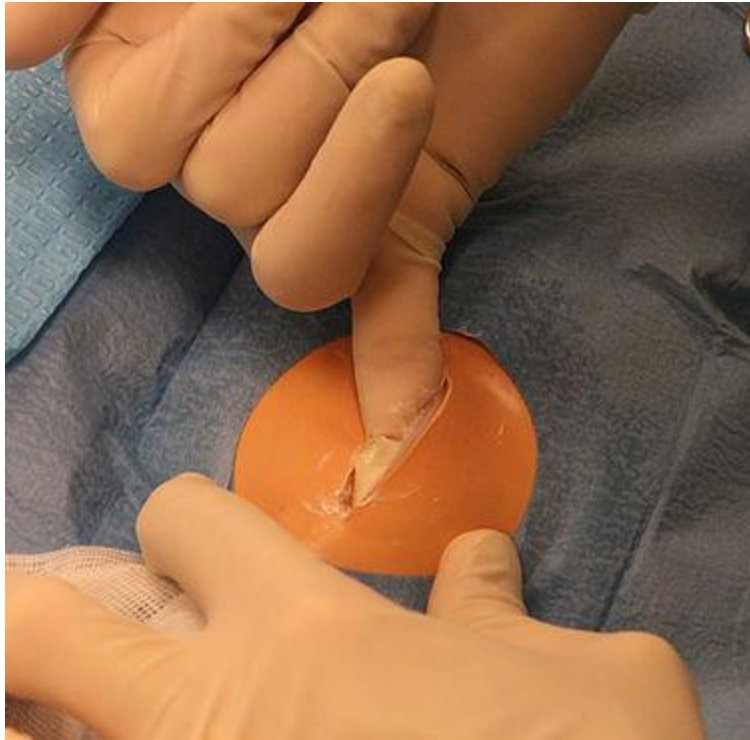


Abscess Drainage

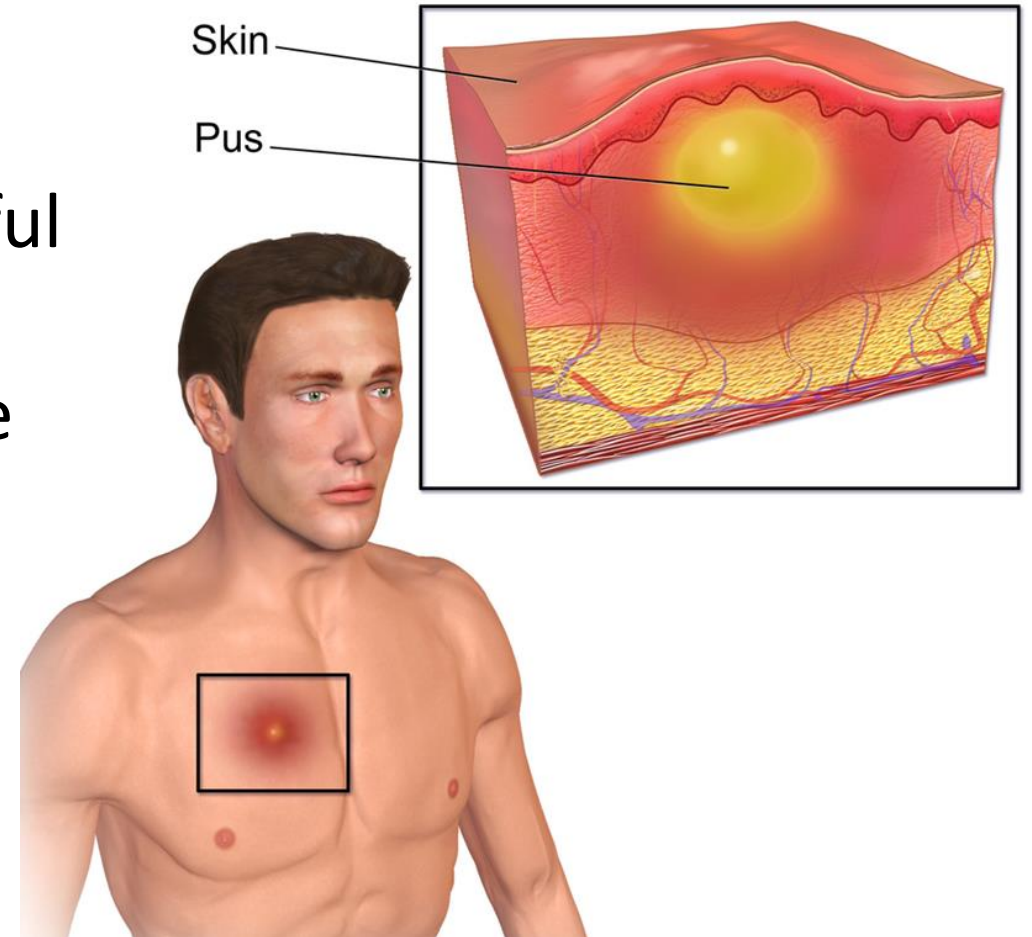


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Skin abscess - Definition

- Collection of pus under the skin forms into a spherical shape with a wall
- The skin is raised, the area is red, painful and warm to touch
- Can origin from infection of hair follicle (Furuncle), sebaceous gland or trauma like injection site.
- Will not respond to antibiotics only
- Mandates surgical drainage
- Around it may be a process of cellulitis



Skin Abscess - Example



