



ORTHOPEDIC INSTITUTE *of* SANTA BARBARA

TOTAL KNEE REPLACEMENTS

FREQUENTLY ASKED QUESTIONS (FAQ's):

1. **What type of joint components does Dr. Gallivan use?**

- | | |
|---|--|
| a. Total Knee Arthroplasty: | Stryker Triathlon Knee |
| b. Robotic Unicompartmental Knee Arthroplasty | Stryde Implant or Smith & Nephew Knee |
| c. Metal Allergy Patients Total Knee | Zimmer NexGen Knee |

These components are made of high-grade metal alloys (nickel, chromium, and cadmium), and high-grade cross-linked polyethylene plastic.

Stryker knee replacements are different than traditional knee replacements because they are designed to work with the body to promote easier motion,^{1,2,3} and a study has shown a more rapid return to functional activities after surgery.² This is due to the *single radius design* of the knee implant. Single radius means that as your knee flexes, the radius is the same, similar to a circle, requiring less effort from your quadriceps muscle.^{1,4,7}

Dr. Gallivan specializes in **minimally invasive total joint replacements**. This equates to a smaller incision, less blood loss, reduced hospital stays, decreased complication rates, and quicker recovery times.

For more info, reference: www.AboutStryker.com, or our website: www.GallivanMD.com.

2. **What approach/technique does Dr. Gallivan use?**

Dr. Gallivan uses a **quadriceps sparring/mini-mid vastis** approach for Total Knee Arthroplasties and Unicompartmental Knee Arthroplasties.

Dr. Gallivan uses **computer-guided navigation** to achieve optimal alignment of the lower extremities. This is analogous to tire alignment in the automobile industry. Using infrared technology to communicate positioning of the bones and joint angles to a computer, technical cuts are then made with increased precision to within a fraction of a degree, resulting in improved alignment, better wear of the prosthesis, and improved function.

Dr. Gallivan uses **Bluebelt Robotic Navio** for his partial (unicompartmental and bicompartamental) Knee Arthroplasties. Robotic Navio is an advancement in the way orthopedic surgeons can perform partial knee replacement. Using state-of-the art computer controlled technology, the system works with the surgeons skilled hands to achieve precise positioning of the knee implant for consistently accurate results. The Robotic Navio allows for less invasive and more accurate resulting in less post-operative pain, quicker rehabilitation, lower risk of complications and smaller incisions.

William R. Gallivan, Jr. MD

Santa Barbara Office 320 W. Junipero, Santa Barbara, CA 93105

Solvang Office: 2040 Viborg Rd Ste 230 | Solvang, CA 93463

Phone: 805-220-6020 | **Fax:** 805-284-0085



ORTHOPEDIC

INSTITUTE *of* SANTA BARBARA

3. **Am I a candidate for Partial (Unicompartmental) Knee Replacement?**

While total knee replacement is the most common surgical treatment for advanced osteoarthritis of the knee. Dr. Gallivan will determine whether partial knee replacement is right for you. If so, there is a new robotic technology for partial knee replacements allowing osteoarthritis sufferers to return to the activities they love. Partial knee replacement involves only replacing the diseased part of the knee. If Dr. Gallivan determines you are a candidate for a partial knee replacement maintaining your own ligaments and normal compartments often results in a more natural feeling knee.

4. **How long is the incision?**

The incision for a total knee is about 4 to 5 inches long and smaller for unicompartmental knees. Normal puckering of the scar may occur. Mederma may be applied to the scar for aesthetic reasons and can be purchased at most pharmacy/drug stores.

5. **How long will I be in the Hospital?**

The majority of our patients undergoing a total joint replacement only stay in the hospital for **ONE NIGHT** and are released to go home the following day. We do require that the patient has someone to help out at home during the first week post-operatively. If you have special concerns and need to stay more than one night, please address these concerns with Dr. Gallivan and staff.

