

Current Status of Total Hip and Knee Replacement
Webcast
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Dr. Raju Ghate

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Introduction

Andrew:

Hello and thanks for being with us once again on Patient Power. Every two weeks we've got a new program for you on healthnet.nmh.org, and our whole goal is to help connect you with Northwestern experts, get the most credible medical information for conditions that may affect you or someone that you care about, and also get inspired by people who've gotten great medical care at Northwestern and understand how they decided to go there, what treatments they had and how it's working out for them.

So, you know, there are millions of people who have joint problems, particularly as we age, in our knees and in our hips. And I know in my own case, my mother-in-law, Ethyl, 75 years old, wanting to travel in her retirement years and she just had a lot of arthritic pain in her hip. Finally it came time to have hip replacement surgery, and it made a huge difference. And she's traveling the world once again. Good old mother-in-law, and I do love her dearly. And so giving Ethyl that gift, really, of alleviation of pain and mobility, that made a big difference for her.

For other people it may be your knee. You want to play golf, you want to play tennis and, yes, you are in your 60s, 70s or 80s and you have otherwise pretty good health, you want to be active. So when does joint replacement surgery, and we're particularly talking about knees today and hips, when is that right for you? Are there certain approaches that made sense for you? Maybe you heard something advertised. Well, what do the good folks at Northwestern Memorial think about it. And, also, are there things you should try first?

Meet An Inspiring Knee-Replacement Patient

Andrew:

So let's begin by meeting an inspiring patient, and that's Reverend Gil Bowen. Now, a lot of people probably know Gil because for 37 years he's been the senior minister at Kenilworth Union Church in Kenilworth, Illinois, and now he's living in Evanston. He's on summer vacation now in Whitehall, Michigan. And Gil, thank you for joining us.

Gil:

Delighted to be here, Andrew.

Andrew:

Now, Gil, it was about, what, five weeks ago that you had joint replacement surgery on your left knee?

Gil:

No, no. It was my right knee and it was five weeks ago yesterday.

Andrew:

Oh, right knee. We'll talk about your left knee in a minute.

Gil:

It will come along.

Andrew:

What was going on, was it just becoming painful and sort of locking up on you? I know people kind of eat away at the cartilage and then you can just have bone on bone. It can be very difficult. Is that what was happening to you?

Gil:

Yeah. Well, it kind of came to a head in March when I was in Israel with the family and climbing all over everywhere. And what had been just kind of a chronic stiffness and what have you turned into real pain. And my left knee had been a bit unstable for some time, so that kind of settled it. We travel a lot, I need my knees.

Andrew:

Right. And you said, now, it was five weeks ago. So you had the procedure. And we're going to meet your doctor in a minute. And I know that your son also is an orthopedic surgeon, so you were kind of smarter than the average bear, if you will. You knew about it. And so you were probably aware that at some point a knee replacement could bring you relief.

Gil:

Yes. I had every confidence that it would. It turned out even better than I anticipated, frankly.

Andrew:

Well, I was going to ask you about that, because I understand you said you've had problems in the other knee, too. So you actually had that scheduled for the fall, as well, to then have a second knee surgery to hopefully have them both be good as new, right?

Gil:

That's right. And, frankly, I thought I would dread doing it twice, but because of how well it went the first time around I really have no hesitation to do it again.

Andrew:

Okay. Let's talk about that. Now, you did have your surgery at Northwestern Hospital five weeks ago. What did that involve? So you went in. You were put to sleep. How long did the surgery take and what was the recovery like?

Gil:

Well, they told me the surgery was an hour and a half. I was in the hospital for three nights, which has, I think, more to do with Medicare than anything. But those three days were painless, quite frankly. They kept me very comfortable. And then I went to a rehabilitation unit in the retirement center where I live for about seven days, because the rehabilitation was immediate there every day. I had a day or two that were a bit uncomfortable, but from then on it was smooth sailing all the way. I really haven't had any pain for two weeks now.

Andrew:

That's great. And, of course, you've got seven grandsons, and so I would imagine you're busy. And I know you've told me previously you have a trip planned now next month, in August, to go to South Africa. Is that right?

Gil:

That's right. As I said, we travel a great deal over time, and that's why it's important that we be mobile. And my wife and I lead these groups, mostly out of the congregation that I've served so long. We have 24 people we're taking to South Africa and to Botswana for 21 days.

Andrew:

So as bad as the knee got to feeling, how good does it feel now?

Gil:

Well, I have no pain. It's functional. I go up and down stairs. I can't believe it, quite frankly. I thought it would take longer to rehabilitate to this.

The Orthopedic Surgeon who Treated Gil

Andrew:

All right. Well, let's meet your surgeon. Dr. Raju Ghate is an orthopedic surgeon associated with Northwestern Memorial Hospital and also the Feinberg School of Medicine. And he's your doctor.

Dr. Ghate, that's the kind of outcome you hope for with a knee replacement, right?

Dr. Ghate:

Certainly you do. I mean, Gil is kind of a unique patient in the sense that it took him quite some time to come to knee replacement, given the amount of arthritis he

had. He managed for quite some time on his own, which a lot of people can do and are able to do for an extended period of time, and he was able to do that very well. But, clearly, he had gotten to the point where he needed some help, and we were very happy to be able to provide him with what seems like a very good outcome so far.

Importance of Mobility in Overall Health

Andrew:

Now, mobility is really critical for overall good health. So I imagine as people develop arthritis and it slows them down and they can't be active. It's not good for their heart. If they're diabetic, it's not good for that. So we have to look at this potential of joint replacement surgery or whatever will help them get them moving again as really important, I would think. Becoming sedentary is not a good thing as you get older, period.

