

Total Knee Replacement

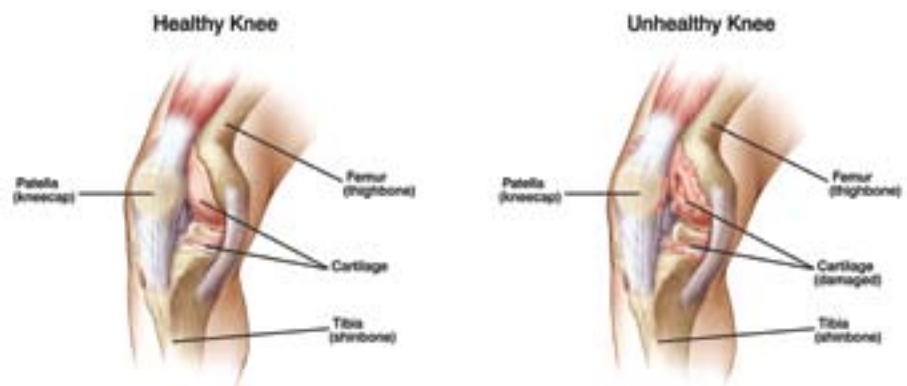
Total knee replacement has become one of the most common orthopedic procedures performed on older adults. More than 300,000 people undergo the procedure each year, and approximately two-thirds are women.

About the Knee

Knees provide support and mobility. They carry almost half the body's weight.

The knee joint is the largest in the human body, formed where the lower part of the thighbone meets the upper part of the shinbone and the kneecap. Ligaments and cartilage support the joint, preventing it from moving too far from side to side.

Injury, infection or arthritis can cause the cartilage to become damaged and deteriorated. Eventually, knee bones can grind together – resulting in pain and reduced physical activity.



TOTAL KNEE REPLACEMENT - IMPLANTS IN PLACE



Illustrations Courtesy of Zimmer, Inc.

About Total Knee Replacement

X-rays taken prior to surgery help the orthopedic surgeon determine the proper size of implant. "Sizing a knee implant is like trying on a pair of shoes," said Dr. John Riester, orthopedic surgeon, who performs approximately 200 total knee replacement procedures annually. "You have a size in mind based on measurements from the digital X-ray. But you don't know for sure if the implant fits until you try it on the patient in surgery."

During a standard knee replacement surgery, the orthopedic surgeon resurfaces the knee joint and makes precise cuts into which the implant fits. The damaged and worn joint surfaces are replaced with a knee implant made of metal, ceramic material or high-density plastic parts. The implant is often adhered to the bone by acrylic cement that seeps into the porous bone surface.

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Gender-Specific Knee Implants

There are more than 150 knee replacement designs on the market today. Dr. Riester uses traditional knee implants, along with new "gender-specific" implants that are made for women.

The sizes of traditional knee implants have been determined using average measurements of mostly male cadaver bones. The new female knee implants were designed using all female measurements, to create implants that fit the unique shape of a woman's knee.

Conventional implants have a "thickness" in front that may make them feel bulky, whereas female-specific implants feature a thinner profile for a more natural feel. The contoured shape of the female-specific implant is proportioned to fit women's anatomy. "Women's bones are narrower. Even big women have smaller bones than most men," Riester said. "The back of the new female implant hugs the bone more, and the lack of implant 'overhang' is important to a good fit."

While Dr. Riester has performed more than two dozen gender-specific implant surgeries, he remains a proponent of traditional hardware as well. "A total knee replacement is already a successful operation, so the gender-specific knee isn't a giant breakthrough," he offered. "Don't run away if your orthopedic surgeon doesn't use gender-specific implants. You can get positive long-term results with traditional implants as well." 📌

This article was reviewed by John Riester, M.D., Orthopedics.



MRSA: Risk Factors and Prevention

Methicillin-resistant *Staphylococcus Aureus* (MRSA) is a bacterium that causes infections in different parts of the body. It is harder to treat than most strains of staph bacteria because it is resistant to commonly used antibiotics.



