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A PATIENT'S GUIDE TO THE RISKS INHERENT TO ELECTIVE ORTHOPAEDIC SURGERY

Dear Patient,

The purpose of this document is to provide you with written documentation of the indications for your proposed surgery, the potential benefits, the inherent risks, and the alternative treatment options available to you in order for you to make an informed decision regarding your elective surgery

INDICATIONS

The indications or reasons for surgery are that you have:

1. An anatomic derangement (i.e. torn, degenerative, or diseased muscle, tendon, or ligament)
2. With symptoms that limit your activities of daily living, occupational activities and/or ability to participate in recreational activities,
3. That has failed to improve with non-operative treatment modalities to include rest, time, activity modification, medications, injections (as appropriate) and physical therapy.

BENEFITS

The potential benefits of surgery are:

1. We can definitively confirm your diagnosis while simultaneously assessing commonly encountered/associated injury patterns,
2. We can address the anatomic derangement to near anatomic status,
3. Often, with surgical intervention, we can prevent the injury from progressing. However, this is not guaranteed.
4. **When properly indicated**, the outcomes of surgical intervention have been proven to be superior to non-operative treatment. Please be sure to address this point in detail with me.

RISKS

The Risks inherent to elective orthopaedic surgery include (but not limited to):

1. This surgery will **NOT** return you to your pre-injury level of function. I cannot undo your injury. With the exception of liver and bone, all adult tissues heal by forming scar tissue. The strength of scar tissue is less than normal tissue (~80-90%) and this strength is never fully recovered. Thus, when fully rehabilitated, the best case scenario is return to ~90% of your pre-injury level of function.

2. While improvement in your pain level is the goal, 100% pain relief is **NOT** guaranteed. My counseling to patients is to expect to have a daily pain rating of 2-3/10 once fully rehabilitated. This means that you should expect to use over-the-counter medications such as Motrin or Tylenol after your usual activities.

3. Please keep in mind that surgery itself is an injury and your body may react to the surgical insult in such a way that your pain level actually increases as a result of the surgery. This is rare, on the level of 25 cases per 100,000 surgeries or 0.00025%. However, we cannot predict who this will happen to pre-operatively.

4. The most dangerous part of surgery is the anesthesia, however, we cannot perform surgery without anesthesia. I will defer to the anesthesia team for the anesthesia specific risks, but in general terms the rate of anesthesia complications range from 1:388 (0.025%) to 1:85,708.

5. There is a risk of infection with all elective orthopedic surgery. Typically less than 3% of elective cases become infected. The only way to eliminate surgical site infections is to not perform surgery. For elective orthopaedic procedures in general, the Centers for Disease Control and Prevention estimates the surgical site infection rate 1.8-5.5%.

For more information on surgical site infections and the steps you can take to minimize your risk, please visit:

http://www.hospitalinfection.org/protectyourself.shtml

6. There is a risk that you may lose some or all of the motion of your affected extremity. Some loss is expected due to the surgical technique. Please be sure to remind me to discuss this risk specifically for your planned procedure. **THIS RISK IS GREATLY DIMINISHED WITH STRICT ADHERENCE TO YOUR POST-OPERATIVE PHYSICAL THERAPY REGIMEN. For this reason, part of our patient-surgeon agreement is that you will at the very least have a confirmed physical therapy appointment by your first post-operative visit with me.**

7. The incision necessary for the surgery may result in a scar that may be cosmetically unappealing. The scar's pigmentation may differ significantly from your normal skin pigmentation/color. It is not un-common for the scar to be painful and/or itchy. This has been reported to occur between 15% - 63% based upon ethnicity.

8. There is the risk of needing additional procedures. Please ask about the known success-rates for the procedure historically as well as my personal success rates for your planned procedure(s).

9. There is a small but highly serious risk of bleeding related complications. Please be sure to inform me of **ALL** medications you are taking to include over-the-counter medications, herbal and dietary supplements as well as any prescription medications. This group of complications includes forming blood clots. The risk of forming a blood clot after knee arthroscopy is 0.24% - 9%; the risk after shoulder arthroscopy is 0.08%. Please be sure to speak to me about steps to mitigate your risk for forming blood clots.

TABLE I. RISK OF VENOUS THROMBOEMBOLISM IN SURGICAL PATIENTS WITHOUT PROPHYLAXIS AND SUCCESSFUL PREVENTION STRATEGIES.

	DVT, %		PE, %		
Level of Risk	Calf	Proximal	Clinical	Fatal	Successful Prevention Strategies
Low risk Minor surgery inpatients <40 yr with no additional risk factors	2	0.4	0.2	<0.01	No specific prophylaxis; early and aggressive mobilization
Moderate risk Minor surgery in patients with additional risk factors Surgery in patients aged 40 to 60 yr with no additional risk factors	10–20	2–4	1–2	0.1–0.4	LDUH (q12h), LMWH (≤3400 U daily), GCS, or IPC
High risk Surgery in patients >60 yrs, or 40 to 60 yrs with additional risk factors	20–40	4–8	2–4	0.4–1.0	LDUH (q8h), LMWH (>3400 U daily), or IPC
Highest risk Surgery in patients with multiple risk factors Hip or knee arthroplasty, HFS Major trauma; spinal cord injury	40–80	10–20	4–10	0.2–5.0	LMWH (>3400 U daily), fondaparinux* oral VKAs (INR 2–3), or IPC/GCS + LDUH/LMWH

LDUH = low-dose unfractionated heparin; LMWH = low-molecular-weight heparin; GCS = graded compression stockings; IPC = intermittent pneumatic compression; VKAs = vitamin K antagonists, INR = international normalized ratio; HFS = hip fracture surgery.
*Note: Fondaparinux has a boxed warning for spinal/epidural hematomas: For full prescribing information, please go to http://us.gsk.com/products/assets/us_arixtra.pdf.
Adapted with permission.[4]

10. Your surgery will be scheduled as expeditiously as possible, however, please be patient as we are at war, this is a teaching hospital, and this is also a Level 1 trauma center. The priority patient for this hospital is the Combat Casualty followed by the Wounded Warrior. Depending on the evacuation rates from overseas as well as the needs of our local Wounded Warrior population, your surgery schedule may take several months. Depending on many factors to include the casualty rate, the trauma rate, and available operating rooms your surgery may be scheduled and then delayed/re-scheduled. Please bear with us.

ALTERNATIVES

Your Alternative to surgery is to continue with non-operative care with your current treatment along with cessation/avoidance of aggravating activities. We can also pursue an inter-disciplinary approach with our pain management service or our Physical Medicine & Rehabilitation service which may include modalities such as acupuncture and biologic interventions such as Platelet-Rich Plasma injections.

If you have any questions, do not hesitate to call or e-mail me at the information above.

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