H. Morton Bertram III, M.D.
Total Joint Replacement Surgery

Surgical Optimization pre-operative phase

To decrease your complication rate and to maximize your surgical outcome we would recommend the following Timeline be closely followed prior to surgery.

As Soon As Possible after your Surgery has been recommended and or scheduled we recommend that you start the following program to prepare you for surgery:

1. If you are on a blood thinner such as Plavix, Eliquis, Xarelto, Pradaxa or Coumadin, please call our office for specific instructions on when to stop those medications prior to surgery.

2. All herbal and diet supplements should be stopped. A lot of these preparations are not cleared by the Food and Drug Administration. They have impurities in them, which cause abnormal and sometimes paradoxical reactions to anesthesia. So, any and all herbal supplements should be stopped prior to surgery. Vitamins are recommended but only those without any vitamin E, so you must be careful and check the label to make sure that they do not contain any vitamin E. Vitamin E is a potent blood thinner and will cause increase bleeding. Vitamin C, and Vitamin D are fine to continue up to and through surgery. Fish oil, including Lovaza, is also a very potent blood thinner and should be stopped at least two weeks prior to surgery. If you have questions, call us.

3. It is highly recommended prior to any joint implant surgery that you see a dentist to make sure that they can clear you with regards to any possible cavities in your teeth or potential tooth abscesses as these could secondarily infect your joint replacement. Infection in a joint replacement is something that is to be avoided at all costs.

4. Make sure to get your preoperative screening labs done as soon as possible after surgery is recommended. We need to make sure that you are as healthy as you need to be to have safe surgery. Your risk of all complications will be decreased if these labs are normal.

5. Start Vitamin D supplementation. It is recommended to take 50,000 IU per week. This will improve your White Blood Cell function and decrease your risk of infection. Our data reveals that a large percentage of patients are Vitamin D deficient. This increases your risk of infection.

6. Start taking Vitamin C. The best preparation is an over the counter product called “Emergen-C”. Take one packet mixed in water daily up until surgery. This product is excellent as a preparation for surgery. It contains the correct amount of Vitamin C, B Vitamins, Zinc and Chromium. These all help to prepare your body for surgery and improve your immune health and your ability to heal.

7. If you have a history of anemia, take a “Prenatal” vitamin once daily. This is over the counter. The iron in this will help to improve your blood count.

4 Weeks Prior to Surgery do the following:

1. It is extremely important that you stop all over-the-counter anti-inflammatory medications one month prior to surgery- two weeks is adequate, but one month is better. This includes any anti-inflammatories sold over-the-counter, most prescription anti-inflammatory drugs as well as aspirin. Tylenol is safe and of the anti-inflammatories that are safe, Celebrex does not have any anti-platelet effect and is safe to continue taking
right up to and even through surgery.

2. **Get an appointment for your Pre-Hab evaluation.** This will identify any weaknesses you may have with regards to your physical function and optimize your ability to recover quickly from your Joint Replacement surgery.

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### 2 Weeks Prior to Surgery do the following:

1. **Two weeks prior to surgery you should start to take a Probiotics diet supplement.** The rationale behind this is that we see an increasingly common problem called *Clostridium difficile*. This is due to the fact that a large portion of the population are on proton pump inhibitor medications and these cause a decrease in the normal bacterial flora in your intestines, which are needed to keep your immune system healthy. Some people are prone to this anyway, particularly the elderly, and they do not absorb nutrients in a normal fashion. By taking these Probiotic supplements you will improve the health of the bacteria in your colon and your intestines and therefore improve your immune system health. This will help you to fight off this complication, which is very serious. It is not unusual for people to lose up to 10 to 20 pounds when they get sick and have severe diarrhea with this problem. So, the best way to avoid this is to add this supplement to your daily diet. There are several preparations available over the counter at the local large supermarkets, or pharmacies, **Dr. Bertram recommends “Align”, or “Florastor”. These are available over the counter at any pharmacy, your local Grocery Store or Target.**

2. **It is extremely important that you stop drinking alcohol two weeks prior to surgery.** We know that people that drink alcohol regular basis have a decreased white blood cell function, decreased function of their immune system, and decreased platelet function. These combine to increase infection risk and increase risk of bleeding during and after surgery. Any bleeding problems during surgery have a resultant effect of making you more anemic and increasing your chances of having wound drainage, which will increase your chance of a wound infection. Therefore, anything we can do to avoid anemia and blood loss during surgery is taken very seriously. Also, alcohol withdrawal symptoms are not uncommon and associated with significant problems, not the least of which is a small mortality rate. So, stopping alcohol and being honest with your surgeon is of the utmost importance. If you need help with that, you need to delay your surgery so that we can get you free of alcohol, or at least two weeks prior to surgery and one month would even be better.

3. **Start on Protein Supplement drinks with each meal.** Readily available brands are Boost High Protein and Ensure Plus. This will help you to recover faster after surgery. One drink three times daily is ideal. Ensure Max Protein has 30 grams of protein per bottle. Two of these shakes per day will be enough.

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### One Week Prior to Surgery do the following:

1. **We also recommend that the patient shower with an antibacterial soap starting one week prior to the surgery.** We recommend “Hibiclens” soap. This may be purchased at any pharmacy. In most good total joint replacement programs, they provide the patient with enough soap to shower the night before or even two days before, **but there is literature to suggest that there is a logarithmic kill rate for the bacteria on your skin. The longer you shower with this prior to your surgery, the lower the bacterial count on your skin.** My recommendation is one week prior, and this includes all body parts, especially your perineal area and groin, but not your hair on top of your head. It is recommended to use a new washcloth and new towel with each shower. Do not share a towel with your spouse or partner.

2. **Mupirocin Ointment will be given at your preop visit.** This is an ointment you will put in
your nose twice each day prior to surgery. This will decrease the bacterial count in your nose, which is where some patients are colonized with MRSA. Using this ointment prior to surgery has been shown to decrease infection rates. We will tell you how to use it prior to surgery when we give you the prescription.

If the patient will follow these recommendations to the letter, we will have done everything that we can do to prepare you for the surgery short of a complete medical evaluation. These are things that anyone can do, anyone can follow, and will impact in a positive way the outcome of your operation. Should you need further clarification on this, feel free to give our office.