Approximately one-third of people have staph bacteria on their skin or in their noses. People with staph in those areas can carry MRSA without being sick or infected, while passing the germ to others.

Staph infections, including MRSA, occur most frequently in hospitals and health-care facilities such as nursing homes. A more widespread, community-associated MRSA (CA-MRSA) began appearing in the 1990s.

Staph infections usually start as small, red bumps that resemble pimples, boils or insect bites. The bumps

can turn into painful sores that require surgical draining. While the bacteria often remain confined to the skin, they can dig deep into the body and cause potentially life-threatening infections in bones, joints, surgical wounds, the bloodstream, urinary tract, heart valves and lungs.

Risk Factors

Risk factors for hospital-acquired MRSA include:

- Recent hospitalization, especially vulnerable patients such as older adults or people with weakened immune systems, burns and surgical wounds.
- Residing in a long-term care facility.
- Use of invasive devices such as dialysis equipment, catheters and feeding tubes.
- Recent use of certain antibiotics.

The main risk factors for community-associated MRSA include:

- Young age, as children's immune systems aren't fully developed.

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- Participating in contact sports, as MRSA can spread through skin-to-skin contact.
- Sharing towels, razors or athletic equipment.
- Having a weakened immune system, such as people with HIV/AIDS.
- Living in crowded or unsanitary conditions.



Boil on the wrist of a patient with MRSA

Prevention

There are steps you can take to protect yourself from MRSA infections. In a hospital or nursing-home setting:

- Ask staff members to wash their hands before touching you.
- Wash your own hands frequently, or use hand sanitizer with at least 62 percent alcohol.
- Make sure IV tubes and catheters are inserted in and removed from your skin under sterile conditions.

In a community setting:

- Avoid sharing personal items such as towels, razors, clothes and athletic gear.
- Keep cuts and wounds clean and covered with sterile, dry bandages.
- If you have a cut or sore, wash your towels and sheets in hot water with added bleach – and dry them in a hot dryer.
- Wash workout and athletic clothes after each use.
- Wash your hands frequently, or use hand sanitizer when soap and water aren't available.

If you have a minor skin problem, keep an eye on it. If it becomes infected, see your doctor. Ask to have any skin infection tested for MRSA before starting antibiotic therapy. Drugs that treat ordinary staph aren't effective against MRSA, and their use could lead to serious illness and bacteria that are more resistant. ▲

INFECTION CONTROL AT AULTMAN

Steps Aultman takes to promote patient, visitor and employee safety when working with MRSA patients include:

- Patients with positive MRSA cultures are placed in isolation utilizing contact precautions. Per CDC guidelines, gowns and gloves are required if in contact with the patient or patient's equipment such as beds and linens.
- If the patient tests positive for MRSA in the Aultman lab, a computerized flagging system places a code on the patient demographic identification to indicate on future admissions that the patient has a history of MRSA. The same is done for patients testing positive for other infections such as C-difficile.
- Hand hygiene is imperative to prevent health-care workers from spreading MRSA among patients. Hand hygiene compliance is monitored monthly and reported to the Nursing Board for Clinical Improvement and other medical committees. Many measures have been implemented to improve hand hygiene compliance including recognition of nursing units with 100 percent compliance; hand hygiene materials including posters and an educational video; a hand hygiene pamphlet for patients and families; and increased availability of hand sanitizer.



This article was reviewed by Margaret Kobe, M.D., Infectious Disease.

Teaching Children Compassion in a Violent World

Flip through the TV channels or check out the latest video games, and you'll likely see one violent image after another. You cannot control all of the things that affect your children's lives. ... However, there are things you can do to encourage children to be caring, compassionate and responsible – in spite of the harshness to which they are exposed.

Tell Your Children How You Feel

Let your children know the importance of being kind. Look for ways they care for others, and reinforce those positive behaviors with praise.

When your children do something you think is foolish or cruel, explain how their negative behavior affects others. Be honest and firm, while focusing on the behavior and not the child personally. Say something such as: "What you did is not very nice," rather than "You're not very nice."

