Hallux Rigidus

Explanation:
Hallux Rigidus is characterized as degeneration of the 1st metatarsal-phalangeal (MTP) joint, otherwise known as arthritis of the great toe. This results in pain and limited range of motion through the involved joint. Pain is often aggravated by activities which create motion through the 1st Metatarsal-phalangeal (MTP) joint. Symptoms can range from pain with brisk walking or squatting to a constant ache or night pain. Swelling and crepitus can also accompany these symptoms. Hallux rigidus can be congenital or acquired as a result of improper shoewear, obesity, trauma, excessive levels of intense physical activity, or inflammatory arthritis such as gout, psoriasis, or rheumatoid arthritis. The first line of treatment may be an orthotic with a rigid portion underneath the great toe called a morton’s extension. The purpose of a morton’s extension is to restrict the motion through the 1st MTP joint. Non-steroidal anti-inflammatories may also be beneficial for symptomatic relief. If conservation treatment fails, then surgery is the next option.
Procedure:
The type of surgery performed depends on the patients’ complaints as well as the extent of arthritis noted on x-ray. If the joint space is well preserved but there is noted bone spurs (osteophytes) restricting motion and causing impingement, then a cheilectomy will be done. This involves removal of the osteophytes thus decompressing the joint. If there is moderate arthritic changes in addition to bone spurs and well preserved motion, then a crescentic oblique basilar resection arthroplasty (COBRA) is performed. A COBRA consists of resecting the arthritic bone and placing temporary pins across the joint maintain some motion.

Cheilectomy

COBRA

Fusion

If there is extensive arthritis noted, than a first MTP fusion is necessary. Arthritic bone is removed from the joint to create a healthy bleeding bone surface for fusion. A screw is placed to secure the fusion and will remain in the foot. A pin will also be placed across the fusion site and will be pulled at 6 weeks.
Pre-surgical Considerations

All patients will have a pre-operative medical evaluation arranged either through your primary care provider or through pre-admission testing at Froedtert. Anti-inflammatory medications (i.e. ibuprofen, aspirin, plavix, or celebrex) need to be stopped seven days prior to surgery. You will be contacted the day prior to your scheduled procedure regarding the exact time of your procedure and required arrival. Please be punctual. If you are not contacted by 3:00 PM, please call (414) 805-3285 for procedures being done at Froedtert’s main OR or (414) 805-9500 for procedures at Sargent Outpatient Surgery Center.

Following surgery you will be unable to place weight on your surgical extremity thus pre-operative planning is essential. Prior to surgery, an appointment with a physical therapist will be made for instructional use of crutches or a walker as their use will be required post-operatively. The device will also be fitted to your height during this appointment. The crutches or walker will be issued at that appointment or arrangements will be made to obtain the device or arrangements will be through a medical supply company approved by your insurance. Some patients may opt to use a Roll-a-bout or wheel chair. These devices can be obtained through your local medical supply store. Please contact the office (414-805-7442) with the medical supply store of your choice and a prescription can be faxed in. Regardless of the modality used to maintain your non-weight bearing status, please practice in your home prior to surgery as repetition will reduce the risk of falls post-operatively. Removing throw rugs and clearing wider pathways through your home will also make navigating with crutches or walker easier and diminish the risk of falls.

During the period when strict elevation is required (the first ten days) you will need help with activities of daily living such as laundry, cooking, and cleaning. Please plan ahead and consider having friends or family stay with you. Driving is contraindicated during the acute post-operative recovery phase and may be prohibited for a longer period of time if your right foot requires immobilization. Showering will also be difficult during the recovery phase as you are unable to place weight on the surgical leg and the cast/dressing needs to be kept clean and dry. Consider the use of a shower chair and/or hand held shower head. You will need to protect the leg by leaving it outside the shower as well as using bags or a plastic cast sleeve (brochure available in cast room) to ensure dressings remain dry.
Postoperative Visits

Day 0-10
- Outpatient procedure: Patients may go home the same day.
- Anesthesia: A regional anesthetic at the level of the ankle (Ankle block) will be administered pre-operatively creating numbness in the foot for intra-operative and post-operative pain control. Intravenous sedation will be administered intra-operatively for relaxation.
- Dressings: Following the procedure, a soft dressing will be applied to the foot. This dressing is to be kept clean, dry and left in place until you return to clinic.
- Non-weightbearing: To ensure optimal surgical results, you will be unable to bear weight on your operative side. The use of crutches or walker is required. Heel weightbearing may be allowed for balance only. Post-operative shoe should be worn for transfers or when patient is out of bed. You are not required to wear the shoe when in bed. Activities are strictly limited during this time.
- Elevation: Strict elevation above heart level (toes above the nose) for the first ten days is important to your recovery as it helps to minimize pain and swelling. Swelling can adversely affect the soft tissue by placing increased tension on incisions putting them at increased risk for dehiscence.
- Pain Control: Pain medications will be prescribed to be used as needed. Pre-Operative nerve blocks can last between 8 to 12 hours; however, waiting to take pain medication until the block has completely worn off can result in increased breakthrough pain which can be difficult to manage. Please plan accordingly and take your medication promptly when sensation begins to return to the foot usually indicated by a tingling sensation in the toes or mild discomfort at the surgical site. Pain medications may be taken on a scheduled basis in the early post-operative recovery phase as this is when the pain is most intense.

Day 10 – First Post-Operative Visit
- Non-weightbearing radiographs and Suture removal if minimal swelling.
- If a Cheilectomy was performed then you will be allowed to advance weightbearing to the front of the foot over the next 2 weeks in a post-op shoe. You can advance to a sneaker if comfortable weightbearing in post-op sandal. Physical therapy will be incorporated to help with range of motion through the joint.
- If a COBRA or 1st MTP fusion was performed, a repeat dressing is applied and only heel weightbearing is allowed. Applying weight to front of foot will bend pins resulting in difficult pin removal or possibly suboptimal surgical results. Continue with limited activities. Repeat dressings will be applied bi-weekly until week 6.

Week 6
- If a Cheilectomy was performed, you can advance to a sneaker if not already done so. Advance activities as tolerated.
- If a COBRA or 1st MTP fusion was performed, pins will be removed and weightbearing X-rays are obtained. Allowed to advance weightbearing to front of foot in post-op shoe over the next 2 weeks. May wean into sneakers when
comfortable with weightbearing in post-op shoe. Physical therapy will be instituted for gait training and rehabilitation with limitation

**Scar Management:** Steri-strips, which were placed over the incision following suture removal, will gradually fall off between week 6-8. Do not pull at these; you may trim the loose edges. Once the Steri-strips have fallen off, you may massage Vitamin E oil or Mederma into the incisions twice a day. Silicone gel strips should also be used in conjunction with the other scar management modalities. These can be obtained from the cast room.

If any questions arise, please contact the office at (414) 805-7442 between 8:00 am and 4:30 pm Monday through Friday. Leave your number and message, Dr. Marks, Jamie, his physician assistant, or Mary S., his nurse, will return your call.