Fishhook Removal

Indications
1. Removal of embedded fishhook from non-vital soft tissue

Contraindications
1. Fishhook embedded in vital soft tissue
   - Eye
   - Eyelid

Preparation
1. Materials
   - 1 - Heavy Suture scissor or wire cutter
   - 1 - Needle holder (short)
   - 1 - Kelly clamp
   - 1 - Pack of sterile 4x4 gauze
   - 1 - 5cc syringe
   - 1 - 27 gauge needle

2. Positioning
   - Pt should be either in supine or prone position based on the procedure table and lesion location
   - Use all necessary precautions to avoid further injury to pt, yourself, and assistants
     - Eye protection

Step-by-Step Procedure
1. Discuss procedure with pt and/or guardian
2. Obtain informed consent
3. Inspect hook or ask pt to point out similar one
   - Determine if single, multi-barbed, or treble hook
   - Consider radiography if hook is in proximity to critical structures
   - If the hook is large consider the need for operative removal by surgery
4. If there are uninvolved hooks (treble fishhook)
   - Cut or cover the exposed points and barbs
5. Cleanse skin w/alcohol
6. Administer anesthesia (local or digital block)
7. Prepare site with povidone iodine or Hexachlorophene
8. Assess adequacy of anesthesia
9. Use one or more of the four methods of fishhook removal
10. Inspect wound for debris (i.e. bait) and irrigate
    - Recall: solution to pollution is dilution
11. Updated tetanus immunization if indicated
12. After hook is removed
    - Dress wound with antibiotic ointment and gauze dressing
13. Review wound care, and signs and symptoms of infection with the patient
14. No evidence for the use of systemic antibiotics
   o Some indicate fluoroquinolones in Pts with
     ▪ Multiple chronic conditions
     ▪ Immunocompromise

Post-Procedure
1. Wound care instructions
2. Avoid immersion in water
3. Ok to shower after 24 hours
4. Cover with dry gauze first 48 hours (change daily)
5. Antibiotic ointments daily
6. Avoid sun exposure
7. Scars take up to 6 months to fully remodel
8. Remind patient that you are available to discuss concerns

Methods of Fishhook Removal
1. Retrograde Technique
   o Apply downward pressure on the shank of the hook
   o Back the point out along the line of entry
   o This technique and the string-yank technique cause the least tissue damage
2. String-Yank Technique
   o Tie a string (umbilical tape, 0 gauge suture) at the bend of the hook
   o Apply downward pressure on the shank of the hook
   o Yank (firm quick pressure) on the string
3. Needle Cover Technique
   o Advance an 18 gauge needle along the hook to cover the tip of the barb
   o Remove the hook and needle along the line of entry
   o A #11 scalpel may be used in a similar fashion by making a small incision as you advance the blade along the line of the hook
4. Advance and Cut Technique
   o Classic method
   o Almost always successful
   o Two variations:
     ▪ For single barbed hooks
     ▪ For hooks with multiple barbs on the shaft
       o Single-Barbed hooks
         ▪ Advance the hook as you would a suture needle with the curve of the hook until the barb is through the skin
           ▪ Avoid arteries, veins, and major nerves
           ▪ Stabilize the point with a needle driver or Kelly clamp
           ▪ Using heavy scissors or wire cutters cut the shaft of the hook proximal to the point
           ▪ Remove the shaft of the hook along the point of entry
       o Multi-Barbed hooks
         ▪ Advance the hook as you would a suture needle with the curve of the hook until the point and first barb are through the skin
           ▪ Avoid arteries, veins, and major nerves
           ▪ Stabilize the eye of the hook with a needle driver or Kelly clamp
- Using heavy scissors or wire cutters cut the shaft of the hook proximal to the eye of the hook
- Continue to advance the hook through the skin until removed

**Pearls**
1. Proper pt positioning for site exposure and pt comfort
2. Good anesthesia = pt satisfaction

**Documentation Template**
1. Pt name and date of birth
2. Pre-op diagnosis
3. Post-op diagnosis
4. Surgeon
5. Assistant
6. Anesthesia
7. Procedure
8. Specimen
9. Complications
10. Disposition
11. Details of procedure

**Complications**
1. Bleeding
2. Infection
   - Low rate if wound cleansed well
3. Keloid and hypertrophic scars
4. Poor cosmetic result

**Follow-Up**
1. Follow up if needed only if there are concerns about a developing wound infection

**CPT Codes**
- 10120 Incision and removal of foreign body, subcutaneous tissue, simple
- 10121 Incision and removal of foreign body, subcutaneous tissue, complicated

**Related Illustrations**
1. Fishhook removal
   - Retrograde Technique
   - String-Yank Technique
   - Needle Cover Technique
   - Single-Barbed Hook
   - Multi-Barbed Hook

**References**

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