Paronychia

Infection - skin around the nail

**Definition**
Paronychia is a superficial infection of the skin around the nails, most commonly caused by staphylococcus bacteria or fungi.

**Causes, incidence, and risk factors**
Paronychia is a fairly common superficial infection of the skin around the nail. It usually results from injury to the area from biting off or picking a hangnail, or from manipulating, trimming, or pushing back the cuticle.

Disorders include:
- bacterial paronychia (caused by bacteria)
- Candida paronychia (caused by a specific type of yeast)
- fungal paronychia (caused by a fungus other than Candida)

Paronychia may include a combined bacterial and fungal infection. Fungal paronychia may accompany fungal nail infection.

Fungal paronychia is common among people with diabetes and among people who have their hands in water for long periods of time.

**Symptoms**
- skin lesion located in the skin around the nail, often at the cuticle or at the site of a hangnail or other injury
- painful
- onset sudden (bacterial) or gradual (fungal, mixed infection)
- may persist (fungal, mixed infection)
- may be acute or chronic
- redness, localized
- swelling, localized
- pus-filled blisters (especially with bacterial infection)
- swelling of the finger or the cuticle
- nail changes
- discoloration
- distorted shape
- detached

**Signs and tests**
The health care provider primarily bases the diagnosis on the appearance of the skin lesion.

**Aspiration** and culture of pus or fluid from the area may reveal the organism causing the infection.

**Treatment**
Treatment goals are to eliminate the infection and relieve the symptoms.

In bacterial paronychia, hot water soaks 2 or 3 times per day reduce inflammation and pain. Topical or oral antibiotics may be prescribed. In severe cases, your physician may cut and drain the lesion with a sharp instrument.

Fungal paronychia may be treated with topical or oral antifungals. The hands should be kept dry, or, topical drying agents such as Castellani's paint should be applied.
**Expectations (prognosis)**
Paronychia usually is superficial and responds well to treatment, although fungal infections may persist for several months. Complications are rare, but they occasionally occur.

**Complications**
- abscess formation
- local spread of infection, including infection of the tendons and bone
- spread of infection to the bloodstream and throughout the body

**Calling your health care provider**
Call your health care provider if paronychia symptoms persist despite treatment.

Call your health care provider if symptoms worsen or new symptoms develop:
- localized spread of symptoms
- development of red streaks along the skin
- fever
- chills
- general ill feeling
- joint pain
- muscle pain

**Prevention**
To prevent paronychia, care for the nails and the skin around the nails properly. Avoid damage to the nails or the fingertips. Do not bite, or pick the nails. Because the nails grow slowly, damage can cause an injury that lasts for months. Protect the nails from exposure to detergents and chemicals by using protective rubber or plastic gloves, preferably with cotton liners.

To minimize the risk of damage to the nails, keep them smooth and trim them weekly. The toenails grow more slowly; trim them about once a month. For fingernails and toenails, use sharp manicure scissors or clippers for trimming and an emery board for smoothing the edges. The nails may be softer and easier to trim after bathing. Trim fingernails with a slightly rounded edge; trim toenails straight across and don't cut them too short.

Do not trim cuticles or use cuticle removers. Cuticle removers are corrosive and may damage the skin around the nail. Trimming the cuticle results in damage to the skin at the base of the nail and allows an entry point for fungi (and bacteria), which can result in infection.