6. **What type of anesthesia will be used?**

Dr. Gallivan prefers to use **spinal anesthesia**. Therefore, the patient is numb from the waist-down for the surgery and feels no pain, but may be awake during the procedure. This helps with recovery. If necessary, a sedative may be used in conjunction

7. **Should someone be with me at home after surgery?**

Yes, Dr. Gallivan recommends someone stay with patients for 7 days or until the patient has demonstrated adequate independence and stability.

8. **When can I walk again?**

Our patients are encouraged to walk within three hours of surgery with full weight-bearing status.

9. **What type of anti-coagulation is used after the surgery to prevent blood clotting?**

- a. For Total Arthroplasty Patients: Aspirin (Enteric Coated) 325 mg twice per days is used for approximately 30 days post-operatively.
- b. For patients taking a blood thinner such as Coumadin or Xarelto, we will speak to your primary care provider prior to surgery. For these patients, Coumadin (Warfarin) may be used for approximately 2-3 weeks post-operatively. We will monitor the INR values twice per week via a blood test. At that point we will transfer the medication monitoring back to your Primary Care Provider or Cardiologist.

William R. Gallivan, Jr. MD

Santa Barbara Office 320 W. Junipero, Santa Barbara, CA 93105

Solvang Office: 2040 Viborg Rd Ste 230 | Solvang, CA 93463

Phone: 805-220-6020 | **Fax:** 805-284-0085



ORTHOPEDIC INSTITUTE *of* SANTA BARBARA

- c. Please let us know if you are using any of the following medications *at your pre-op appointment*: aspirin, ibuprofen, other NSAIDs, Coumadin (Warfarin), Pradaxa, Lovenox, Heparin, Vitamin E, Vitamin K, or Fish Oil.

Reference

Raphael IJ, Tischler EH, Huang R, Rothman RH, Hozack WJ, Parvizi J. Aspirin: an alternative for pulmonary embolism prophylaxis after arthroplasty?. *Clin Orthop Relat Res.* 2013;472:482–488

American Academy of Orthopaedic Surgeons. "Statins may lower blood clot risk following joint replacement surgery." AAOS, 11 March 2014. <http://www.aaos.org/news/acadnews/2014/AAOS19_3_11.asp>.

10. What is the recommendation for antibiotic prophylaxis for dental procedures?

Avoid any routine dental cleaning or non-urgent procedures for 6 months post-operatively. For all patients with a total joint replacement (knee or hip), each time the patient visits the dentist for any procedure, including dental hygiene (cleanings), the patient is required to take an antibiotic one hour prior to the procedure. This is currently recommended for life. Please inform us of any dental issues.

11. I have a history of skin infections. Is this a problem?

Part of your pre-operative testing will include special swabs to see if you are a carrier of staphylococcus bacteria. If you test positive, you will need to scrub from the chin down, once daily for 5 days prior to your surgery with an over-the-counter *Hibiclens wash*. You will also need to apply *Mupirocin (Bactroban)* ointment to each nostril twice per day for 5 days prior to your surgery. A prescription will be provided. **ALSO NOTE, if you or your partner or spouse has a history of skin infections, you will be prescribed the Hibiclens wash and Mupirocin ointment.**

12. Will I need physical therapy/rehabilitation?

Yes! Each patient will need to work with their therapist on range of motion, strengthening, and balance several times per week for a few months. The physical therapist is a very important part of your team and your recovery.

13. How long will it take to recover?

The typical patient will be walking the day of surgery, with a walker, provided by the hospital. Most patients are fully weight bearing on the replaced joint. Most patients rapidly progress to using a cane with physical therapy, and then to normal walking. Some patients recover quickly, in a matter of several weeks, but total recovery can take 4 to 6 months, or longer.