Upper back abscess



Furuncle

Objectives of Surgical Drainage

1. Pus Drainage
2. Septations Breaking
3. Avoidance of early skin closure (Reorganization of the abscess)
4. Hemostasis

Special Cases

Consider general anesthesia

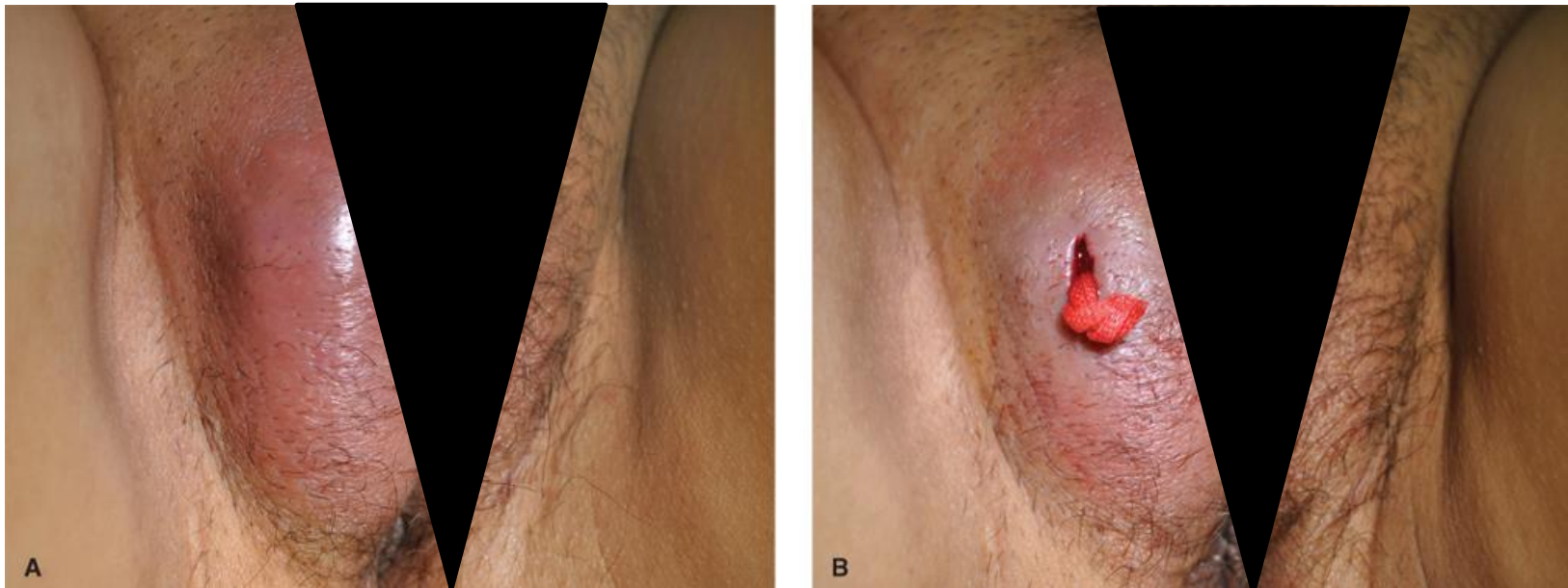
1. Neck abscess (Near vessels & nerves)
2. Inner part of joints (Axilla etc.)
3. Perianal abscess (for better pain control)
4. Pilonidal abscess
5. Breast abscess
6. Patient under anti-coagulation (better hemostasis in OR)
7. Hidradenitis Suppurativa (multiple abscesses)

Location, Location, Location...

