Robotic-Assisted Total Knee Replacement FAQ

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A knee replacement is a procedure performed to fix the damaged parts of a knee with different types of implants. Advanced technology like robotic-assisted devices can help your surgeon perform a precise knee replacement surgery personalized for your specific anatomy.

Every knee is different, as is every patient requiring a knee replacement procedure.

The robotic system assists Dr. Bircher in optimizing surgical outcomes. It does this by using intra operative data that's unique to you. Dr. Bircher utilizes the technology during your procedure to enhance the accuracy and precision of your knee replacement to help you start moving again.

HOW DOES ROBOTIC-ASSISTED KNEE REPLACEMENT WORK?

Dr. Bircher's robotic platform utilizes advanced technologies to ensure he has the information and tools needed to perform a highly accurate and precise knee replacement. This robot is designed to:

- Aid Dr. Bircher by accessing state-of-the-art technology to provide surgical insights for real-time decision making
- Work intraoperatively without the need for CT scans, which can save you time and costs
- Help Dr. Bircher remove the damaged bone with accuracy. This robotic-assisted device does not move or operate on its own
- Use an infrared camera and optical trackers to help Dr. Bircher gather the necessary data about your knee's anatomy

HOW DOES ROBOTIC-ASSISTED KNEE REPLACEMENT DIFFER FROM TRADITIONAL KNEE REPLACEMENT?

The goals of robotic-assisted knee replacement and traditional or manual knee replacement are the same:

- Restore the knee joint by removing the damaged bone and cartilage
- Replace the damaged surfaces with a knee implant

During a robotic-assisted knee replacement, the technology assists Dr. Bircher to gather data and provide accuracy as they plan your procedure and remove the damaged parts of the knee joint.

WHAT ARE THE BENEFITS OF USING ROBOTIC-ASSISTED TECHNOLOGY?

There are many potential benefits in using this technology for your knee replacement. Robotic-assisted technology may allow Dr. Bircher to perform a knee replacement tailored to you, providing both precision and accuracy during your procedure. The technology gathers details and data on your knee that helps your surgeon select the right implant fit for your anatomy.

In addition, robotic-assisted technology may deliver*:

- A greater range of motion (how well you can bend and flex your knee after surgery)[5,6]
- Less pain compared to traditional methods[2,5]
- Faster recovery times (reduced length of hospital stay, hospital readmissions, and health visits)[2,7]

* Findings based on studies conducted across multiple robotic-assisted total knee replacement systems.

THINGS TO DISCUSS WITH DR. BIRCHER BEFORE A ROBOTIC-ASSISTED KNEE REPLACEMENT

- What type of knee replacement do you think is appropriate for my situation?
- What are the other knee replacement techniques and technologies available? How do they compare to the robotic-assistance you use?
- Can knee replacement surgery help to relieve my pain and stiffness? What are the benefits and risks of knee replacement surgery?
- How long will it take to recover and rehabilitate from robotic-assisted knee replacement? And what is my role in recovery and rehabilitation?
- If I choose to undergo robotic-assisted knee replacement surgery, will I be able to resume daily activities?

*FOR MORE INFORMATION INCLUDING VIDEO LINKS, PLEASE CONTACT DR. BIRCHER'S CARE TEAM at 763-302-2196.

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Important Safety Information
As with any medical treatment, individual results may vary. The performance of knee replacements depends on age, weight, activity level and other factors. There are potential risks, and recovery takes time. People with conditions limiting rehabilitation should not undergo this surgery. Only an orthopaedic surgeon can determine if knee replacement surgery is an option for you.