

Decreasing Your Risk of Infection



Infection is a difficult problem that affects one out of 100 people after joint replacement surgery. If your joint becomes infected after surgery, it usually means additional surgery will be needed to treat the infection. It also means, your results will not be as good as they could be.

Your overall health is very important to prevent infection. **Research shows that any health issues made better before surgery could decrease your surgical infection risk.** The three most common problems that increase infection risk are obesity, tobacco use and uncontrolled diabetes.

Obese or Overweight

Obesity means a person has a body weight that is more than normal based on height. Physicians define this by a measure called body mass index (BMI). This takes your height and your weight and generates a number that tells if you are a healthy weight or weigh more than normal. You can use an online calculator such as the one provided by the American Diabetes Association to see what your BMI is and where you fall on the scale. Being overweight or obese is a concern for a successful joint replacement surgery. Research on joint replacement in obese patients found an increased risk of having a problem after surgery. If you are obese, the decision to proceed with surgery must be made between you and your surgeon.

There are usually other medical problems that go along with obesity like heart disease, diabetes mellitus and poor nutrition. These other medical problems put you at an even higher risk of having a problem after surgery. Your surgeon may recommend against surgery based on your weight and health.

If your surgeon determines you should lose weight before surgery, there are options such as working with a nutritionist or your primary physician or having weight-loss surgery.

Smoking and Tobacco Use

Tobacco puts you at risk of having problems after your joint replacement. This includes blood clot, infection and poor wound healing. Nicotine is the main addictive chemical in tobacco, and it causes blood vessels to narrow. This means less blood makes it to your healing joint replacement and increasing the chances of your joint replacement getting infected.

Your surgeon may require you to quit using tobacco and anything with nicotine before surgery. It is recommended to stop all these products for at least 4-6 weeks before surgery. Your primary provider and surgeon can frequently provide resources such as prescription medicines and smoking cessation programs to stop this damaging habit.

For more information on the benefits of quitting tobacco, follow this link: https://www.cancer.gov/about-cancer/causes-prevention/risk/tobacco/cessation-fact-sheet#q1





Diabetes Mellitus

This is a disease where the body can't control blood sugar on its own. There are different ways to control diabetes such as diet, medicines and insulin injections.

If you have diabetes mellitus, it is very important that your blood sugar is well controlled for surgery. Once blood sugar levels frequently reach 180 mg/dL or more, it is uncontrolled, and there is a much higher risk of having a problem with hip or knee surgery.

The heart, lungs, digestive tract, kidneys, skin, nerves, and immune system are damaged by uncontrolled diabetes. This can be a big problem for your overall health and also increases your risk of infection after joint replacement surgery.

Your surgeon may recommend delaying surgery if your blood sugar levels are not well controlled. Your blood sugar levels should be brought under better control before surgery and under tight control as your body heals after surgery.

There is a test called hemoglobin A1C (HbA1c) that lets you see how well you are controlling your blood sugars. You can input your blood glucose numbers into the calculator from the American Diabetes Association to see if you have good control.

We can't put an exact number on your personal infection risk with joint replacement surgery. You may be low, medium or high risk for infection based on your health. It is important to discuss your health problems with your surgeon and to work with your health care team to improve your health and lower your infection risk before surgery.

The better your medical and mental condition, the more likely you'll have a successful result. Surgery is a team approach, and you are a very important part of that.





This article has been written and peer reviewed by the AAHKS Patient and Public Relations Committee and the AAHKS Evidence Based Medicine Committee. Links to these pages or content used from the articles must be given proper citation to the American Association of Hip and Knee Surgeons.

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