

Mark S. Sanders, MD FACS

Certified by the American Board of Orthopaedic Surgery
Certificate of Added Qualification in Orthopaedic Sports Medicine
Fellow of the American Academy of Orthopaedic Surgeons
Fellow of the American College of Surgeons

THE EIGHTEEN COMMANDMENTS OF HOW TO SURVIVE AFTER SURGERY

1. Thou shall stay calm and be patient. Orthopaedic surgery involves the synchronous services of many individuals. These individuals include, but are not limited to, an Orthopaedic surgeon, an anesthesiologist and/or a Certified Nurse Anesthetist, two Registered nurses, an assistant surgeon or licensed surgical assistant, one or two surgical technicians, many times a technical surgical equipment representative, and finally a patient. Any delay in the arrival of any of the aforementioned individuals will delay the start of the procedure. These delays occur because earlier surgical procedures, even performed by a different surgeon, at a different institution may take longer than expected, and, particularly in Orthopaedic Surgery, compound fractures take precedence over elective surgery. Any operation that is not started at 7.30 AM can be expected to be delayed one to three hours on average. It's a lot like flying from Houston to Dallas on a rainy summer day. The flight only takes a short time but you can wait all day on the tarmac before the flight is given clearance to take off. Since it is not considered good medical practice to offer sedatives prior to short time before a patient is brought into the operating room, we recommend that patients should expect a considerable delay and bring a good book or laptop with them to help kill the time.

Visits to the clinic also take up time. Usually there are other patients there, and often times a wait in the X-ray department. If that's not bad enough, Doc sometimes seems so busy that you may not think you have had enough time for him to answer all your questions. However, all your questions are important and they need to be addressed. Doc's cell phone is 713-907-6076. His personal email is sandersclinic@comcast.net You are more than welcome to call or email him at any time regarding the questions relating to your condition that you forgot to bring up or weren't clear on during the Clinic visit. Administrative questions are best handled by Beth or Norma. For billing questions call our billing office at 713-622-3576.

2. Thou shalt stay calm and be brave. Issues come up from time to time. They are always quickly resolved. Over 95% of our patients will ultimately enjoy results rated good or excellent, with the vast majority rated as excellent.

DR. SANDERS' COMMANDMENTS DOCUMENT

3. Thou shalt limit your activities. Those who have had knee surgeries are best to spend the majority of their time in bed with the knee straight and a pillow under their heel, and NOTHING BUT AIR under the knee, elevating the foot 8 inches (measure with a ruler) above their heart. **Dave, one of our rider/patients from Colorado came up with a great idea after we did his second ACL reconstruction. He said to put the mattress on the floor and position the coffee table at the foot of the bed. This way the heels can rest on a pillow placed on the coffee table. That will certainly keep the limbs elevated and the knee straight.**

Those that have had shoulder surgery will be most comfortable sitting up as much as possible. An operated hand or foot should be elevated 8 inches above the heart. In the early periods after upper extremity surgery, no lifting, pushing, or carrying of anything heavier than a Coke can in that hand is allowed until you are instructed to start doing more.

4. Thou shalt do the exercises. Those that have had knee surgery need to do the simple cannonball exercises that they have been instructed to do. They should be done five times during the five minutes every hour that the water in the Cryocuff is being changed during the hours that you are awake. Those that have had shoulder surgery can just chill as far as exercises are concerned the first night. Those that have had hand surgery need to make a full fist and release as much as possible.

5. Thou shalt not fear blood. Expect bloody drainage through the dressings. Sometimes it looks like a lot of blood and can frighten the uninitiated. Do not change them. Leave them alone. The purpose of the dressing is to absorb the blood that comes out over the first few days. Blood that is in the dressing is far better than blood that remains in the tissues which will lead to excessive swelling, stiffness, bruising, and pain. Remember Commandment number 2.

6. Thou shalt drink Gatorade or a sports drink until your urine is clear. Keep drinking it so it stays clear. Surgical patients have fasted for at least 8 hours before surgery, and then rarely feel well enough to eat a lot after surgery. Gatorade will supply the water, sugar, and salt that is necessary to sustain vital body functions.

7. Thou shalt keep it cold. Some patients will have been given Cryocuffs. Use them 55 minutes on the hour, utilizing the other five minutes for knee exercises while the water is being changed. If you have not been given a Cryocuff (usually because of insurance issues) buy several bags of frozen peas in the grocery store and use them as cold packs. They will stay cold longer than ice and can be refrozen and used again.

