



FIRST MTP JOINT INTERPOSITION ARTHROPLASTY

SEARCH

WHAT IS A FIRST MTP JOINT INTERPOSITION ARTHROPLASTY?

The first MTP, also called the first metatarsophalangeal joint, is the big toe joint. A first MTP joint interposition arthroplasty is a surgical procedure to treat **arthritis of the big toe**. The treatment can stop pain at the base of the big toe by preventing the surfaces of the bones from rubbing together. It also can preserve some motion in the big toe.

Symptoms

The main symptoms of arthritis are pain and loss of motion at the joint between the big toe and the foot. Your **foot and ankle orthopaedic surgeon** will examine you and take X-rays to determine the extent of your arthritis. If it is severe, this procedure may be an option.

Patients with infection or blood vessel disease should not be considered for this surgery. Young age and poor skin around the joint or large deformities are sometimes barriers to surgery. Diabetics should consult their doctor before this surgery.

Treatment

Your surgeon will make an incision over the first MTP joint and carry it down to the joint. They will then remove the joint surfaces along with a small amount of bone. The remaining space can be treated by placing a sheet of tissue over the bone and stitching it into place to resurface the joint. This material can come from another part of your body, a donor, or a graft made from animal or synthetic materials.

Recovery

After surgery, a gauze dressing and a wrap (such as elastic bandages) are placed over the toe and foot. The joint should be immobilized followed by early motion to prevent stiffness. Physical therapy may be used to improve motion and strength. You should keep their foot elevated as much as possible to reduce swelling. There may be a brief period of time where you should not **put weight on your foot** but in general you will get back to limited walking within a few weeks of your surgery. Stitches generally are removed after 10-15 days, depending on the condition of the skin. Patients are encouraged to wear a hard-soled shoe during recovery.

Risks and Complications

All surgeries come with possible complications, including the risks associated with anesthesia, infection, damage to nerves and blood vessels, and bleeding or blood clots.

One of the most frequent complications of first MTP joint interposition arthroplasty is failure to relieve pain or preserve motion. Another complication is rejection of the tissue placed in the gap, which may require further surgery. Other less common complications include pain at the base of the second toe, delayed wound healing, recurrent deformity,



Image of the first MTP interposition arthroplasty procedure. The surgeon places a graft in the big toe joint to prevent the worn out surfaces from rubbing together.

bony overgrowth, disintegration of bone around the graft, implant displacement, instability of the joint, and injury to the nerves of the big toe.

If the surgery is not successful, joining the two bones of the big toe joint (a **first MTP joint fusion** procedure) is the recommended treatment.

When can I return to work?

It depends on the physical requirements of your work and your individual pain tolerance. When you can tolerate pain without pain medication and you can walk without assistive devices you can return to a sedentary occupation (desk work, etc.). For more physically strenuous occupations, it could take 12 weeks or more to safely return to work. You and your **foot and ankle orthopaedic surgeon** can decide when it is right for you to return to work.

Can I play sports after first MTP joint interposition arthroplasty?

Strenuous physical activity such as running, jumping and rock climbing is thought to lead to early failure of the procedure. Light activity, such as walking and cycling, can be performed after the initial healing without significant risk of early failure. Again, this is a matter to be discussed with your foot and ankle orthopaedic surgeon.

Will first MTP joint interposition arthroplasty improve my range of motion?

It is unlikely that you will regain more motion than you had prior to surgery.

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