- Facial abscess = Plastic surgery
- Limb abscess = Ortho
- Buccal abscess = Maxillo-Facial
- Peri-Tonsillar abscess = ENT
- Labial abscess (Bartholin cyst) = OBGYN
- Scrotal abscess = Urology
- All the rest = General surgery

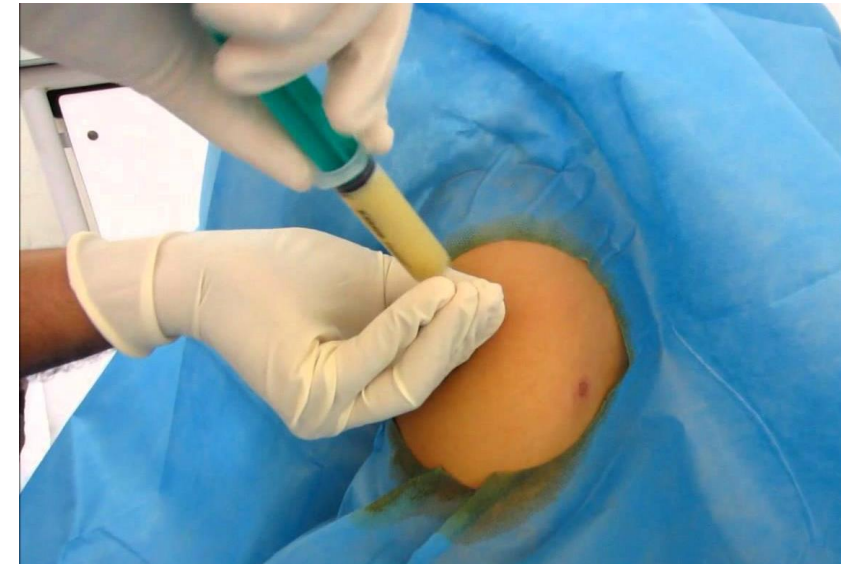
The “Bermuda Triangle”

Abscess in the elusive region of the Groin, Labia majora & Inner thigh.
Demands the collaboration of Ortho, OBGYN and General Surgery.



Is it an abscess for sure?

- Not every raised and red skin area is an abscess...
- The fluctuation is not always clear. An abscess with tense skin over it may be firm and resemble cellulitis.
- In order to make sure that there is pus under the skin, one can try to aspirate before cutting the skin.



Culture? Don't need it!

- The culture is usually of a poly-microbial nature
- The antibiotic of choice will cover the skin microbiome (Gram positive, and rarely anaerobes)
- Culture is needed only when draining a surgical wound, a hematoma\seroma (suspected of developed infection) or after multiple drainages. Those cases are suspected of having acquired resistant bacteria (e.g. ESBL, MRSA etc.)

Order actions

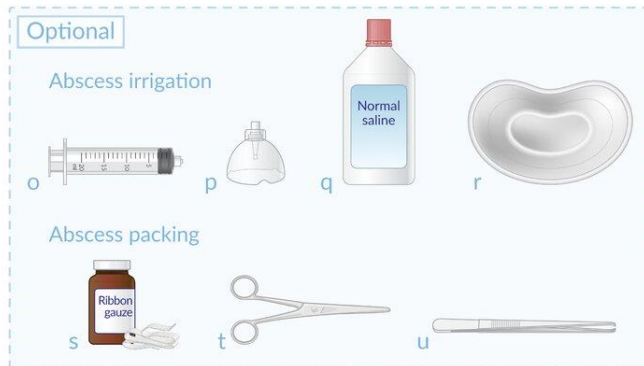
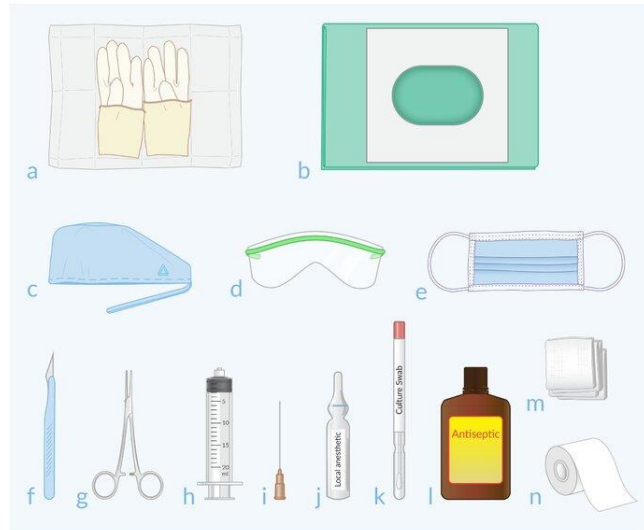
1. Preparation of the patient and the working environment
2. Preparation of the equipment
3. Skin prepping
4. Injection of local anesthesia
5. Drainage of the abscess
6. Washing the cavity with a solution
7. Dressing the wound

