



HEALTH ISSUES AND KNEE REPLACEMENT

While an understanding of all current medical problems and conditions is essential for the safe treatment of patients considering surgery, there are several conditions that are relatively common and deserve special attention. Addressing these conditions will decrease the risk of a surgical complication.

Diabetes

All types of diabetes mellitus have profound systemic effects on the body. It is essential for the physician to consider the effects of this condition on the kidneys, heart, vascular system, and immune system. This will require collaboration with your primary care physician and in some cases, subspecialists. We make changes to some of the medications diabetic patients receive, and, in rare cases, the decision to do surgery can be affected. Be sure to let us know if you have diabetes.

Vascular Disease

Peripheral vascular disease is a condition that affects the arteries by decreasing the blood flow. Usually this is associated with a similar process for the arteries of the heart, and heart disease needs to be evaluated in patients with peripheral vascular disease. There are several problems that can occur in patients with peripheral vascular disease after surgery, and if blood flow is diminished, infection risk is elevated and wound healing might not occur. It is critical that vascular disease be evaluated before surgery. In some cases, a vascular surgeon may need to correct or improve blood supply prior to surgery.

Dental/Oral Disease

One of the most devastating complications that can occur after surgery is infection. Infections can result from a variety of sources, but one of the most common is bacteria that reside in the mouth and gums. If there is a gum or tooth infection, this will periodically shed bacteria into the blood stream. Bacteria in the blood stream can attach to inorganic material in the body and this will lead to persistent infection. **For this reason, it is imperative that any dental conditions be addressed prior to surgery**, and if a knee replacement is in place, all future dental work be preceded by prophylactic antibiotics. Please ask your surgeon if you have any questions about dental work or prophylactic antibiotics.

Personal or Family History of Blood Clot (Venous Thrombosis)

While small blood clots involving calf veins are relatively common after knee surgery, larger clots involving the knee or thigh can occur. Rarely, these can have serious health consequences. As a result, we take steps to prevent blood clots based on national and international recommendations and standards.

Blood clot prevention is a balance between preventing clots from forming in a bad way, and allowing necessary clotting to prevent bleeding. It is important that we know if you have ever had a blood clot or have any genetically related family members with a history of blood clots. **Blood clot formation may be genetically related.** Also please tell us if you are on an **oral or implantable birth control medication or estrogen replacement.** These medications will increase the risk of blood clots with surgery and should be discontinued 10 days before surgery whenever possible.

Blood clots occur as the result of multiple factors. While there are several conditions that increase blood clots risk that a patient can do nothing about—such as a family history, a cancer, or poorly functioning veins, there are some things that can be done to help prevent a blood clot from forming.

Careful management of blood thinners before and after surgery is necessary to minimize the chance of a blood clot. In patients who are reasonably active, have no family or personal history of blood clots, and no known risk factors it is probably sufficient to take aspirin for one month and mobilize early after most knee surgeries. I also recommend mobilizing and doing some exercise in the morning the day of surgery to encourage blood flow in the extremities. While there are no studies to support exercise before surgery, one step in the formation of blood clots is blood pooling, also know as stasis. Some mild exercise should help prevent blood clots.