Set a Good Example

Your children learn from your words and actions. If you consistently show kindness to others – whether you help an elderly neighbor or donate canned goods to the local food bank – your children are more apt to learn to be caring. Remember that if you say one thing but do another, you will lose credibility in your children's eyes.



Counteract the Influences of the Outside World

Despite your best efforts, your children will be exposed to influences that model uncaring and violent behavior. To help counteract these effects, limit viewing of violent television programs and encourage shows that have positive role models. Give your children books and videos that feature compassionate characters. Educate children about famous heroes and heroines who exemplify caring and compassion. Expose your children to other positive influences in your circle of friends and family.

Make the Most of Early Childhood Development

The early years of children's development (birth to age six) influence their later development and ability to show compassion. If babies learn that the adults caring for them are kind and dependable, they will develop trust. Parents who express consistent expectations with clear directions and explanations help children feel safe in exploring the world. Give guidance based on love and respect, to help children develop an awareness of how their behavior affects others. ▲

This article was reviewed by Beth Marcinkoski, M.D., Pediatrics.

Seniors' Health: Exercise for Life

Although exercise and physical activity are among the healthiest things you can do, older adults are often reluctant to exercise. Some are afraid that exercise will be too strenuous or harmful. Yet, studies show that exercise is safe for people of all ages – and older adults actually hurt themselves more by not exercising than by being physically active.

Regular exercise can prevent or delay diabetes and heart trouble; reduce arthritis pain, anxiety and depression; and help older people maintain independent lifestyles.



There are four main types of exercise, and seniors need some of each:

- Endurance activities – such as walking, swimming or bike riding – build stamina and improve the health of your heart and circulatory system.
- Strengthening exercises build muscle tissue and reduce age-related muscle loss.
- Stretching exercises keep the body limber and flexible.
- Balance exercises reduce the chances of falls.

It is safe for most adults older than 65 years to exercise. Even patients with chronic illnesses such as heart disease, high blood pressure, diabetes and arthritis can exercise safely.



Here are some tips to get you on the road to physical activity:

Check with your doctor before starting an exercise program.

If you have not exercised regularly for at least six months, get your physician's approval before starting an exercise regimen.

Do things you enjoy.

Stay active by walking, ballroom dancing, swimming or doing other physical activities you enjoy.

Get an exercise buddy.

You are more likely to stay motivated and exercise regularly if you participate with a friend, neighbor or family member.

Start slowly.

Plan to progress slowly to avoid injury and avoid burn-out. Start with just 15 minutes of physical activity 3-4 times a week, and build from there. ▲

When should I call my doctor?

If your muscles or joints are sore the day after exercising, you may have done too much. Next time, exercise at a lower intensity. If the pain or discomfort persists, you should talk to your doctor. You should also call your doctor if you have any of the following symptoms while exercising:

- Chest pain or pressure
- Rapid or fluttery heart beat
- Trouble breathing or excessive shortness of breath
- Light-headedness or dizziness
- Difficulty with balance
- Nausea
- Any new, undiagnosed symptom

This article was reviewed by Louis Shaheen, M.D., Internal Medicine.

Enjoy the Holidays ... Without Overeating

If you think eating healthy during the holiday season is nearly impossible, think again. Even holiday treats can fit into a sensible eating plan, if you practice balance and moderation.



Here are some tips to keep the extra pounds away this holiday season:

Don't go to parties hungry.

Have a healthy snack before you arrive at a party, to take the edge off your hunger and help you from overeating.

Watch your portions.

When approaching a buffet, think about what foods you want on your plate. Take small portions, and select just one or two of the richest foods.

Limit high-fat foods.

Items such as fried food, cream-based soups, cheese-filled casseroles, pies and processed meats including salami and sausages are high in fat and calories.

Try a lower-fat eggnog.

Traditional eggnog is usually made with egg yolk and thick cream. Look for a low-fat or fat-free version – or make your own low-fat eggnog.

Walk off the extra calories.

Take brisk walks with your loved ones – outside, at the shopping mall or at a fitness center. You'll enjoy their company while benefiting from exercise.

