

Guide to Surgical Success
The Lapiplasty® Passport
Coastal Maine Foot and Ankle
Barry M. White, DPM FACFAS

*This Passport is intended to be used from your first consultation visit until your last post-operative appointment. Please use this as a reference for contact information, frequently asked questions, and other details regarding your Lapiplasty® surgical procedure. It is also expected that you bring this booklet with you to **every** subsequent visit to review instructions, and to review any questions you may have since the last visit.*

COASTAL
MAINE
FOOT & ANKLE



The 11 Golden Rules

1. **ICE, ICE, BABY:** Apply two 1-gallon bags of ice to the foot and ankle with another bag of ice behind your knee (for a total of 3 1-gallon bags of ice). Perform this icing technique for 40-45 minutes, 6-8 times daily. Dressings are to remain dry while icing.
2. **ELEVATION:** “Toes ABOVE the nose”.
3. **DO NOT REMOVE YOUR SURGICAL DRESSING:** Keep it clean and dry. You are not permitted to use any topicals, ointments, creams, or salves of any kind, even after your dressing is removed in clinic. NO rubbing alcohol or peroxide on then wound AT ANY TIME.
4. **ASPIRIN:** Taking this post-operatively helps prevent blood clots from forming.
5. **DIETARY RECOMMENDATIONS:** Please. See The Foot & Ankle Surgical Candidate Nutrition Guide (found on page 5). These diet instructions can help you heal more quickly.
6. **AVOID ALL NICOTINE:** This includes second-hand exposure.
7. **PAIN MEDICATION:** You will receive ONE prescription postoperatively with NO REFILLS. NO EXCEPTIONS. Celebrex[®], Mobic[®] and Extra Strength Tylenol[®] are non-narcotic pain medication that can help after your narcotics are finished.
8. **DO NOT TAKE THE ADVICE OF OTHERS:** Listen ONLY to Dr. White and Staff at Coastal Maine Foot and Ankle.

9. **COMMUNICATION IS KEY:** Call our office/contact us immediately for problems such as:

- A fever of 101°F or greater
- Experiencing severe pain in the calf or behind the knee
- Experiencing excessive drainage
- Developing a rash
- Dressings become wet and/or soiled
- Severe Pain
 - If you need urgent medical attention, please call 911, or go immediately to the Emergency Department

10. **WEIGHT-BEARING STATUS:** You will be **fully weight-bearing as tolerated** while in your Aircast Walker after your 1st POV.

11. **DRIVING:** Driving is not recommended while you are taking prescription narcotics. You should not drive until you are medically cleared to do so by our clinic. This is typically around the 3-4 week post-operative visit.

Surgical scheduler- **Tammy Brown 207-888-3640, 8am-4pm, M-T.** This is to be used mainly for surgical scheduling issues, but can also be used during the day to deliver messages to us

Medical Assistant- **Laura Miller 207-888-3640, 8am-4pm, M-W.** This is to be used as a secondary contact for concerns of casts, dressings, appointments, or to speak directly to the medical assistant.

If at any point during your recovery there is an urgent need please contact Dr. White on his cell phone at 207 751 3970. If he does not answer or respond to your call within 20 minutes please call again. If there is no response after another 20 minutes and there is an urgent need please go directly to the Mercy Hospital Emergency Department or closest urgent care facility.

Nutrition Guide

We recommend initiating a high protein, low carbohydrate intake diet. We also recommend starting the following supplements preoperatively:

SUPPLEMENT	REASON
Multivitamin- 1 daily	Supports overall body function
Supplemental Vitamin C- 2,000 IU once daily	Antioxidant that supports the immune system and nerve health
Additional Vitamin D – 2,000 IU once daily	Necessary for building and maintaining strong, healthy bones
Protein supplement – i.e. Ensure Max protein shake. (30 grams twice daily)	Supports decreased healing time and prevents loss of skeletal muscle

Foods to decrease: candies, cookies, sweets of any kind, bread, potatoes, cereal, rice, pasta, alcohol, sugary beverages.

Foods to increase: meats, beans, nuts, peanut butter, fresh vegetables, increased water intake.

If you have diabetes: Check with your primary care provider before starting the protein supplement. An alternative and lower sugar content supplement might be Glucerna shakes.

If you have kidney disease: check with your nephrologist before starting the protein supplement.

