



AVATAR
Same Day Surgery

**TOTAL JOINT
REPLACEMENT
SURGICAL PROCESS**

A.V.A.T.A.R®

(Alignment of **Vital Assets To Accelerate Recover**) is a revolutionary method designed to expedite the recovery process for patients who have undergone total knee, hip, or shoulder replacement surgeries. By leveraging the latest advancements in surgical technologies, **A.V.A.T.A.R®** effectively manages all the essential components (the **Vital Assets**) involved in a patient's journey from pre-operative evaluation and physical preparation to anesthesia, surgery, rehabilitation, and final recovery.

The **A.V.A.T.A.R®** Joint Replacement

WHAT IS IT? Faster recovery and rehabilitation for patients who would prefer to go home with close monitoring and intensive physical therapy. Patients are able to demonstrate that they are ready and safe for discharge to home within a few hours after surgery.

HOW? With new anesthetic techniques and minimally invasive surgery an overnight hospital stay is unnecessary for appropriately selected patients. The use of non-narcotic pain relievers, regional anesthesia (nerve blocks) and medication to limit blood loss make it possible for patients to be dressed, walking, doing stairs and heading home within a few hours after surgery.

WHO ? Healthy, motivated individuals who don't require a hospital stay to manage other health problems. After surgery, patients have to demonstrate that they are sufficiently recovered to be functional and safe at home. Patients are cleared for discharge to home by an experienced physical therapist, nursing staff and Surgeon. A total joint coach/ support person must be available to drive the patient home and spend the night after surgery

LESS PAIN Pain is the major factor limiting rapid rehabilitation after total joint surgery. We cannot make surgery “pain-free” however by making surgery less invasive, by limiting the use of general anesthesia, and by enhancing our use of regional nerve blocks and longer-lasting local anesthetics (Exparel), rehabilitation and the return to normal activity can be accelerated. We still believe in the adage “no pain- no gain” and will encourage patients to push themselves maximally despite discomfort.

Oral pain relievers are still necessary. **An individualized postoperative medication schedule will be developed for each patient using multimodal medications to limit the use of narcotics.**

PREPARATION

A stepwise plan starts 4 weeks before the date of surgery. Our office will facilitate this plan for you. This includes :

Scheduling laboratory testing and a medical clearance visit with your Primary Care Physician. Your PCP may want you to have further testing or consultations with other doctors.

PRE-HAB : Prior to surgery some patients may have an appointment with physical therapy for instruction on preparatory muscle and joint exercises. Following this exercise program will be your responsibility and will help you get ready for surgery and introduce you to your outpatient physical therapist.

HOME PHYSICAL THERAPY: A preoperative visit from a home physical therapist will be ordered by our office. This is to help ensure a safe environment, orientation for family and other caregivers, rehearsal of the rehabilitation protocol at home. Our office will help select the agency and send the referral.

You should have a walker, crutches and a cane available. There are many community resources where these are available at little or no charge. Each community may have different resources, such as the Rye Lions club , Kittery Lions Club, Care Pharmacy in Rochester, Keene Medical Portsmouth, Rite Aid pharmacies etc. *Please remember to bring your walker on the day of surgery

For knees, a CPM machine will be delivered to your home by SurgiCare. Our office will initiate the request. SurgiCare will call to arrange the delivery. They tend to deliver the machine 1-2 days prior to your surgery. You will be fit to the CPM and instructed on use. Practice a few times prior to surgery to become familiar with the machine. SurgiCare's phone number 1-888-291-8901 should you need to reach them.

Hips and shoulders don't require a CPM machine.

Your Surgeon's office may direct you to educational videos they want you to watch prior to your surgery.

ORTHOPEDIC PREOPERATIVE VISIT

You will have a pre-operative visit at your Surgeon's office approximately one week before surgery. This is to review the information from your

appointment with your PCP and answer any questions.

- A medication schedule will be developed and reviewed with you. Prescriptions for postoperative medications will be given so that you may fill these ahead of time.
- You will also need to have, Prilosec 20 mg, Tylenol 500 mg, enteric coated aspirin 325 mg, and you may want to have stool softeners and laxatives on hand.
- Let your surgeon's office know if you have motion sickness or have had difficulty with nausea after other surgery. They may want to prescribe something in advance to help reduce the chance you will feel sick after your knee replacement.

Preoperative medication:

- **STOP** taking anti inflammatory medications one week before surgery. This includes Aleve, Advil, ibuprofen, Motrin, voltale, and others. If you have any questions call your Surgeon's office. You may continue taking aspirin if you are already on aspirin.
- **START** taking Tylenol 1000 mg three times a day beginning 3 days before your surgery date. **DO NOT TAKE TYLENOL THE MORNING OF YOUR SURGERY.** You will receive IV Tylenol on the day of your surgery.
- Starting 5 days prior to surgery, wash with Hibiclens when you shower (available over the counter at your pharmacy). This is to reduce the bacterial count on your skin. Leave the Hibiclens on your skin for 5 minutes before rinsing it off.

