. We still need to do (<i>e.g. an electrocardiogram</i>) in about minutes. (<i>providing details about the upcoming medical activity and the remaining time until its commencement</i>)				0 1 9
Total score: 200		<input type="radio"/>			%
		<input type="radio"/>			%
		<input type="radio"/>			%

Legend: - criterion unfulfilled; - criterion partially fulfilled; - criterion fulfilled completely
(score according to column P)

Selective references

1. Berman Audrey, Snyder Shirlee, Jackson Christina – Skills in clinical nursing, 6-th ed., Pearson Prentice Hall, New Jersey, 2009