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Ask the Expert: Joint Replacement and Orthopedic Surgery

Expert: [David Ayers, MD](#)



[David Ayers, MD](#), is the Arthur M. Pappas Professor and Chair of Orthopedics and Physical Rehabilitation at UMass Memorial Medical Center and the University of Massachusetts Medical School.

In addition to his reputation as a gifted clinician and skilled surgeon, Dr. Ayers is known nationwide as a thought-leader in joint replacement surgery and is the orthopedic leader of a \$12 million [project](#), involving 40,000 knee and hip replacement patients from across the country that will greatly impact orthopedic practice. This comparative effectiveness program will assess the success of joint replacement surgery as it relates to a patient's quality-of-life improvement and pain relief.

1. *I am a health care provider. Please discuss the effects of weight loss and smoking cessation prior to joint replacement. Are there any evidence-based medical studies we can use to help the pre-surgery patient with these issues?*

Smoking increases the risk of infection of the joint replacement and of pulmonary (lung) complications during and after surgery. All patients should stop smoking before elective total joint replacement.

Obese patients are at increased risk of complications, during and after surgery, as well. If their body mass index (BMI) is over 40, there is an increased risk of infection, and deep vein thrombosis or pulmonary embolism (a very serious blood clot that can travel to the lungs or elsewhere in the body, causing stroke or death). Medical research supports the importance of losing weight and quitting smoking before total joint replacement surgery.

2. *I have to get my knees done but I'm dreading the pain and rehab. How bad is it?*

Everyone experiences the pain associated with the operation differently. At UMass Memorial, we've developed a complete new program for helping patients manage pain--starting before the pain even begins. Because we strongly believe that the less pain a patient has, the better their rehabilitation will be, we:

- Begin to treat the pain *before the pain exists* by giving medications at the time of admission, before surgery.
- Eliminate intravenous drugs, and with it the associated side-effects of nausea, vomiting, altered mental status and constipation .
- Use a multi-modal pain management approach using four different oral medications that each target a different part of the pain pathway.
- Emphasize the use of spinal anesthesia in place of general anesthesia.
- Use regional nerve blocks to supplement the spinal anesthesia.

This new pain treatment pathway has changed the model of care and dramatically improved the experience for patients who are having total joint replacement. A recent review by an outside

organization on patient care took notice of our program and has begun to recommend that other hospitals adopt a similar approach.

3. I am 60 years old and managing a hip that will need replacing; I've been hearing through some of my friends at the YMCA that resurfacing is an alternative although I'm not convinced since these two individuals don't appear that much improved. Your thoughts?

Hip resurfacing is a somewhat experimental procedure that has uncertain results. At issue is that all hip resurfacing patients receive a metal-on-metal bearing surface that produces metal particles called ions. The long-term effect of these ions on tissues within the body is unknown.

Hip resurfacing is not suggested for female patients in whom the results are worse than conventional total hip replacement. Caution should be used in choosing hip resurfacing over conventional total hip replacement without fully exploring the possible complications of resurfacing and fully understanding any potential advantage-- and whether the advantage is a *proven* advantage or a possible or *theoretic* advantage. Currently, I believe that the role of hip resurfacing in hip surgery for arthritis in the USA is extremely limited.

4. I was diagnosed with a right loose knee cap. I am working out in the gym to lose weight and build muscle around the knee area. Recently I have been using the elliptical and other exercise involving the knee area. My knee is swollen and painful. Is there a support band for the knee or surgery that can fix this issue?

I do not have enough information about your condition to make an informed recommendation. I can tell, however, that you have a significant problem and should consult an orthopedic surgeon who can take a full history, perform an exam, do the appropriate imaging studies (x-ray, MRI) and make an informed recommendation. If you would like to make an appointment with me, call [508-334-9750](tel:508-334-9750).

5. What are the alternatives to knee replacement surgery?

Exercise, physical therapy, oral medications, weight loss, medication injected in to the knee, activity modification can all help lessen the symptoms to a certain degree, but they can't repair a severely damaged knee.

6. Will a knee replacement set off the metal detector at the airport? How do I prove that I've had a joint replacement, if so?

