

Corns and Calluses

What's the problem?

A **corn** or a **callus** is an area of hard, thickened skin. These skin changes can occur anywhere on the foot.

How does it feel?

Calluses and corns quite often are due to pressure, which causes symptoms ranging from sharp, shooting pain to dull, aching soreness.

How did this happen?

Corns and calluses form because of repeated friction and pressure, such as a shoe or the ground rubbing against a bony prominence (bump) on the foot. In order to prevent the formation of an open sore or a blister, the skin thickens in response to this pressure. Small amounts of friction or pressure over long periods of time cause a corn or callus to form. Large amounts of friction or pressure over shorter periods of time cause blisters or open sores.

How is it diagnosed?

First, your doctor will conduct a thorough inspection of the areas. They may gently trim some of the thickened skin away in order to rule out a wart. Your doctor may also order X-rays to identify the specific bone problem that is causing the corn or callus.

How can I care for myself?

Do not try to treat yourself if you have diabeties or poor circulation. If you cut yourself, you may cause a wound or trigger an infection. Products such as corn pads and callus removers often have harsh acids that peel excess skin away after repeated application, but they can cause a severe chemical burn. This might lead to infection, wound and greater pain.

- You can begin by washing your feet in warm soapy water and gently rubbing away any dead skin that loosens. You can use a pumice stone, buff bar or emery board to "gently sand or file" the thickened skin, but do this gradually, ideally after each shower or bath.
- Apply a good moisturizer to the hardened areas to keep them softer and relieve pain.
- You can use **non-medicated** corn pads or moleskin (a thin fuzzy sheet of fabric with an adhesive back) to protect corns and calluses, but make sure you remove them carefully, so you do not tear the skin.
 - Do not wear non-medicated corn pads or moleskin for more than a day at a time.

How will my doctor care for me?

Your doctor is the expert in trimming down these areas of thick skin and will often apply comfortable padding to these painful corns and calluses. Special padding devices and materials may be available only from your doctor for your use at home.

Other treatments and recommendations from your doctor include:

- Stop wearing tight or ill-fitting shoes. Also, discontinue use of shoes that are too large as that can cause excess motion and friction which can contribute to callus and corn formation.
- Review all causes of pressure that could be modified, such as changing tight socks.
- Ask for a prescription for a custom-made device called an **orthotic**. This is a
 device you will wear inside your shoes in order to redistribute pressure
 more evenly.
- Use padding or stapping to help decrease rubbing. However, use caution not to add too much bulk in the shoe with this padding as that can make the pain worse.
- You doctor may suggest surgery to remove or correct the underlying bony deformity.

How can I prevent it from happening again?

Often changing your style or size of shoes may help.

- Carefully review the shoes in your closet. Check their fit and discard any
 that have seams and stitching over painful corns or have worn out
 innersoles. These do not have enough protection for calluses on the ball and
 heel of your foot.
- Make sure shoes are wide enough for your feet and have enough depth in the toe area to allow minimal pressure on the toes.

To demonstrate whether your shoes are of adequate size and shape:

- 1. Place your foot on a blank sheet of paper and trace the shape of your foot.
- 2. Then, place the shoe in question on top of your foot tracing. You may be surprised, as are many people, that your shoes are actually smaller and narrower than your feet. Try to imagine the forces present in that shoe when you squeeze your foot into it and then walk at any speed. Ouch!
- Review the socks in your drawer. If they have thick seams at the toes or if there are holes, it's time to go shopping for new ones.
 - Try to choose natural materials such as cotton and wool.
 - Several types of socks (such as Thorlo brand) have a double thickness in the toes and heels to protect these areas.
 - Try nylon hose with a woven cotton sole on the bottom of the foot to offer less friction and more padding.

Disclaimer: This document contains information and/or instructional materials developed by University of Michigan Health for the typical patient with your condition. It may include links to online content that was not created by U-M Health and for which U-M Health does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition or your treatment plan

Author: Crystal Murray Holmes DPM, Michael E. Munson, DPM

Edited by: Karelyn Munro BA

Patient Education by <u>University of Michigan Health</u> is licensed under a <u>Creative Commons</u> Attribution-NonCommercial-ShareAlike 4.0 International Public License. Last Revised 12/2021