

# CORNS AND CALLUSES



## ■ ■ ■ Description

A corn is a thickening (bump) of the outer skin layer, usually over bony areas, such as toe joints. There are two types of corns: hard corns and soft corns. A callus is a painless thickening of skin caused by repeated pressure or irritation. Corns tend to affect toe joints and the skin between the toes. A callus can appear on any part of the body (especially hands, feet, or knees) that endures repeated pressure or irritation.

## ■ ■ ■ Common Signs and Symptoms

- Corn:
  - A small, tender, and painful raised bump on the side or over the joint of a toe
  - Usually 3 to 10 mm in diameter with a hard center
  - Hard corns most commonly occur along the outer aspect of the fifth toe at the joint
  - Soft corns appear most often on toes between bony prominences (bumps), usually between the fourth and fifth toes or between the second and third toes
- Callus:
  - A rough, thickened area of skin that appears after repeated pressure or irritation

## ■ ■ ■ Causes

Corns and calluses form to protect an area of skin from injury caused by repeated irritation (rubbing or squeezing). Pressure causes cells in the irritated area to grow at a faster rate, leading to overgrowth. Soft corns tend to develop between toes, where moisture exists, often as the result of prolonged shoe wear with perspiration.

## ■ ■ ■ Risk Increases With

- Shoes that fit poorly (particularly too tight)
- Occupations or sports that involve pressure on the hands (racquetball, baseball) or sudden stops on hard surfaces (track, tennis)
- Sports that require the athlete to wear shoes, perspire, or wear clothing or protective gear that causes the production of heat and friction.

## ■ ■ ■ Preventive Measures

- Wear properly fitting shoes and equipment.
- Modify activities that create constant pressure on specific skin areas.
- When possible, wear protective equipment, such as gloves, knee pads, or corn and callus pads, to reduce friction or pressure on specific areas of the body.
- Keep the area between the toes dry (with powder or by removing shoes often).
- Relieve shoe pressure by stretching the areas of the shoe that cause the pressure, and use ointments to soften leather shoes.

## ■ ■ ■ Expected Outcome

Corns and calluses are usually curable if the underlying cause can be eliminated. Allow 3 weeks for recovery. Recurrence is likely even with treatment if the cause is not removed.

## ■ ■ ■ Possible Complications

Pain elsewhere from altered body mechanics (walking or throwing) caused by overcompensation in an attempt to avoid pain or continued irritation.

## ■ ■ ■ General Treatment Considerations

The initial treatment usually consists of the removal of the source of pressure if possible. Using corn and callus pads can reduce pressure on irritated areas. Keeping the areas between the toes dry, including placing cotton between the toes, may help in the treatment of soft corns. Having a shoe repair specialist modify the shoe by pushing out areas of pressure may help. Occasionally a metatarsal bar within the shoe may relieve pressure on corns or calluses on the ball of the foot or on the adjacent toe and foot joints. Peeling or rubbing the thickened area with a pumice stone, sandstone, callus file, or with sandpaper, especially after the affected skin has been soaked, may help remove the corn or callus. Do not cut the corn or callus with a razor or knife; a medically trained person may surgically remove the corn or callus in the office or training room if necessary. After peeling away the upper layers of a corn once or twice a day, it may be recommended to apply a nonprescription 5% to 10% salicylic ointment and cover the area with a bandage. Surgery to remove the bony bumps (at toes joints) is rarely necessary and may cause pain from postsurgical scarring.

## ■ ■ ■ Medication

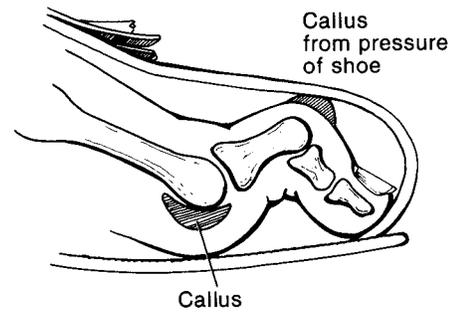
- Nonsteroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take within 7 days before surgery), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed by your physician. Contact your physician immediately if any bleeding, stomach upset, or signs of an allergic reaction occur.
- Topical salicylic ointments (5% to 10%) may be of benefit.
- Pain relievers may be prescribed as necessary by your physician. Use only as directed and only as much as you need.

## ■ ■ ■ Soaks

- Soak the foot for 20 minutes, twice a day, in a gallon of warm water. This may help to soften corns and calluses. Care should be taken to thoroughly dry the foot, especially between the toes, after soaking.

■ ■ ■ **Notify Our Office If**

- Symptoms get worse or do not improve in 2 weeks despite treatment
- Any signs of infection develop, including redness, swelling, increased pain or tenderness, or increased warmth around the corn or callus
- New, unexplained symptoms develop (drugs used in treatment may produce side effects)



**Figure 1**

From DeLee JC, Drez D Jr.: Orthopaedic Sports Medicine: Principles and Practice. Philadelphia, WB Saunders, 1994, p. 1911.

Notes:

(Up to 4400 characters only)

Notes and suggestions