SURGERY

One or two days prior to your surgery, you will receive a call letting you know your arrival time. No food after midnight the evening before your surgery. You may drink water until 4 a.m. the morning of surgery. Nothing to eat or drink after 4 a.m. We encourage patients to hydrate for several days prior to surgery. This helps reduce feeling dehydrated after surgery and symptoms that may go along with that, such as dizziness, low blood pressure. It would also be a good idea to be mindful of your diet the week prior to surgery. Healthy foods including protein and good carbohydrates will help with energy, stamina and healing.

Pre-op Suggestions

Remove nail polish the day before surgery

Consider making meals ahead of time and freezing

Consider clean sheets on your bed for optimum hygiene

Try to rest well the night before surgery

THE DAY OF SURGERY: Please be patient as delays are not uncommon. Bring a book to read. Upon arrival there will be an evaluation by the nurses, the Anesthesiologist and your Surgeon. Once your IV is started you will have regional anesthesia (nerve blocks) and a spinal anesthetic. You will also receive preoperative IV antibiotics. Surgery is about 2 hours in length.

Following surgery you will be in the PACU, (post anesthesia care unit) you may have something to eat and drink. Your vital signs will be monitored and pain managed. You will be evaluated for your ability to move safely while the nerve blocks are wearing off. You will work with an experienced physical therapist for safety transferring from sit to stand, safety with walking and practice stair climbing. Your vital signs will continue to be monitored. Feeling weak immediately after surgery is normal, pace yourself, rest when you need to.

GOING HOME DAY 1 – Your total joint coach, (support person) will drive you home and be with you overnight. You can be up walking with assistance, going to the toilet, and doing stairs.

- Be safe, take it easy, pace yourself, remember you have just had surgery. Stay hydrated, eat moderately if you feel well.
- Use the CPM machine as much as possible (all night and 8 hours

throughout the day) for the first 2 weeks to never allow the knee to become stiff.

- **Begin taking Aspirin 325 mg every 12 hours every day to prevent blood clots and continue for six weeks. The Aspirin dosing may vary for individuals. Follow the medication schedule developed for you, to stay ahead of the pain.**

HOME Day 2 -

- **Dressing and drain(knees only) remain in place, If drain falls out NO PROBLEM) continue to pace yourself, stay hydrated and nourished.**
- **You will be seen by a home physical therapist who will help assure that you acquire excellent range of motion, strength, and function.**
- **Continue with scheduled medications. For knees only, continue frequent and regular use of the CPM machine. (*time and time again the most satisfied patients after knee replacement have achieved range of motion early on in the process)**

HOME Day 3 –

- **Home physical therapy**
- **Drain (if present) and dressing removal, incision may be open to air or covered with dressings provided. Incisions must be covered for showers for 10 days.**
- **No bathing/ pool or hot tub until you have seen your surgeon 3 weeks after surgery. Your incision has been closed with absorbable suture and steri strips. Blisters beneath the steri strips are not unusual, no treatment is needed, do not intentionally**

break/ pop the blisters.

- Steri strips will fall off over time. Redness and local reaction to the absorbable suture material can occur. Call office for any incisional drainage or wound concerns. Photos from your cell phone are helpful for evaluation.
- Continue CPM and home exercises per your therapist
- Continue scheduled medications/ avoid constipation

HOME Day 4-

- If the incision is dry, you can shower with the incision covered. Remove the wet dressing after showering and recover or leave open to air/ your preference.
- Cover wound with a dressing for showers for 10 days. Do not immerse the incision for three weeks until reviewed by your surgeon .

PAIN MEDICATIONS (and other medications)

There are several different “classes” of pain receptors in your body. You will be prescribed non-narcotic medications that target these different receptors. By hitting more than one class of receptor the pain relief is

enhanced. By following the multimodal medication protocol / medication schedule, that was developed for you, the medications work synergistically...more effectively

Aleve 2 pills (inflammatory receptor) is taken twice daily with food. Or ibuprofen including Advil or Motrin 2-3 tablets 2-3x/ daily with food

Tylenol 1000 mg (“central” receptor) is taken 3 times per day (perhaps at 7 am, 2 pm and 9 pm)

Tramadol 50 mg. (opioid receptor) is taken every 6 hours (perhaps at 7 am, 2 pm and 7 pm and 12 am) occasionally you can take an additional 50 mg for “breakthrough” pain every 6 hours. Do not take more than 400 mg of Tramadol in 24 hours. **some patients are not given RX for tramadol due to contraindication with one of their regular medications

Aspirin 325 mg is to prevent blood clots (not for pain) and should be taken twice daily for six weeks unless you are taking some other anticoagulant such as coumadin, Eliquis, Plavix etc. . The Aspirin dosing may vary for individuals.