DR. SANDERS' COMMANDMENTS DOCUMENT

8. Thou shalt take the pain medicine as necessary and directed, but in the end, you are in charge. Enough pain medication must be taken such that you can do the prescribed exercises. Too much medication and you will be too sleepy or nauseous to do what you have to do. *Worse yet is constipation.* Lots of folks say its worse than the post op pain. We recommend that patients take no more than eight pain pills of any kind per day. If the pain is not to severe, you should take one Tylenol and one narcotic pain pill. If the pain is mild to moderate, try two Tylenol and skip the dope. For severe pain, then there is no choice but to take two narcotic pain pills, but expect the nausea, fever, or constipation. When the constipation occurs, you need to cut down on the narcotics and take an over the counter laxative. (Everyone or their Mother seems to have their favorite. On which one to take, I have no opinion). Also patients should avoid Advil, ibuprofen, and other anti inflammatories because it interferes with blood coagulation, ligament, and bone healing.

9. Thou shalt expect to have a temperature above normal. This is from blood in the tissues, as a consequence of anesthesia, or resultant from dehydration. Dehydration is addressed in Commandment 6. Coughing, deep breathing, and blowing up balloons will allow the lungs to fully expand and resolve post anesthesia issues. Tylenol will also bring the temperature down to normal. After a few days, expect some warmth and redness around the wounds. That comes about from the extra blood supply that the skin gets in order to mount the healing response.

10. Thou shalt not miss your first follow-up or PT appointment. Call the office for an appointment. These parts have to start moving. Leave an operated joint alone and don't move it for a few days, and its gets very, very stiff. This is totally avoidable.

11. Thou shalt stay at home or in your hotel room. Out of town knee surgery or ACL patients especially should stay in their hotel rooms and not visit Gainesville's tourist attractions or the local mall. (Make discretionary purchases on line if you have to) If what you think is a problem with your surgery, do not visit Emergency Rooms unless I tell you to meet me there. This occurs in less than 1 in 200 surgical cases. The health care professionals there have no idea what you had done, or how to manage post operative issues. I personally answer my cellular phone 24/7. The number is 713.907.6076 if issues come up that have not been explained clearly in this document, do not hesitate to call.

DR. SANDERS' COMMANDMENTS DOCUMENT

12. Cleanliness if next to Godliness. Those patients who are not given an appointment for the next day shall remove the surgical dressing after twenty four hours. Purchase Hibiclens and an antibiotic ointment in the drugstore.

Dilute the Hibiclens 50-50 with water and place this diluted solution in a water bottle, such as one you would take with you on a bike ride.

Use this solution as a body shampoo twice per day. Wash the wounds first, then wash the rest of your body with this diluted solution. Conserve the solution by using a wash rag, or you will use ten dollars worth of Hibiclens with each shower. After the shower, apply antibiotic ointment to the wounds. (If your wound was closed with Dermabond, then the ointment is not necessary). After 24 hours, a dressing is only necessary to prevent the greasy ointment or bloody drainage (which will last for five to seven days) from staining your clothes. Do not reuse any sheet, towels, or pillowcases during the first ten days. Prior to your surgery, you have undergone a screening examination of the nose for MRSA, the resistant Staphylococcus germ. If you don't carry it, then that's fine. If you do or we can't be sure that you don't, we will prescribe Mupirocin (also known as Bactroban) to be applied to the external nares two times per day for ten days. Since folks usually infect themselves by scratching their nose, and then their surgical area, this should decrease the incidence of infection.

13. Thou shalt remember that bone is living tissue with calcium. Every post op patient needs a high protein diet to bring nutrients into the healing area. Every patient who has had bone work, such a fracture surgery, deformity correction, or ACL surgery requires extra calcium. Such patients need to take 1500mgs of Calcium every day. We recommend obtaining Calcium citrate at a health food store and taking 500mg three times per day. Absorption of calcium is dependant on Vitamin D. Fracture, osteotomy, and ACL patients need 1000 international units daily.

14. Thy body shall be a Temple. That means whatever you put into your body, you put into your healing surgical site. Cigarette smoke reduces the amount of Oxygen in the blood which is available for wound healing. Nicotine, itself retards bone healing. (Typically we don't do major elective bone surgery on smokers or those that won't at least quit during the time of their recovery, although sometimes people think they can fool us, but they really only fool themselves). During your recovery, all tobacco products must be avoided like the plague. Since major surgeries often initiate a change in lifestyle, this may be a good opportunity to quit smoking or dipping on the permanent basis.

