STANDARD OPERATING PROCEDURE

ABSCESS MANAGEMENT

1. Purpose

To provide a standardized protocol for diagnosis and management of abscesses to ensure timely drainage, infection control, and prevention of complications.

2. Scope

Applies to: General surgeons, surgical residents, emergency physicians, nursing staff, minor OT staff

3. Definition

An abscess is a localized collection of pus within a tissue cavity caused by infection, usually bacterial.

4. Common Types of Surgical Abscess

Superficial: Skin abscess, furuncle, carbuncle, breast abscess, perianal abscess, injection abscess

Deep abscess: Intra-abdominal abscess, appendicular abscess, liver abscess, psoas abscess, pelvic abscess

5. Responsibilities

Surgeon – Diagnosis, decision for drainage, perform incision and drainage, antibiotic decision documentation

Surgical Resident - Initial assessment, prepare patient, assist drainage, post procedure care

Nursing Staff – Dressing, monitoring, vitals, wound care

6. Clinical Features

Symptoms: Localized pain, swelling, fever, redness, pus discharge, functional limitation

Signs: tender swelling, fluctuation, warmth, erythema, pointing, fever (sometimes)

7. Assessment

History: Duration, pain severity, fever, diabetes, trauma, injection history, previous abscess

Examination: Size, location, fluctuation, cellulitis, lymphadenopathy**,** sepsis signs.

8. Investigations

Usually clinical diagnosis.

If needed: CBC, blood sugar, CRP

For deep abscess: Ultrasound, CT scan

Pus culture after drainage.

9. Indications for Incision and Drainage (I&D)

Fluctuant abscess
Pointing abscess
Failure of antibiotics
Large abscess
Systemic infection

Rule: "Where there is pus → drain it"

10. Contraindications

Relative: Uncorrected coagulopathy, very small abscess, cellulitis without pus

11. Pre-Procedure Preparation

Consent: Explain: Pain, bleeding, scar, recurrence

Check: Allergy, diabetes, anticoagulants

Preparation: Sterile instruments, local anesthetic, scalpel, artery forceps, gauze
Drain if needed

12. Procedure: Incision and Drainage SOP

Anesthesia: Local anesthesia (1% lignocaine).

avoid injecting into pus cavity.

Infiltrate around abscess.

Steps:

1 Skin preparation with antiseptic

2 Incision at most dependent part

3 Adequate incisions (not small stab)

4 Drain pus completely

5 Break loculi using artery forceps

6 Irrigate with saline

7 Send pus for culture

8 Insert drain if large cavity

9 Pack with gauze if needed

10 Sterile dressing

13. Antibiotic Policy

Abscess alone → drainage is main treatment.

Antibiotics indicated if: Cellulitis, fever, diabetes, immunocompromised, large abscess, deep abscess

Common choices: Cloxacillin, Amoxicillin-clavulanate, Cephalexin

If severe: Ceftriaxone, Metronidazole (anaerobic risk)

Adjust based on culture.

14. Special Situations

Diabetic abscess: Strict glucose control, broad antibiotics, frequent dressing

Perianal abscess: Urgent drainage

Breast abscess: USG guided drainage, if possible, continue breastfeeding if possible.

Deep abscess: Image guided drainage preferred.

15. Post Procedure Care

Monitor: Pain, bleeding, fever

Daily dressing: Remove packing after 24–48 hrs.

Regular irrigation.

Healing by secondary intention.

16. Complications - Bleeding, recurrence, fistula formation, sepsis, scarring

17. Warning Signs After Drainage

Increasing pain, fever, spreading redness, persistent pus

Need reassessment.

18. Discharge Criteria

Pain controlled
No fever
Able to do dressing
No active bleeding

19. Follow Up

Review: 48–72 hrs

Check: Healing, culture report, need antibiotics adjustment

For perianal: Check fistula later.

20. Documentation

Must include: Site, size, amount of pus, culture sent, procedure details, antibiotics, dressing plan

23. References

Bailey & Love's Short Practice of Surgery
Sabiston Surgery
CDC infection guidelines
WHO surgical infection protocols