Oxycodone 5 mg is a narcotic that is taken for more severe “breakthrough” pain if needed. You can take 5 mg -10 mg every 4 hours if pain level is greater than 6

Zofran is commonly used to treat nausea and vomiting if this occurs

Prilosec 20 mg daily to protect your stomach while taking these medications

You may need over the counter products to help avoid constipation

HAVE REASONABLE EXPECTATIONS

Though we make every effort to give people a new joint replacement that functions at a very high level and feels comfortable, it is important to remember that this is still a metal and plastic replacement. It is not the normal joint provided by nature. It may feel tight, it makes noises, it has some limitations and it may feel a bit artificial. The artificial joint will also impact the surrounding muscles, tendons, ligaments and other soft tissues. This is normal.

We also try to make the surgical experience as pleasant as possible. However, this is NOT PAIN-FREE surgery. Pain is normal and we work with you to control it as much as possible. However, if you are not having pain, we are probably not pushing you hard enough in your rehab. The speed of recovery varies a lot from person to person. Some are very fast, some are very slow but most people are in-between. We will work with you no matter where you fit or who you are.

FAQ'S and post surgical recommendations

If you feel that you are faced with a life threatening emergency such as severe chest pain, severe shortness of breath, signs of symptoms of a heart attack or stroke call 911 and go directly to the emergency room. For all other emergencies call your Surgeon's office.

PAIN **Expect pain** after total joint replacement. Pain may increase about 30 hours after surgery when the adductor canal nerve block wears off and then again in 2-3 days when the Exparel wears off. We recommend that you take scheduled medications as outlined to stay ahead of the pain. Call the office with questions about pain.

NAUSEA is a common side effect of anesthesia and surgery. It may also be a side effect of constipation. It may also be a side effect of your medications.

SAFETY take care not to trip or fall. Move carefully and deliberately, use your walker, crutches or cane as instructed on. Use proper techniques on stairs to avoid falling.

BREATHING keep your lungs expanded by deliberately taking deep breathes and coughing

FEVER temperatures up to and even above 101F is normal in the first few days after surgery. It does not require antibiotics. Call the office if you're experiencing fevers, sweats, or chills or have concerns

CONSTIPATION is common with pain medications and must be avoided. Take a stool softener (such as Dulcolax) the day before surgery and continue throughout the first few days after surgery. Do not go for more than two days without a bowel movement. Laxatives are recommended, Metamucil, milk of magnesia and MiraLAX

DIZZINESS and LIGHT-HEADEDNESS due to anesthesia, fluid loss, pain medications IS COMMON. Arising suddenly, rapid movements, and dehydration should be avoided. Initially move in stages and see how you

feel, stay hydrated with water or electrolyte drinks such as Gatorade, Powerade, Pedialyte, these are readily available in grocery stores

DRAINAGE AND WOUND PROBLEMS . If the drain (if present) becomes disconnected from the reservoir, just reconnect it. If the drain falls out of your leg...DO NOT try to reinsert it. This is not a problem for you. The drain should be removed after two days **It is not a problem if the drain falls out before this.** There may be some bleeding through the dressing in the first 24 hours. The dressing can be reinforced with new dressing material. Once the dressing is removed the wound should be dry except for blisters that may have formed under the Steri-Strips. These will resolve by themselves. Call your Surgeon's office if there is any bleeding or drainage from the incision or excessive **LEG SWELLING** or calf pain. Elevation of the lower extremity above the level of the heart will reduce the swelling. Pump your ankles up and down to decrease swelling and help reduce risk of blood clots (DVT).

NUMBNESS WEAKNESS The nerve blocks are intended to reduce pain and will produce both numbness and weakness in the leg. The nerve blocks wear off in 1-3 days. Some permanent numbness of the skin is normal around the incision.

CLICKING Total joint replacements are made from hard durable materials and you may feel or hear clicking with motion.

DIET you can consume a normal diet and are encouraged to eat foods that avert constipation

DRESSINGS a bulky dressing can be removed on day 3. An island dressing, coverlet, or large Band-Aid can be applied after that before showering. It may be removed after showering.

SHOWERING AND BATHING You can shower on day 3 with the incision covered after the bulky dressing has been removed. Remove the wet

coverlet after showering and bathing. Do not immerse the incision in a bathtub or hot tub or pool for 3 weeks or until cleared by your surgeon's office.

DRIVING You may drive when you feel safe and have discontinued any pain medications that can cause impairment

Office: Dr. King and Dr. Parsons 603-431-5858

Stratham Ambulatory Surgery Center 603-772-2076

Portsmouth Hospital 603-431-5110

Surgicare (CPM Machines) 1-888-291-8901

Places to borrow or rent walkers:

American Legions and Lions Clubs in your area

American Legion Newmarket: 1-603-659-3155

Kittery Lions Club: 1-207-439-3378

Rye Lions Club: 1-603-964-8128

For Maine residents only: York Maine Community Closet 1-207-363-2510

Rentals: Care Pharmacy in Rochester 1-603-332-4281