

Benefits and Risks of Orthopedic Surgery

Treatment regimens for all injuries or diseases whether medical or surgical have associated with them both benefits and risks. When your orthopedic surgeon recommends a surgical procedure to treat your problem he/she has considered both the benefits and risks of that treatment, and has concluded that the potential benefits outweigh the risk of complications. A long list of precautions and prophylactic measures are employed with all surgical procedures to minimize the risk of complications. In spite of this complications still occur. Because of the many variables involved we are never likely to see the risk of complications disappear completely.

If we draw an analogy with automobile travel we can make a pertinent comparison. Despite the advent of seatbelts, airbags, anti-lock brakes, speed limits, traffic signals, divided highways, etc. people are still injured or killed every day in automobile accidents. When you get in your car for a drive you can not guarantee with certainty that you will make your destination without a wreck (complication). But if you take precautions like wearing seat belts, obeying traffic signals, driving the speed limit, etc. the chances of having a mishap are very low. Certainly road hazards, the condition of your car, the performance of other drivers, and weather conditions can combine to produce an accident. However, on the vast majority of driving trips your destination is reached without incident.

So it is with surgery. Many innovations and procedures have been developed, and are in place to prevent surgical complications. These are adhered to in a stringent fashion. Because of this complication rates for surgery are very low. But on occasion factors will be present which lead to the development of a complication.

Many myths exist about the development of complications in medicine. One of the most common myths regarding surgical complications involves the development of post-surgical infection. A patient who develops an infection often believes or is told by a non-medical person that the reason for the infection was that “The doctor didn’t wash his hands.”, or “The instruments were dirty.”, or “The hospital wasn’t clean.” When you are dealing with board certified physicians in an accredited facility using state of the art procedures and protocols the chance of such factors being involved in the development of an infection is very, very, very, low. Yet in spite of this

infection rates still hover just below one infection for every one hundred procedures performed (<1%). How could this be? The answer lies in the variables that affect the development of infection that can not be controlled. When a patient is “prepped” for surgery in the operating room the surface of the skin where the incision is to be made is sterilized by applying a solution that kills all the bacteria on that skin surface. Bacteria still remain present and viable in the depths of the hair follicles, sweat glands, and sebaceous glands in the deeper layers of the skin. We currently have no means available to us to eliminate the bacteria in these deeper structures. When an incision is made some of these skin structures are invariably opened and bacteria are introduced into the wound, virtually **every** surgical wound. The combination of the patient’s immune system and antibiotics given at the time of surgery usually annihilate these bacteria and prevent any infection from developing; that is, at least 99% of the time. Disease processes such as diabetes mellitus that adversely effect the immune system will consequently increase the risk of infection in these patients as well.

It is important to point out as well that many of the complications listed on the following pages are not really surgical complications at all, but are actually complications of the problem for which the surgery is being performed. A good example is a fracture of the upper end of the femur(hip bone). Osteonecrosis is a complication of this injury in up to 50% of even the simplest of these fractures. Surgery actually lessens the chance of this complication occurring. Even so some patients with this fracture will develop the complication in spite of optimal state-of-the-art surgery.

Realistic expectations are necessary in dealing with the consequences of any injury or disease and its treatment. Severe injuries and advanced degenerative disease may undergo treatment that may accomplish all that can be expected and yet fall short of a normal appearance, function, or pain level. Even in such severe circumstances surgery will be undertaken if significant improvement can be made, or prevention of further deterioration can be accomplished.

Finally, it is important to realize that your surgeon is doing his/her utmost to minimize the development of a complication during or after your surgical procedure. Should a complication occur in spite of this one should not assume that the care provided has been less than the accepted “standard of care”. Even with optimization of all controllable parameters involved in and around a surgical procedure a complication can occur.

A discussion by your doctor of the potential complications that can occur with your orthopedic surgical procedure is not meant to scare you, or to dissuade you from having your procedure, but is merely had to inform you of the possibilities that can naturally occur when surgery is undertaken. Always feel free to question your doctor about possible complications, and what factors you might have that would increase your relative risk for them. Understanding the risks and what might be involved in additional treatment should a complication occur can make coping with such an event easier should you be the patient to develop one.