14. Is there any special equipment or clothing I will need?

- After the surgery, while in the hospital, the patient will wear **T.E.D. Anti-Embolism Hose Compression Stockings** from the feet to the thighs on both legs. This helps with swelling and helps to prevent dangerous blood clots. The T.E.D. Hose need to be worn all day, every day until both legs are the same size, which takes about 1 month.
- After a *total knee arthroplasty*, patients will also require **Pneumatic Sequential Compression Devices (SCD's)** to wear 18 hours per day every day for 2 weeks to help prevent dangerous blood clots. If your insurance does not cover the pneumatic SCD's, they are offered at a discounted price

William R. Gallivan, Jr. MD

Santa Barbara Office 320 W. Junipero, Santa Barbara, CA 93105

Solvang Office: 2040 Viborg Rd Ste 230 | Solvang, CA 93463

Phone: 805-220-6020 | Fax: 805-284-0085



ORTHOPEDIC INSTITUTE *of* SANTA BARBARA

- of \$150/week from the supply company. The pneumatic SCD's are analogous to wearing a seatbelt in a car ride to improve safety.
- c. Most patients will require use of a walker in the post-op period, and then progress to a cane, then independent ambulation at a variable rate. Using bike gloves may reduce hand pain while using a walker.

15. How long will I wear the bandage after the surgery?

You need to wear the **Acticoat** bandage/dressing for approximately 1 week after total joint replacement surgery. We will remove it in the office at your post-operative visit. This is a special post-operative, occlusive, waterproof dressing with silver anti-bacterial properties. *Do not remove it at home unless instructed to do so by a provider in our office or if water becomes trapped in the dressing.*

16. When can I shower after total joint surgery?

You may shower 2 days after your operation, if no drainage is present at the incision. You will be wearing the **Acticoat** occlusive and waterproof dressing that protects your incision from the shower, as described above. If the incision gets wet, pat it dry.

17. What are good positions for my knee? Are there certain positions I should avoid?

You should spend some time each day working on straightening your knee (extension) as well as bending your knee (flexion). A good way to work on extension is to place a towel roll underneath your **ankle** when you are lying down face-up, on your back. A good way to work on flexion is to sit on a chair or stationary bicycle and bend your knee. *Avoid using a pillow behind the knee for any length of time.*

18. When do my stitches or staples come out after total joint replacement surgery?

Your stitches are absorbable and do not need to be removed. The steri-strips that have been applied can be kept in place until they fall off on their own. They will help keep the skin edges together. If they have not fallen off by 3-4 weeks, it is OK to peel them off. If you have staples, they should be removed 1- 2 weeks post-operatively in the office.

19. When can I drive after a total joint surgery?

If you have had surgery on your right knee, you should not drive for at least 6 weeks after total joint replacement surgery. After 6 weeks, you may return to driving as you feel comfortable. If you have had surgery on your left knee, you may return to driving as you feel comfortable as long as you have an automatic transmission and are off pain medication. Be careful getting into and out of a car, and avoid crossing your operated leg over the other. **DO NOT DRIVE IF TAKING NARCOTICS.**

20. When can I travel after total joint replacement surgery?

William R. Gallivan, Jr. MD

Santa Barbara Office 320 W. Junipero, Santa Barbara, CA 93105

Solvang Office: 2040 Viborg Rd Ste 230 | Solvang, CA 93463

Phone: 805-220-6020 | **Fax:** 805-284-0085



ORTHOPEDIC

INSTITUTE *of* SANTA BARBARA

You may travel as soon as you feel comfortable after total knee replacement surgery. It is recommended that you get up to stretch or walk at least once an hour when taking long trips. This is important to help prevent blood clots.

21. Will I set off the security machine at the airport after a total joint replacement? Do I need a doctor's note about my surgery?

You may set off the machines at airport security, depending on the type of knee implant you have and the sensitivity of the security checkpoint equipment. A wallet card or letter is not helpful or required to travel.

22. Can I drink alcohol after a total joint replacement surgery? What about smoking?

If you are on Coumadin, avoid alcohol intake. Otherwise, use alcohol in moderation at your own discretion. You should also avoid alcohol if you are taking narcotics or other medications.

