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Claw Toes and Hammertoes

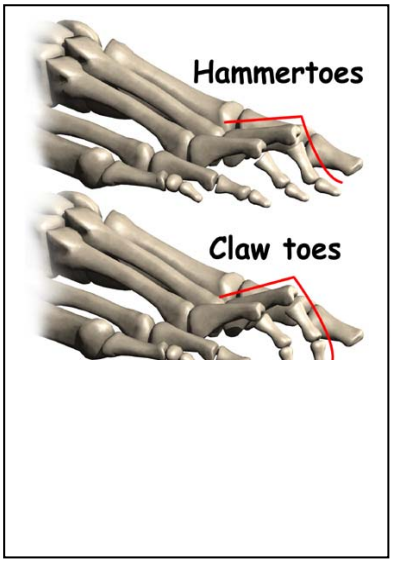
Claw toe and hammertoe conditions are fairly common in cultures that wear shoes
In most cases, these problems can be traced directly to ill-fitting shoes.
Usual problem is callosity which rubs against the shoe causing pain

What part of the toe is affected?

The toes are made up of several bones. Each of the four smaller toes starts with a *metatarsal bone* within the forefoot. Moving down the foot from the metatarsal bone are three smaller bones, called *phalanges*. The first of these small bones is called the *proximal phalanx.* (*Proximal* means closer.) Next comes the *middle phalanx,* and last is the *distal phalanx.* (*Distal* means further away.)

The toe bones connect to form the toe joints.
The *metatarsophalangeal joint* (or MTP joint) is the first joint that connects the toe to the foot.
The ball of the foot is formed by the MTP joints.
The second joint is the *proximal interphalangeal joint* (or PIP joint), and the last is the *distal Interphalangeal joint* (or DIP joint). Each joint is surrounded by a *joint capsule* made of ligaments that hold the bones together
In a hammertoe deformity, the first joint (MTP) is cocked upward, and the middle joint (PIP) bends downward.

A claw toe deformity has a cocked up MTP joint, and both the middle joint (PIP) and the tiny joint at the end of the toe (the DIP) are curled downward like a claw.



Why do I have this problem?

These problems can be the result of wearing a shoe that is too short.
In many people, the second toe is actually longer than the big toe, and if shoes are sized to fit the big toe, the second and maybe even the third toe will have to bend to fit into the shoe. Shoes that are pointed make matters even worse.
Combine pointed shoes with high heels, and the foot is constantly being pushed downhill into a wall with the toes squished like an accordion.
A hammertoe in the second toe is also common in people who have a bunion in the big toe. The big toe angles too far toward the middle of the foot, and the second toe can end up with a hammertoe deformity.

Claw toes are common in people with high arches. And they can come from a muscle imbalance. This type of muscle imbalance can occur from more serious nerve problems.

What does the condition feel like?

Pressure builds in three places:

1. at the end of the toe
2. over the PIP joint
3. under the MTP joint

Assessment

Painful calluses develop as a result of pressure from the shoe.
Examination of sole to check weight bearing area for callus
Deformity of the toe
Check for Circulation of the foot
X ray of the foot

What can be done for the problem?

Nonsurgical Treatment

Early on, simply switching to shoes that fit properly may stop the deformity and return the toes to a more normal condition.

If the condition is more advanced and the toes will not completely straighten out on their own, a *contracture* may exist.

Pressure points and calluses caused by a contracture can be treated by switching to shoes that have high toe box.

Surgery

1. **Joint fusion:**

Through a small incision in the top of the toe over the DIP joint or PIP joint: removed one side of the joint. It is held with sutures (stitches) or a metal pin while it heals.

2. **MTP Joint Release**

If clawing is a problem, then the MTP joint may also have to be released to relieve the contracture of this joint and allow the proximal phalanx to come into the correct position. The toe may be held in the proper alignment with a metal pin until the soft tissues heal. The pin may remain in place for three or four weeks.

3. **Release of tendon**:

Through an incision over the plantar side of the toe, two tendons of toe released

What should I expect after treatment?

A pair of shoe insoles or *orthotics* to correct associated problems, such as high arches.
Recommendations may be given of shoes that have extra depth in the forefoot.

After Surgery

Patients are usually fitted with a *post-op shoe*. This shoe has a stiff, wooden sole that protects the toes by keeping the foot from bending.
Any pins are usually removed after the bone begins to mend (usually at four weeks).
You will probably wear a bandage or dressing for about a week following the procedure.
The stitches are generally removed in 10 to 14 days.

Complications

Recurrence of deformity requiring re-surgery
Infection: requiring antibiotics and sometimes removal of pins