Minimal Excision Technique for Epidermoid (Sebaceous) Cysts

Indications

1. Diagnostic
   - Rapid growth of mass
   - Suspicious for malignant lesion
   - Recurrent inflammation
2. Therapeutic
   - Recurrent inflammation
   - Cosmetic

Contraindications

1. Infected lesion

Materials

1. Nonsterile tray for anesthesia
   - Non-sterile gloves and mask
   - 1 inch of 4x4 gauze soaked with Povidone-iodine soln
   - 1 inch of 4x4 gauze
   - 5 mL syringe, filled w/2% lidocaine with Epinephrine w/30 gauge (Ga) needle
   - 25 Ga, 1 1/4 inch needle (for anesthetizing beneath cyst)
2. Sterile tray for procedure
   - Sterile gloves
   - Fenestrated disposable drape
   - Two sterile bandages to anchor drape
   - Three small-tipped hemostats (mosquito clamps)
   - No. 11 blade
   - Needle holder for suturing (if needed)
   - Iris scissors
   - Adson forceps
   - 2 inches of 4x4 sterile gauze
   - Suture materials (if needed)
   - Splatter control shield (if desired)

Positioning

1. Comfortable position for pt
2. Adequate exposure of lesion

Step-by-Step

1. Clean overlying skin w/povidone-iodine soln
2. Anesthetize overlying skin and tissues to side and beneath cyst w/2 % Lidocaine with Epinephrine
   - Avoid using epinephrine to areas w/little or no alternative circulation
     - Digits
     - Ears
     - Tip of nose, etc

3. Position fenestrated drape and secure in place w/band-aides
4. Using No. 11 blade create a stab incision in center of cyst
    - Put a small-tipped hemostat into cyst
    - Gently open tips and apply compression to allow cyst contents to pass through opening
5. Remove hemostat
    - Use both thumbs to express cyst contents
    - Reinsert hemostat if needed to assist w/passage of sebaceous material
6. Following complete and vigorous expression of cyst contents
    - Reintroduce hemostat into cyst cavity
    - Grasp capsule at base of wound and elevate
    - Gently remove entire sac through small opening
    - Many times can work entire cyst wall up to surface w/thumbs
    - If sac breaks, remove all broken pieces
7. After finishing procedure, inspect wound for complete removal of cyst wall
8. Most small incisions do not require suture closure

Post-Procedure

1. Encourage pt to apply direct pressure to site with gauze for 1-2 hrs
    - Or may use a pressure dressing after procedure is completed
2. Apply antibiotic ointment on site daily until wound is healed
3. Notify pt to report any problems, such as infection or bleeding
4. May shower 36 hrs after procedure
5. If stitches are used, schedule follow-up appt for suture removal

Pearls

1. Use mask, eye protection or splatter shield to avoid splatter on physician while expressing cyst contents
2. Minimal excision technique can be physically demanding
    - Use thumbs to express cyst contents to produce greater pressure
3. Perform a formal excision procedure, if a solid tumor is suspected during minimal excision, and send for pathological evaluation

Complications

1. Difficulty w/expression of cyst wall or cyst contents
2. Cyst wall may break during procedure
3. Infection or hematoma formation

Follow-Up

1. Cysts that do not conform to typical inclusion cyst or that are not cystic at all
    - May require a second procedure to provide a wider margin of excision around original lesion
2. Many physicians prefer to send tissue for biopsy especially if tissue looks atypical
3. Simple epidermoid cysts that appear to be completely excised do not generally require follow up
4. For recurrence, standard excision should be attempted

References

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