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If you have any of the following, there may be extra requirements before surgery:

- Are over 55 years old
- Diabetes
- Nicotine dependence
- History of DVT/PE
- Cardiac history
- Pain medication addiction
- Are taking a blood thinner
- History of gastric bypass/gastric sleeve/lap banding
- Rheumatoid arthritis

Below are the pre-operative protocols required to be deemed an eligible foot and ankle surgical candidate:

- Diabetic of any age: Medical clearance by PCP. Hemoglobin A1c of **less than 7.0 within 1 month**
- Nicotine use or exposure (second-hand smoke, vape, chew, snuff): Medical clearance by PCP. **Must be nicotine free for a minimum of 6 weeks prior to surgery.** Nicotine testing will be required at history and physical visit as well as preoperatively.
- History of DVT/PE: Lovenox arranged by PCP pre-op
- Cardiac history: cardiac clearance by cardiologist
- On oral blood thinner: Alternative of Lovenox needs arranged by PCP preoperatively
- Rheumatoid arthritis: all RA medications stopped preoperatively

- Pain medication addiction: Have pain clinic contract and plan by pain management
- History of gastric surgery: Nutrition status evaluated by pre-operative Albumin blood level

Pre-operative Medication Recommendations:

Medication	When to stop prior to surgery
Coumadin	7 days
Plavix	7 days
Pradaxa, Xarelto, Eliquis	7 days
Anti-inflammatories (Advil, aspirin, Naproxen, ibuprofen)	7 days
Aspirin (Excedrin, Alka-Seltzer)	7 days
OTC supplements (garlic, Gingko, St. John's Wart, Fish oil, Omega 3 fatty acids)	14 days

Pre-operative Skin Care:

- Wash with anti-bacterial soap (or chlorhexidine) both the evening prior to and the morning of surgery.
- Do NOT scrub vigorously. Skin irritation could result in cancelling your surgery.
- Do NOT apply creams, lotions, or oils to skin the morning of surgery.
- No open wounds may be present the day of surgery.
- No rashes around surgical site.
- Remove nail polish
- No healing abrasions present at time of surgery

What to Do the Day Before Surgery:

- Find out your arrival time at the hospital. **The surgery center will call you prior to surgery. Your arrival time will be approximately 1 hour before your surgery.**
- Know what NPO means- Do not eat or drink anything 8 hours before your arrival time –**EVEN WATER**- unless otherwise instructed by anesthesia. This also includes chewing gum, candies, etc.

What to Do the Day of Surgery:

- What to bring to the hospital:
 - Do not bring any valuables to the hospital (jewelry, credit cards, etc.)
 - Friend/family member to drive you home and stay with you for a minimum of 24 hours. This is hospital policy.
 - Bring this Passport with you to the hospital.
 - Updated medication list with dosing to review with pre-op staff.

Discharge Instructions:

- You may have a low-grade fever (below 100.5°F)
- You will be given a prescription pain medication at the time of discharge. Use this as prescribed to stay ahead of pain prior to your nerve block wearing off. You will only be given one prescription, as we DO NOT provide refills. If you are finished with the script given, you are to transition to Extra Strength Tylenol®.
- Steps for swelling control should be initiated immediately with ice and elevation. Severe swelling can cause very serious wound complications and pain.
- Nicotine use and second-hand exposure is prohibited as a foot and ankle patient.
- Dressings are to remain on at all times. Your dressings are placed in the operating room under sterile conditions. This is to be kept clean and dry. If your dressings get wet, you must contact us ASAP.
- Take all post-operative prescriptions as prescribed (aspirin, Vitamin D, Celebrex®)
- You are to be Non -Weight bearing immediately after surgery.
- Continue following the nutrition guide. (Page 5)

What To Expect at Your Follow-up Appointments:

Visit 1; ~1 Week Post-op, Dressing Change

- Xrays
- Dressings will be changed
- Aircast will be fit and dispensed
- Emphasis on Ice and Elevation

Visit 2; 3 Weeks Post-op, Suture Check

- Your dressings will be removed.
- Xrays
- Sutures will be removed
- Compression stockings
- Range of motion of the great toe will be demonstrated.
- Swelling and incision check will be performed.