Put away the candy.

Place bowls of fresh fruit around your house, for a festive and sweet substitute to chocolates or other candy.

Put things in perspective.

Whether you overeat a bit or stay right on track, don't focus on food during the holiday season. Concentrate instead on the spirit of the season and sharing special times with people you love. 🍷

SAFE HOLIDAY COOKING

From office parties to family gatherings, keep food safe this holiday season by following these steps:

- Wash your hands and food-contact surfaces often. Bacteria can spread throughout the kitchen and get onto cutting boards, knives, sponges and countertops.
- Keep raw meat, poultry and seafood (and their juices) away from ready-to-eat foods – to prohibit bacteria from spreading from one food product to another.
- Cook foods to proper temperatures to ensure they are heated long enough and at a high enough temperature to kill harmful bacteria that cause foodborne illness.
- Refrigerate foods promptly to keep harmful bacteria from growing and multiplying.



This article was reviewed by Marcella A. Martell, MS, RD, LD, from Aultman Weight Management.

Heavy Hearts During the Holidays

For many people, the holiday season means family gatherings, weekend shopping sprees and reconnecting with friends. For people grieving the loss of a loved one, however, the holiday season may feel anything but festive.

“Most of us associate the holiday season with family gatherings and special traditions,” said Beth Wengerd, Aultman Hospice bereavement coordinator. “When a loved one isn’t there, it’s hard.”

The timing of a death loss has an impact on holiday grieving. “When a loved one dies close to the holidays, you’re in such a state of shock that the first holiday season is a blur,” Aultman Grief Services Director Brenda Brown explained. “The second holiday season can actually be harder than the first, when the reality has set in that your loved one is not going to be there.”

A helpful, healing way to celebrate the holiday season is to find a way to memorialize your loved one. “Start a new tradition, such as buying a Christmas tree ornament each year in memory of that special person,” Beth suggested. “Another way to brighten your holiday season is to help someone in need, such as donating money or your time to a local charity.”

Other tips on how to cope with holiday grief include:

Plan Ahead

Have a family meeting to talk over your plans for the holiday season. Share your feelings, while respecting others’ choices and needs.

Accept Your Limitations

If you don’t feel like going to a party, baking dozens of cookies or sending holiday cards, it’s OK. Your friends and family members will understand.

Take Care of Yourself

Exercise regularly, and get plenty of rest. Try to eat a



healthy diet, even if you don’t have much of an appetite. Avoid alcohol and drugs. Don’t bottle up your emotions: if you need to cry, then cry.

Be Prepared

Grief affects each person differently. The holiday season may bring additional stress that affects you emotionally, cognitively and physically. These are normal reactions and part of the grieving process.

Give Yourself Permission to Feel Joy

Don’t feel guilty or disloyal to your deceased loved one by enjoying the holiday season. Don’t worry that others are judging you negatively – as if you’re not “grieving enough.” An important aspect of healing is rediscovering joy in everyday life, such as watching an eager child open Christmas presents.

For more information on grief-related resources and support groups, contact Aultman Grief Services at 330-479-4835 or Aultman Hospice at 330-479-4805. 📍

For more information on any of the topics covered in this newsletter, call the Sharon Lane Health Information Center at 330-363-3333, or e-mail us at aainstitute@aultman.com.




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Warning Signs: Colorectal Cancer

Here are the most common signs of colorectal cancer:

- Blood in or on the stool (either bright red or very dark)
- A persistent change in bowel habits, such as diarrhea or constipation, for no apparent reason
- Stools that are narrower than usual
- Stomach discomfort, including bloating, fullness and/or cramps
- Frequent gas pains
- A strong urge for bowel movements but with little stool output
- Feeling that the bowel does not empty completely
- Weight loss for no known reason
- Constant tiredness

It is important to note that many people diagnosed with colorectal cancer never had symptoms or warning signs. In addition, the symptoms above are not unique to colorectal cancer. Check with your doctor if you suspect a problem. 

This article was reviewed by James Schmotzer, M.D., Medical Oncology.

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