仁安醫院
UNION HOSPITAL

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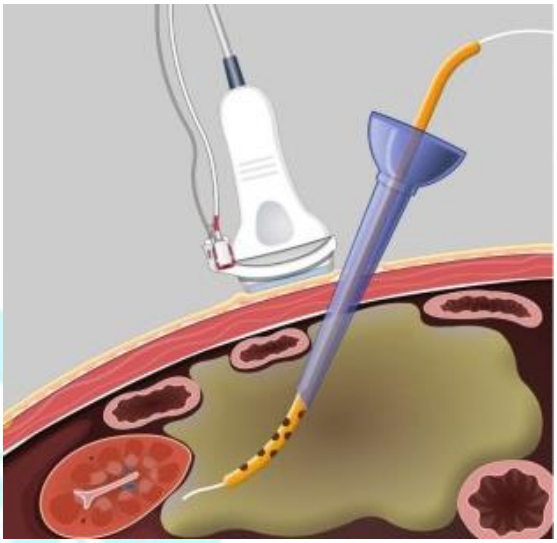
Procedure Information

Percutaneous Drainage of Abscesses or Fluid Collections

Introduction

Medical treatment may be helpful for small abscesses or fluid collections but is not usually effective against large collections. The doctor may suggest the patient perform a Percutaneous (through the skin) Drainage to drain the abnormal fluid or pus to relieve the symptoms. It is designed to obviate or delay a major operation. The success rate of percutaneous drainage of uncomplicated abscess or fluid collection exceeds 90%. This decreases significantly (down to 65%) with complicated collections such as those with loculation or inflammation (e.g. pancreatic abscess).



Source:
https://media.springernature.com/m685/springer-static/image/art%3A10.1186%2Fs13244-021-01087-2/MediaObjects/13244_2021_1087_Fig1_HTML.jpg

This procedure is performed by radiologists with special training in interventional radiology. It is generally performed in the Medical Imaging Department under image guidance, such as X-ray, ultrasound or computed tomography (CT). Please discuss with your doctor for better option plans and treatment.

Indications

Abscesses or fluid collections which are not responsive to or not suitable for medical treatment.

Outcomes

It is expected that the pus or abnormal fluid collection is drained. The obtained fluid or pus will be sent to the Pathology Department for culturing and analysis.

Procedures

1. This procedure is usually performed under local anesthesia.
2. This procedure is performed under image guidance.
3. The skin over the drainage site is punctured by a needle followed by a drainage catheter.
4. The catheter is inserted into the site of abscess or fluid collection.
5. Drainage of the pus or fluid collection: depending on the patient's conditions and the treatment plan,
   - the abnormal fluid or pus is simply drained through the catheter which is then withdrawn; or
   - the catheter is attached to a drainage bag and is secured to the skin by stitches.
6. The puncture site (with or without the catheter) is protected by a sterile dressing.

Possible Risks and Complications

The overall complication rate is less than 15% and procedure-related mortality is rare.

1. Minor complications
   - Local pain, mild bleeding, infection, and leakage along the catheter track
   - Catheter may be dislodged, kinked or blocked. In such cases, a new catheter may be inserted.
2. Major complications
   - Injury to a major blood vessel causes severe bleeding is rare.
   - Injury to adjacent organs is very rare.
     - If the drainage site is in the abdomen, injury to the bowel can cause peritonitis. Surgical repair may be needed.
     - If the drainage site is in the chest or upper abdomen, injury to the lung may cause haemopneumothorax (blood and air in the pleural cavity), pus leakage into the pleural cavity, and thus, further drainage or surgical procedure may be required.
3. If a contrast agent is used during the procedure
   - Side effects of contrast agents include hives, itchy, flu-like symptoms, and other anaphylactic reactions.
   - Steroid cover may be necessary for the patients who have an allergic history.
   - The overall adverse reaction related to iodine-base non-ionic medium is below 0.7%. The mortality due to reaction to non-ionic contrast medium is below 1 in 250,000.

** The risks listed above are in general terms and the possibility of complications is not exhaustive. Please understand that even though all procedures are carried out with utmost professionalism and care, this does not rule out the possibility of complications arising.

Pre-procedure Preparations

1. Good hygiene can prevent wound infection. Therefore, we advise you to clean up yourself on the day of the procedure.
2. The procedure and possible complications will be explained by the doctor and a consent form must be signed prior to the operation.
3. Please inform your doctor and nurse all your past medical history, previous surgical operations, current medication and any complication with drug or anaesthesia.
4. Several drugs, herbs and supplements which influence coagulation ability may be withheld a few days before the procedure.
5. Please inform the doctor and nurse if you are or might be pregnant, or if you breastfeed your baby.
6. Blood tests may be performed to assess the coagulation profile. Correction with transfusion of blood products may be needed before the procedure.
7. Steroids may be prescribed for patients with an allergic history if a contrast agent is used during the procedure.
8. No food or drink six hours before the procedure.
9. Intravenous access is established.
10. Prophylactic antibiotic is administered.
11. Please change into a surgical gown after removing all belongings including undergarments, dentures, jewellery and contact lenses.
12. Please empty your bladder before the procedure.

Post-procedure Instructions

1. Your vital signs (e.g. blood pressure, pulse) and the puncture site are monitored closely.
2. Please inform the nurse if bleeding or pain from the puncture site persists or worsens, or if any other discomfort.
3. Bed rest for at least 4 hours.
4. Diet can be resumed if the vital signs are stable.
5. Keep the wound dressing clean and dry.
6. If the drainage catheter is attached to a drainage bag to collect the fluid,
   - Keep the drainage bag in a position below the wound site to prevent fluid reflux.
   - Avoid pulling, kinking or bending the drainage catheter.
   - Please inform the staff at once if
     - the connection of the drainage catheter is loosened;
     - the drainage catheter is coming out;
     - bleeding or leakage from the puncture site, abdominal pain or any other concerns.
   - The catheter is removed when the drained fluid becomes scanty and the clinical condition improves. Usually, it takes 1-2 weeks, in some circumstances, it may take weeks to months. Throughout therapy, the catheter may be revised, replaced or repositioned.
7. Repeated imaging may be required to monitor the progress.
8. The length of hospital stay and the length of the drainage catheter stay vary. If you are going to be discharged home with the drainage bag, your nurse will tell you how to take care of the wound and the drainage system at home.

Should there be any enquiries or concerns, please consult the attending doctor.

Under the professional care of the doctor, you will gradually recover. We wish you all the best during your treatment and recovery.

If you have any questions after reading the entire leaflet, please write them down in the spaces provided in order for the doctor to further follow-up.

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Compiled by Union Hospital Operating Theatre (OT) Governance Committee