# Paronychia

## Introduction:

- Paronychia (infection and abscess between the lateral nail fold and nail plate)
- Eponychia (infection and abscess between proximal nail fold and nail plate).

If left untreated, can result in the destruction of the nail bed or develop into a felon (suppurative infection of finger palp), that require another technique for treatment.

## **Etiology:**

*Acute form:* Bacterial such as staph. areus or as a complication of chronic paronychia, by other organism including streptococci, psudomonas, coliform organism and proteus.

Chronic form: fungal infection.

## **Precipitant factors:**

Acute: Local injury or without preceding injury.

*Chronic:* Chronically wet and cold hand, thumb sucking in children, diabetic patient, psoriasis.

# **Equipment:**

- Sterile prep solution
- Needle or size 11 scalpel
- Soap solution
- Sterile gauze packing

# **Treatment:**

#### Acute:

- Superficial: drainage without antibiotic.
- Deeper lesion: broad spectrom antibiotic. (some authoritis recommended removing the proximal one third of the nail plate, especially when it is as a complication of chronic form and recalcitrant cases.)

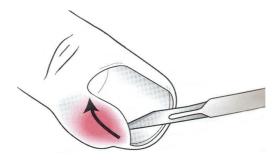
#### Chronic:

- Avoidance of precipitant factors and using emollient. If the condition is likely to fail so medical therapy is provided.

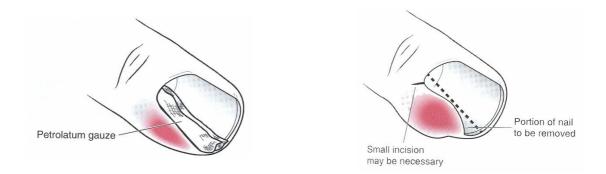
- Topical therapy: steroid, antimicrobial and topical imidazole.
- When features are marked, oral antibiotics appropriate for staph. areus should be used.

## **Technique:**

- 1. Prepare the area with an antiseptic solution.
- 2. Anesthesia is usually unnecessary, except, in large ones with a definite abscess.
- 3. Gently elevate the cuticle of the nail from the nail, using a needle or you can insert the tip of the No. 11 blade into the swollen sulcus of the lateral nail fold or eponychium. This should result in liberation of a small amount of pus.



- 4. Adequately drain the collection.
- 5. If pus has accumulated beneath the nail, remove a small section of nail to allow adequate drainage. Insert a small piece of gauze into the sulcus of the eponychium to prevent adherence of the fold.



- 6. Advise the patient for double daily irrigation in a warm, mild soap solution.
- 7. Antistaphylococcal antibiotics, elevation, & immobilization should be instituted. The patient should have close follow-up to ensure continued improvement and detect complications.

# **Complications:**

- Osteomyelitis of the distal phalanx
- Damage to tissue, digital arteries, nerves, and nail matrix from inappropriate incision
- Chronic paronychia

# **Checklist for Drainage of Acute Paronychia**

 1. Checks patient's name and hospital number

 2. Assembles correct equipment in the tray

 3. Greets and introduces oneself to the patient

 4. Explains procedure and gets verbal consent

 5. Washes hands

 6. Uses mask, gown and gloves

 7. Preps and drapes the site

 8. Elevates naile cuticle with a needle or size 11 scalpel

 9. Drains the collection adequately

 10. Explains double daily irrigation or mild soap bathing

 11. Thanks and listens to patient's questions