A total knee replacement implant typically *will* set off the airport metal detector. You should have a card from your surgeon that informs the screeners, and your dentist and any other doctors you might see, that you have a knee implant. At the airport, you can also ask to go through the new x-ray screeners that will show the implant.

7. I had two total hip replacements in 2009. The implants are metal-on-metal and are one of the varieties that have been recalled because they cause bone and tissue damage and are emitting metal particles in the body. From what I have researched they need to be replaced with the metal-on-plastic. I am only 56 years old and very healthy, never had any surgery before the hip surgery. I am very scared! I have an appointment with a specialist in metal-on-metal hip replacement in Boston. What

advice do you have for me? I am also not sure if my insurance would cover this. What questions might I ask the specialist and what recommendations do you have?

There are many concerns about metal-on-metal bearing surfaces. If your implant has been recalled, you should see your orthopedic surgeon soon and have a full exam, history and a test of metal ion levels performed, and probably also an imaging study looking at the soft tissues (either an MRI or a ultrasound looking for soft tissues mass and fluid collection). If revision (correction) surgery is necessary, the company that made the recalled metal-on-metal implant will pay for it , not you or your insurance company.

8. I have osteoarthritis in my right knee and have had arthroscopic surgery and gel injections done but still experience much pain at times. Some days can be better than others. I do exercise and my knee feels better afterwards but then it becomes stiff and painful again. I will take ibuprofen on occasion but do not want to get in a habit of taking it every day. Any suggestions would be helpful.

I suggest that you see an orthopedic surgeon for an evaluation. If you would like to make an appointment with me, call [508-334-9750](tel:508-334-9750).

9. How long with a joint replacement (knee) last?

They typically last 15 to 20 years, but it depends on how much you weigh and what activities you do and what activities you don't do. You shouldn't run, jog, or do impact loading exercises, for example, because they can damage the joint or wear it out. Exercises like walking, swimming, biking, yoga and other low-impact sports are best.

10. A friend told me that hip replacement increases risk of developing blood clots, can you explain why and what can be done to prevent this, if anything?

Blood clots are a risk of any surgery and are the result of the surgery itself. Joint replacement surgery patients are given an anticoagulant for at least two weeks after surgery for knee replacement and four weeks after hip replacement. Each patient is different, of course, and may be given anticoagulants for a longer time if there is a previous history or family history of blood clotting problems.

11. What are replacement joints made of? Is one kind better than another? Do you recommend people get both knees (or hips) done at the same time, or one at a time?

Different types are made of different materials. Different types do have varying results. You should discuss this with your surgeon and look at data regarding the performance of the type of replacement that your surgeon is implanting that covers at least 10 to 15 years. In my opinion, you should not have both knees done at the same time because the current data shows that people who have both knees done at the same time have a higher risk of heart attack, stroke and death.

12. I am very overweight but stay active (I walk every day and play golf) and my doctor said I have to lose weight before I can get my knees replaced. Why is that? Because I'm not a good candidate for surgery itself, or because of rehab?

Both. Having the muscles around the knee strong before surgery will help you recover after surgery. If you lose weight before surgery, you will lower the risk of complications around the time of surgery.

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Resources:

- [David Ayers, MD](#), Chair, Orthopedics and Physical Rehabilitation
- To contact the Department of Orthopedics and Physical Rehabilitation, call **508-334-9750** or visit: www.umassmemorial.org/our-care/orthopedics
- Learn about the [Arthritis and Joint Replacement Center at UMass Memorial](#)
- [UMass Memorial Musculoskeletal Center of Excellence](#)
- **Article:** [Medical School-Medical Center Lead Nationwide Study of Total Joint Replacement Surgery Outcomes](#)
- **Upcoming Ask the Expert Q&A sessions and Ask the Expert Archive:** www.umassmemorial.org/asktheexpert

Orthopedic services provided include:

- Arthritis and joint pain treatment
- Foot and ankle care
- Fracture care
- Hand and upper extremity surgery and therapy
- Joint replacement
- Pediatric orthopedics
- Physiatry
- Spine surgery
- Sports medicine
- Trauma care for orthopedic injuries