

First (Big) Toe Fusions



Image courtesy of Wright Medical

What it is

When the big (1st) toe has limited movement, up or down, it's often associated with some form of arthritis – either isolated arthritis of the big toe (*hallux rigidus*) or part of a generalized arthritis of the foot (usually rheumatoid arthritis). Sometimes, the joint can be made more comfortable with an appropriate shoe modification. If surgery is required, it is often in the form of a fusion.

Why it's a problem

A big toe fusion will only be done if the arthritis has severely damaged the joint. If *hallux rigidus* is at an early stage, another operation called a cheilectomy is usually advised. [see www.orthoconnect.org for information on spurs/cheilectomy.] The toe may also be fused to correct a severe deformity of the toe, usually a bunion (*hallux valgus*). [see www.orthoconnect.org for information on bunions.] Finally, a fusion may be used to treat problems after the failure of another operation on the big toe, especially if the toe is deformed, weak, floppy or painful.

Surgical treatment

Fusion of the big toe will stiffen the joint at the base (called the 1st metatarsophalangeal or the MTP joint). A cut is made along the side or the top of the toe, and the joint is opened. Any large bony lumps are trimmed. The joint surfaces are prepared to enable the toe to sit in the correct position, fixed together with screws, staples or a small plate. The wound is stitched and a dressing is applied.

Recovery

Following surgery:

- You will have bandages or a dressing to hold your toe in its corrected position.
- You will be instructed on caring for your dressings, and if you can (and how to) walk without disturbing the toe. Most patients can walk after the fusion without putting weight down on the toe. However in certain instances, when your bone is weaker than normal, you may be instructed not to bear any weight. Check with your surgeon before you go home.
- You will wear a special post-operative shoe or removable cast to protect your foot.
- Keep your dressings dry (place a plastic bag on your foot when showering).
- Rest with your foot elevated to reduce swelling.
- Watch for complications. Alert your surgeon or visit an emergency room if you experience bleeding that won't stop, pain that does not subside with prescribed medication, swelling that worsens (or dressings that become too tight – remove them, but visit an emergency room immediately following) after the second day, drainage from the wound, and/or have a fever higher than 38°C or 101°F.

After about 2 weeks, the dressings and stitches will be removed at a post-operative appointment determined by your surgeon. If necessary, you will get a splint or cast on your toe to hold it in position. The splint/cast should stay on for another 4 weeks. If the toe has fused by then, the splint can come off. Otherwise, it stays for about 2-4 more weeks.



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If you have a cast, keep it dry! If the cast gets wet, the skin underneath stays damp and can become mouldy and smelly. To keep your cast dry in the shower, enclose it in a plastic bag, or buy a special cast protector. If the cast and the underlying dressing get wet, contact your surgeon's office or go to your nearest emergency department to get your cast checked.

The main advantage of a fusion is that it's a permanent correction, eliminating the arthritis and pain. The disadvantage is the restriction of movement of the big toe. The stiff joint, however, does not significantly affect the way that you walk. It is important to understand that the fusion will help relieve your pain; therefore, your gait (walking) mechanics will improve, not deteriorate. Typically, you will also be able to exercise, run and wear most shoes quite comfortably. Women with first toe fusions will not be able to wear a very high heeled shoe; but they may be able to occasionally wear a shoe with a 1-inch heel.



For more information: The Canadian Orthopaedic Foundation provides a free booklet, *Foot & Ankle Surgery – Planning For Your Best Results*, which outlines general preparations, complications monitoring, a diary of progress and more. Visit www.whenithurtstomove.org for access, or call 1-800-461-3639 to have a copy mailed to you.