Visit 3; 6 Weeks Post-op

- Swelling and Incision check will be performed
- Xrays
- Compression stockings
- Discussion involving Physical Therapy

Visit 4; 8-9 Weeks Post-op, Transition to FWB

- You may be released to wear a supportive athletic shoe.
- Power Step inserts will be Fit and dispensed
- Xrays

Visit 5; 12 weeks Post-op, Continued Healing Imaging

- Xrays
- Transition to presurgical activities other than high impact activities such as running /jumping

Visit 6; 16 weeks Post-op, Full Recovery

- Xrays
- Transition to unrestricted activity
- Possible Casting for Custom orthotics

Visit 7; 6 Months Post-op

Final Follow-up
Xrays

Please use this page for any questions to be addressed at your 1st post-operative visit.

Please use this page for any questions to be addressed at Post-operative visits:

Frequently Asked Questions

Who is my Surgeon

- **Barry M. White, DPM FACFAS**
 - Board certified Foot and Ankle surgeon
 - Foot & ankle specialist
 - Lapiplasty Centurion Surgeon with over 200 cases
 - Owner of Coastal Maine Foot and Ankle
 - Has practiced here in Maine since 2004
 - Surgical Residency Training at Graduate Hospital, PA
 - Medical Degree from Temple University
 - Undergraduate Degree from Springfield College

COASTAL MAINE FOOT & ANKLE

What is a bunion and why does my foot hurt?

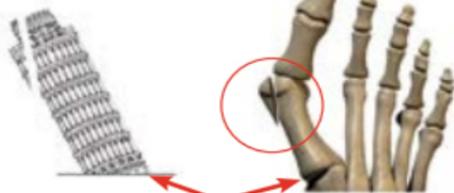
A common misconception is that a bunion is simply an overgrowth of bone that can be "shaved off"...

In reality, bunions are complex deformities caused by an unstable joint



A bunion is a "corner" between the toe bone and the foot bone (metatarsal) that forms as a result of an inherited problem with the instability of the metatarsal.

1 Shaves Bump



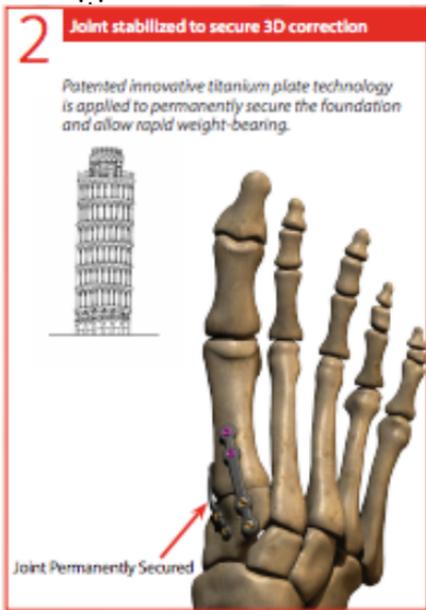
Unstable Foundation
(Root of problem is not corrected)

What is traditional bunion surgery?
Traditional bunion surgery is cutting the

metatarsal bone and shifting it to make it look as if the bump (“corner”) is gone. However, the unstable joint in the foot remains and, therefore, traditional bunion surgery fails up to 70% of the time.

What is Lapiplasty®?

Lapiplasty® is a patented surgery designed by Dr. Santrock and 3 other surgeons across the nation. It uses 3D technology to correct the bunion at the unstable joint. This puts the bones back into the most normal anatomic



The unstable joint is secured with a patented titanium plate to permanently secure the fusion in place. This allows rapid post-operative weight-bearing.

What are the results of Lapiplasty®?

Success of Lapiplasty® has shown potential to far exceed the results of traditional bunion surgery. Our published research shows a 97.3% success rate with Lapiplasty®.

What are the possible surgical complications with Lapiplasty®?

Aside from the normal risks of bleeding, infection, and damage to other tissues, you should be aware that Lapiplasty® is a bone procedure that comes with the risk of malunion, nonunion, hardware breakage, stiffness, and pain.

How long does my hardware stay in post-operatively?

The hardware is designed to be permanent. There are very rare instances that we would recommend removing the hardware.

Am I too young or old for Lapiplasty®?

Lapiplasty® is approved for patients as young as 14 years old, so long as the growth plates of the bones are closed. There is no upper age limit; however, sometimes, older patients with bunions may have developed arthritis with the bunion, and this might change the type of Lapiplasty® offered to you.

Is Lapiplasty® covered by insurance?

Lapiplasty® surgery is for a true orthopedic condition and is most frequently covered by most private and government insurances.