DR. SANDERS' COMMANDMENTS DOCUMENT

15. **Thou shalt remember that exercising a joint (including sexual activities) puts stress on an incision site.** Patients who have had incisions near moving joints, especially in the lower extremity, where there is less blood supply than the upper extremity, need to leave their sutures in for a longer time. Sutures around the knee need to remain for four weeks, and sutures around the ankle and leg need to stay in place for six weeks. Surprisingly, sutures in the foot can be removed at three weeks. Sutures in the upper extremity stay in for three weeks. This is especially important for out of town patients who may be having someone else remove their sutures. If absorbable sutures and Dermabond have been used, this issue doesn't come up. Please consider your incision site during sexual activities. The position you choose **should NOT** put pressure or strain on the site until the staples/sutures have been removed and it is fully healed.

16. **And on the seventh day He rested.** Humans don't have nearly the stamina of the Almighty. They can not go six full days and nights before resting. Most patients have sleep disturbance after major surgeries. Sleep is one of the most important body functions. A person can't function without it. It is important to proactively make sure that you can get some good rest. For this we will first recommend that you take one or two Tylenol PMs just before bedtime. If that is not sufficient, then an Ambien (which you have been prescribed) may be added. The earlier you resume your normal sleep patterns, the faster you will recover to your preinjury or presurgical state of good health.

17. **When bad things happen to good people.** We are constantly tested in life. Many times bad things happen to good people. People have reconstructive operations on their bones and joints; behave like good soldiers as they successfully complete their rehab, only to have subsequent injuries when returning to sports. This is especially common amongst off road motorcyclists. Sometimes many good people end up being subsequently treated in clinics or by physicians who are less well suited to treating problems than we are. Usually this occurs in patients who live in places remote from our Clinic. Many of the subsequent treating practitioners don't share our philosophy of avoiding unnecessary arthroscopies, and preserving our factory installed parts such as the meniscal cartilages of the knee. Often this leads to far less than desirable results. We have realized that in the end a return trip to our Clinic is more economical than poor treatment elsewhere. Dr. Sanders' telephone and emails are always answered on the timely basis and he is always available for his patients. He would much rather intervene in your care, whether it be by having you come back to the clinic, or running interference with local physicians than have you treated by a less knowledgeable or skilled practitioner and you being left with a problem that can end one's athletic career and follow you forever.

DR. SANDERS' COMMANDMENTS DOCUMENT

18. **Thromboembolic Disease** This is a category of possible conditions that can complicate Orthopaedic Surgery, most commonly in the lower extremities, but can also effect the region of the upper part of the upper extremity. It involves a blood clot that occurs inside of a vein, and that clot can break off and travel to the lungs. Such a clot can, although not often, be fatal. Much of Dr. Sanders' post operative protocols, such as early motion, ambulation, TED stockings, use of spinal anesthesia when available, minimal use of a tourniquet in surgery, and use of Aspirin or other blood thinning medications is done to reduce the incidence of this problem. However, no mechanism is entirely effective.

It is important for patients to understand the warning signs of Thromboembolic diseases. The most likely complaints or signs that the patient can notice include

1. **Excessive swelling of the limb.** This does not include echymosis or black and blue marks which are common and expected to be seen under the skin.
2. **Soreness in the calf.**
3. **Rapid Heart Rate**
4. **Rapid Breathing Rate**
5. **Shortness of breath**
6. **Chest pain.**
7. **Fever**

If you experience a rapid heart rate, rapid breathing, shortness of breath and chest pain—call 911. These symptoms are serious signs of a possible clot in the lung and require immediate medical attention.

If you experience any of these problems, please call the clinic, Michelle, or Dr. Sanders on his cell phone (713.907.6076) as soon as possible.

I have read the Commandments document and my questions have been answered by Dr. Sanders or his staff.

Post Operative Fracture, ACL and Osteotomy
Nutrition and Supplements

1. **Calcium:** 1500 mgs/day. It is important to get Calcium Citrate rather than Calcium Carbonate tablets. Make sure you are getting at least 1500 mgs of Calcium. The weight of the Citrate doesn't count.
2. **Multi-vitamin:** find a good multi-vitamin to take each day.
3. **Vitamin C:** 2000 – 3000 mgs per day. To help immune system and new cell growth.
4. **Vitamin D:** 1,000 IU/day
5. **Total Daily Caloric Intake:** 40kcal/kilogram of body weight
Kilograms of body weight is calculated by your weight in pounds divided by 2.2
6. **Protein Intake:** 1.125gms of protein/kilogram of body weight