Preparations

- Pick the correct side
- Sit down on an adjustable chair
- Adjust the table height
- Position the lights
- Use a Mayo stand for equipment
- Garbage container at hand
- Needle canister near by
- Make sure that the patient is in a comfortable position



Equipment



1. Sterile sheet
2. Gauze pads
3. Scalpel
4. Pean
5. Skin prepping solution
6. Local anesthetic solution
7. Syringe + injection needed
8. Washing solution
9. Bandage

Abscess draining Kit



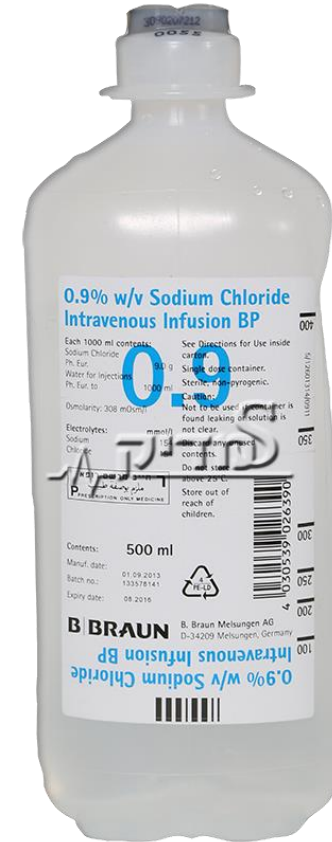
Solutions



**Povidone iodine
10%**



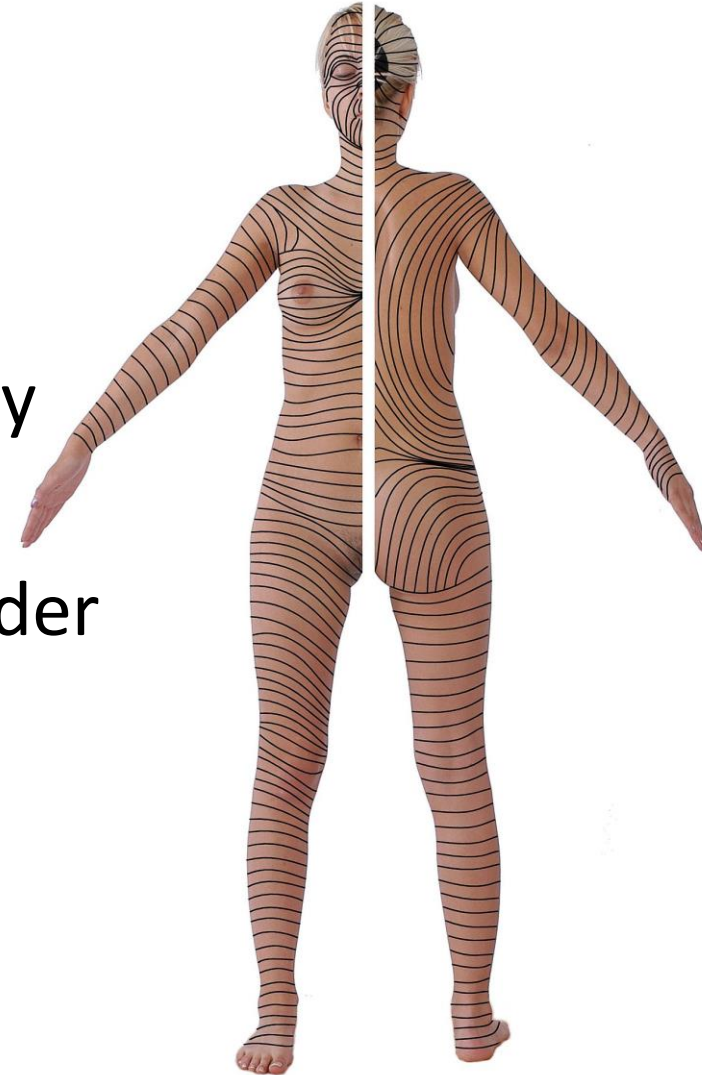
**Sodium Peroxide
3%**



**Sodium chloride
0.9%**

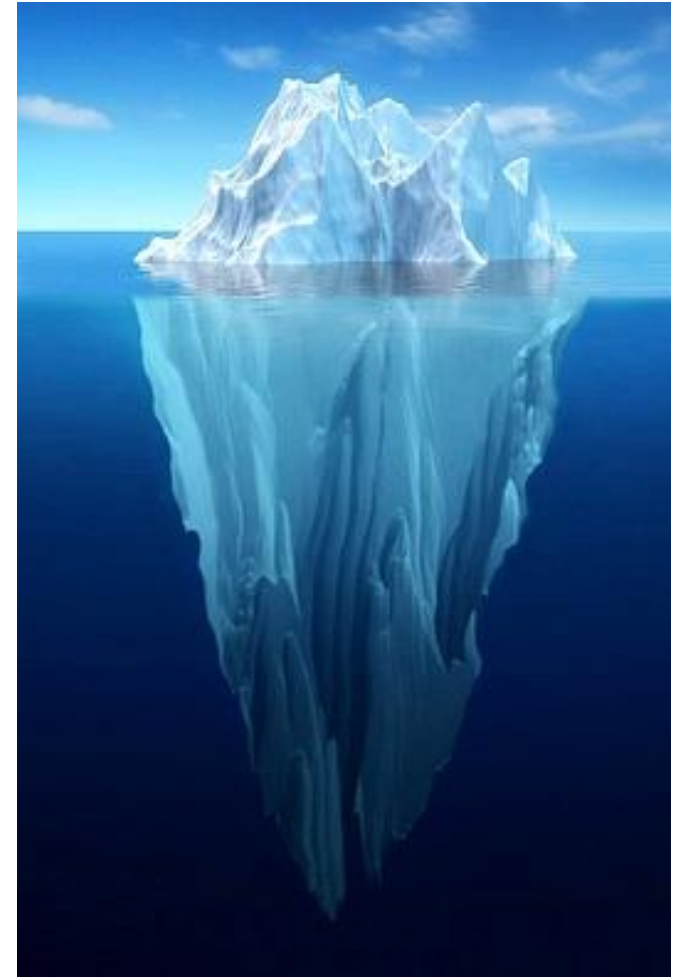
Surgical technique

- Small cut on the top of the abscess
- Cut according to Langer Lines
- Pus drainage by pressing
- Introducing a finger through the cut to assess cavity
- Breakage of septations with finger
- Enlargement of the cut on a dissector to reach border
- Washing the cavity with solution till clear fluid
- Compressing a wet gauze for hemostasis
- Dressing



Size of the Cut

- The raised skin level does not indicate the depth or size of the cavity
- The initial cut should be big enough to introduce a finger inside but not too big (not necessarily the final size) because one can not estimate the dimension of the abscess before the cut
- The cut can always be extended – start small!



Further Instructions

Discharge letter

1. Keep the place dry and dressed for 8 hours
2. Subsequently pull out the gauze (preferably in the shower)
3. Thorough washing with soap and water
4. Analgesics
5. Antibiotics (if needed, see next slide)
6. In case of fever, growing pain, continuation of pus secretion – one should report back to ER.

Antibiotics

Should be prescribed in the following cases...

- Vast circumferential **Cellulitis** around the abscess
- **Diabetes** mellitus
- **Immunodeficiency**
- Extremes of age
- Neglected patients
- Signs of **Sepsis** (tachycardia, high fever, severe leukocytosis) – consider admitting the patient.