Do I need to be put to sleep for surgery?

Usually, yes. Most patients get a “lighter” anesthesia where you are asleep, but wake up more gently.

What is general anesthesia?

With general anesthesia, you are unconscious and have no awareness or other sensations. There are a number of general anesthetic drugs. Some are gases or vapors inhaled through a breathing mask or tube and others are medications introduced through a vein.

You will be provided with medications through your IV to help sedate you in the operating room and prevent pain and anxiety.

During all types of anesthesia, you are carefully monitored, controlled, and treated by your anesthesia care team. When you are under general anesthesia a breathing apparatus will be placed to maintain proper breathing during this period. This will plan on being removed prior to your anesthesia being reversed and regaining consciousness.

Will surgery be painful?

All surgery causes pain. We do everything we can to help with the pain. **You will receive a local block in the surgical area and will likely wake up in the recovery room without any discomfort. You will also receive a Rx for pain medication prior to surgery (usually Percocet or Oxycodone) and will be instructed to supplement this with NSAID medications such as Celebrex or Mobic. Additionally, the**

application of Ice and continuous elevation will also help considerably with pain control.

How long will my surgery take?

Usually 1.5-2 hours, depending on your deformity.

How long will I be in the hospital the day of surgery?

Lapiplasty® is a same day surgery. You will go home the same day.

What if I live alone?

Post-Procedure Recovery and Discharge:

Patients must be recovered in an area where personnel with the skill and qualifications to recover patients are in attendance. When the patient meets the discharge criteria listed for recovering from sedation, the patient may be discharged to regular hospital patient care management or home when appropriate.

If a patient is discharged to home the following must occur:

1. Patient and accompanying responsible adult must demonstrate understanding of all written and verbal discharge instruction.
2. The patient and accompanying responsible adult are to be provided with resource contact telephone numbers in the event problems arise after discharge.

All post-operative visits are at Coastal Maine Foot and Ankle in Yarmouth. Address is 45 Forest Falls Drive, Yarmouth ME.

Where should I go for an emergency outside of my scheduled visits?

If you have an emergency that is unable to be addressed during office hours through Coastal Maine Foot and Ankle, please seek care at the Mercy Hospital Emergency Department or closest urgent care facility. Please ask that the attending physician attempt to Contact Dr. White with any questions.

When will I be able to walk after surgery?

We will have you walking in a protective boot after your initial POV. The boot is to be worn for an average of 8 weeks.

Will I need to use any assistive devices (wheelchair, walker, cane, etc.) after surgery?

Crutches or a Knee walker will be necessary during the first week of recovery.

When can I drive?

Driving is not recommended while on pain medication. Following surgery on your right foot, returning to driving may be as short as a few weeks if you are comfortable.

There are studies to suggest that it might take as long as 6 weeks to be able to hit the brakes effectively following surgery. You will need to use your best judgment. We do not advocate wearing the boot on the right foot while driving.

When will I return to work after surgery?

Patients' time returning to work differs by each case.

Generally, most patients return to work somewhere between 2 and 8 weeks. We recommend returning no sooner than 2 weeks to focus on swelling control.

Will I need physical therapy post-operatively?

Some patients will require PT and others will not. This will be discussed during the 3rd POV.

What about physical activity and sports postoperatively?

After recovery, we are hopeful that you can return to your normal activities, including sports. If all is well you will be released with no restrictions at your 4 month post-operative visit.

What if I am considering surgery on my other foot?

We recommend no less than 12-16 weeks between surgeries.

How long will my swelling last?

Swelling is common after all foot surgeries. It is not unusual to have some swelling for 9-12 months.

What about my surgical scar?

Fortunately scars of the foot are very forgiving and if treated well, will fade to almost invisible by 1 year in most cases. It is important in the first year that you do not get suntan or sunburn to your foot and to use sunblock. This prevents pigmentation of the scar.

What is Zip® Surgical Skin closure by ZipLine Medical? Zip® is a new type of stitch that looks and functions just like a zip tie. They allow for better healing and are removed (painlessly) at the second postop visit.

What is an EVENup™?

EVENup™ is an orthotic shoe lift that is used for compensating temporary leg length discrepancy to avoid pain in the back, hip and/or knee due to uneven gait when walking with a CAM boot. It is used on the opposite shoe of surgery. (Page 42)

Pain Medication Protocol

- Prescribers can only prescribe a limited amount of opioids.
 - Prescribers in a non-emergency setting may not issue an initial opioid prescription for more than a 7-day opioid supply. The dosage must be at lowest effective

dose as determined according to the prescriber's judgment.