Of course, you should not smoke at all, as this jeopardizes the healing and success of your total joint replacement and significantly increases risks of complications. This includes marijuana.

23. Can I go up and down stairs after a total joint replacement surgery?

Yes. Initially, you will lead with your non-operated leg when going up stairs and lead with your operated leg when going down stairs. You can use the phrase, "*Up with the good, down with bad*" to help you remember. As your leg gets stronger, you will be able to perform on stairs in a more regular pattern.

24. What should I eat the day of the surgery?

Nothing! Please do NOT eat or drink anything after midnight, the day prior to your surgery. If you take medication, such as blood pressure medication, you may take your pills with a small sip of water.

25. What about ALLERGIC REACTIONS?

Please let Dr. Gallivan and his staff know if you have any **ALLERGIC REACTIONS** to any *medications or metals/jewelry*. Let us know *when* you had the reaction and *what type* of reaction (e.g. 1999 Penicillin: rash, shortness of breath, hives, trouble swallowing, etc).

26. Will I have any numbness after the surgery?

Following a Total Knee Arthroplasty, it is normal to have some *localized numbness* lateral to the surgical scar (just to the outer half of the knee). The sensation may improve over time. Most patients get used to the numbness and are able to live with it.

27. When can I swim?

You can swim when your surgical wound is healed and there are no scabs. This varies from patient to patient.

28. How long will my knee feel warm?

William R. Gallivan, Jr. MD

Santa Barbara Office 320 W. Junipero, Santa Barbara, CA 93105

Solvang Office: 2040 Viborg Rd Ste 230 | Solvang, CA 93463

Phone: 805-220-6020 | **Fax:** 805-284-0085



ORTHOPEDIC

INSTITUTE *of* SANTA BARBARA

Your total knee replacement will typically feel warmer than the other side for up to a year as the tissues continue to heal. Please let us know if you experience any unusual drainage, increased redness, severe pain, fevers, chills or sweats.

29. What will my range of motion (ROM) be after the total knee arthroplasty?

We anticipate your knee to have a normal ROM of 120 to 130 degrees after 4-6 months of recovery and physical therapy. The knee requires a minimum of 115 degrees of flexion to perform normal activities of daily living, such as climbing stairs. At 6 weeks post-op, the minimum ROM should be 90 degrees. **Your knee may click after having it replaced. This is normal as it is made of metal alloy and plastic. The clicking should not be painful.**

30. Can I dance again? Yes!

31. Why can't I take NSAIDS such as Ibuprofen (motrin/advil) or Naproxen with Aspirin? According to the U.S. Food and Drug Administration (FDA), ibuprofen/naproxen (non-specific COX inhibitor) can interfere with the anti-clotting effect of aspirin, potentially making the aspirin less effective.

Aspirin works by inhibiting platelet aggregation; thus, working as a blood thinner decreasing the risk of blood clots post-operatively. Aspirin binds to the COX-1 Enzyme.

Ibuprofen (active ingredient in Motrin and Advil) and Naproxen work as an anti-inflammatory by binding to both the COX-1 AND COX -2 Enzymes. As a result, when Ibuprofen is taken concurrently with aspirin, the COX-1 enzyme can be blocked thereby reducing the anti-clotting effect as intended.

However, CELEBREX DOES NOT BIND TO THE COX-1 ENZYME. CELEBREX DOES NOT INTERFERE WITH ASPIRIN'S ANTIPLATELET AFFECT. For this reason, we use Celebrex concurrently with aspirin and NOT NSAIDS such as Ibuprofen and Naproxen post-operatively. Celebrex is also less likely to cause stomach problems such as ulcers.

01/05/15.RHN

William R. Gallivan, Jr. MD

Santa Barbara Office 320 W. Junipero, Santa Barbara, CA 93105

Solvang Office: 2040 Viborg Rd Ste 230 | Solvang, CA 93463

Phone: 805-220-6020 | **Fax:** 805-284-0085