Consent to Treat with Opioid Medications

"I understand that these medications will not cure my condition, but are used to try to control my pain, there is absolutely no guarantee that these pain medications will improve my condition.

I understand that opioids could worsen my condition by masking symptoms or other unknown reasons. I understand I should not drive, operate heavy equipment, take sedative medications, or drink alcohol when taking opioid medication.

I understand that these medications may interact with medications I use for my medical problems and I will notify caregivers immediately of any changes in my medications used for other medical problems."

Smoking & Second-Hand Exposure

The chemicals in cigarette smoke cause many changes to the way the body handles oxygen. It limits the amount of oxygen that is able to be carried throughout the body. It also makes blood vessels narrow, making it more difficult to carry blood and oxygen to tissues. Smoking also makes blood thicker, making it more difficult to flow through narrowed blood vessels. Overall, with less oxygen, the body has a more difficult time healing the skin where the surgery is performed.

If surgery involves the bones of the foot or ankle, smoking may prevent the bones from healing, which is called a nonunion. Current research shows that smokers may have anywhere from 2 to 10 times the risk of wound problems and/or nonunion after surgery.

Smoking has also been shown to make it more difficult for your body to fight off an infection after surgery. Chemicals in cigarette smoke limit the activity of infection-fighting cells called neutrophils. Smokers have been shown to have up to 4 times the risk of infection after foot surgery than nonsmokers.

Research in other areas of the body shows that if you quit smoking before surgery, your risk of complications goes down. Stopping nicotine use/exposure as little as 6 weeks prior to surgery significantly lowers the chance of having a postoperative complication.

Diabetes and Hemoglobin A1c

To be an elective foot and ankle surgical candidate, your preoperative hemoglobin A1c must be less than 7.0. Elective foot and ankle surgery is unique in that the foot is one of the most distal, and the most gravity-dependent portions of the body. Strict control of your diabetes is necessary in order to minimize complications of surgery.

At an A1c level of 7.0, there is likely no physiologic damage occurring, and therefore the patient is best prepared to heal from elective surgery.

A study performed over a 6-year period analyzing patient's recorded hemoglobin A1c measurements within 1 year before undergoing elective foot and ankle surgery. For each 1% increase in hemoglobin A1c, the odds of developing a complication increased by 5%. Complications in this study were classified into 4 groups, including: infection, wound healing, mechanical failure, cardiovascular/pulmonary, and wound healing.

****Domek, N., Dux, K., Pinzur, M., Weaver, F., & Rogers, T. (2016). Association Between Hemoglobin A1c and Surgical Morbidity in Elective Foot and Ankle Surgery. *The Journal of Foot and Ankle Surgery*, 55(5), 939–943. doi: 10.1053/j.jfas.2016.04.009**

EVENup™

EVENup™ is an orthotic shoe lift that is used for compensating temporary leg length discrepancy to avoid pain in the back, hip and/or knee due to uneven gait when walking with a CAM boot.



EVENup™ comes in 4 sizes (S-M-L-XL) and fits either the left or right shoe.

For ordering information, you can contact:

OPED Medical, Inc. dba Evenup

5256 Bellewood Court Ste 400

Buford, GA 30518

Toll free: (800) 334-1906

Or visit www.evenupcorp.com

Toeless Compression Socks

I recommend my patients obtain this sock to be used at the beginning at week 3-4 post-op. Swelling control is vital for a good outcome. The sock should be continued until all swelling is controlled or eliminated. The timeframe for the need of the sock varies greatly from patient to patient.

The materials are Lycra and Nylon. The compression is graduated to the "sport" level of 10-20mmHg.



Teaching and Consultant Status Disclosure

Please be aware that Dr. White is a consultant and researcher for Treace Medical. He is an innovator and consultant for this company; therefore these products are often used in the operating room.

- Treace® Medical Concepts, Inc. (Lapiplasty®)

Disclaimer About This “Passport”

This passport is designed for the average Lapiplasty® patient. As with all surgeries, all patients heal differently. You may experience minor or major deviations from what references are shown.

Helpful Websites

www.alignmytoe.com

www.treace.com/lapiplasty

www.Coastalmainefootandankle.com