Dr. Ghate:

No, absolutely not. And it's important to look at it, as you mentioned, as a global issue. It can be a downward spiral for a lot of people if they're not able to exercise or at least just walk as their normal daily activities. Because if you stop walking you certainly start becoming more sedentary, then you potentially put some weight on, worsening any medical issues that you might have with any high blood pressure or obesity or something like that. That certainly can get worse with inactivity. So activity is important from age two to age 100. So we want to make sure we maintain activity.

And a lot of people get afraid or concerned, Oh, am I too old or too young for a knee replacement, and the key defining factor is the thing you mentioned, and that's activity. We want people to be able to maintain their activity level and enjoy their life and enjoy their recreational activities. And with knee replacement and hip replacement in its modern phase as it is right now we're able to do that comfortably.

Andrew:

We're going to talk in greater about it. The other thing I think about is if someone's joints are not stable, then you also worry about falls. And having done programs on people as they get older, I know falls is a big problem. And you talked about a downward spiral when people become inactive and it can lead to pneumonia, and that can be their death knell. So I imagine having good, strong, mobile and stable joints is really critical as we get older.

Dr. Ghate:

It certainly is, and you've raised a great point with the fall issue. The saw a woman who is 94 the other day, and if you saw her you'd think she was 74. She had a pretty arthritic knee, and her biggest--the biggest concern I had for her was that

she had fallen twice because her knee gave way on her. And the reasoning or the logic approach that I took with her was that certainly, you know, she could continue to manage the pain in her knee without surgery, but the real concern was fall. Because a hip fracture in an elderly patient can be--has a high morbidity. And morbidity, by that I mean can affect other organs and have a significant effect on their ability to ambulate and often carries with it a certain degree of mortality that a lot of people, you know--could be avoided if they were ambulating safely and better. So certainly that is a big concern that we have.

The First Steps to Addressing Knee Pain

Andrew:

All right. So let's go back to knees then, and you kind of touched on it. So a lot of people and, Gil, it sounds like you, maybe you didn't feel the pain or were coping with the pain, but a lot of people find themselves with terrible arthritis pain. So are there approaches short of surgery to manage that first? So if we take a conservative view--and I know Northwestern Memorial does, you're not pushing surgery--what do you try first? Let's talk about the knees first. What do you try first?

Dr. Ghate:

Well, I think in the knees I think the first thing is you want to meet with someone who is qualified to evaluate you. And once you've had the evaluation, certainly the first step that I go with all my patients is conservative. So that starts with things like physical therapy. If it's a younger patient, talking about modifying your activities. I mean, if you're 50 years old and you have a little bit of knee arthritis, training for the Chicago Marathon is probably not the ideal activity for you. But certainly swimming, cross training, training to ride a Tour de France or getting on an exercise bike or a cycle is a great exercise or a great way to stay in shape and not really pound on your knees.

So one of the first things we talk about is activity modification. So modifying your activities to cope with what you have. So swimming is a great activity. Exercise bike or cycling is a great activity. And also an elliptical machine, which is a nonweight-bearing type activity, is a great activity. A lot of people go out and buy treadmills, because they think Oh, I have arthritis, I should exercise. You never want to discourage exercise, but if you're going to buy something, a treadmill is not always the ideal device to buy for hip or knee arthritis. So certainly getting an idea of what's going on before you start buying exercise equipment and trying to manage your own pain is a reasonable thing to do.

Beyond that I think basic anti-inflammatories, Advil Aleve over-the-counter are wonderful medications when used in moderation. Certainly you don't want to be on an anti-inflammatory for three, four, five, six years because, like everything in life, it's not free, and there's risk associated with it. We prefer to treat people with a

short course of anti-inflammatories. Use them for bursts at a time, you know, three, four weeks at that time. For example, when Gil was going on a trip maybe he took some anti-inflammatories with him because he knew he'd be walking more than usual. And that's when we like to use the anti-inflammatories.

Beyond that, the second tier of treatment involves injection therapy, and that really at this time point comes in two forms. At one point is that of cortisone, which is more of a quick fix. Someone who tweaked their knee with a little bit underlying arthritis or someone who comes in and says, My granddaughter's getting married this weekend. Can you do something to get me comfortable through the weekend. Certainly a cortisone shot can help.

And cortisone has variable outcomes. There's no good literature to tell us how long it's going to last. In every it's variable. Some people get six hours. Some people get six days. Some people get six months. So there's no real rhyme or reason to why it works for some people and not in others. But, certainly, there is a law of diminishing returns with its use in terms of the fact that if the first time you get cortisone it lasts you six months, well, the next time it might last you four and then two and then, you know, it might be down to two weeks. And, typically, we don't like to use more than three or four cortisone shots in a knee. And I don't like to use more than six in the life of a knee.

Andrew:

Dr. Ghate, I want to hear the through line of where you go next, but I want to do that after the break. We are visiting with Dr. Raju Ghate, who is an orthopedic surgeon associated with Northwestern Memorial. We have on also one of his happy patients, Reverend Gil Bowen, who joins us from his summer vacation in Michigan.

We'll be back with more Patient Power sponsored by Northwestern Memorial Hospital right after these messages.

Welcome back to Patient Power live on healthnet.nmh.org. We're here every two weeks with a webcast to help connect you with leading medical experts who are on the medical staff at Northwestern Memorial Hospital, one of our leading medical centers in the world. And the idea is to just help you get good information for you and your family. We've got a whole variety of topics, so take a look at that area on the Northwestern Memorial website, healthnet.nmh.org. All our replays are there, transcripts and our schedule of what's coming up. So it's important for you.

Injection Therapies

Andrew:

Now, today we're talking about the latest in knee and hip replacement surgery, and we've been learning first about more conservative approaches. And we have with us an orthopedic surgeon on the medical staff at Northwestern, and that's Dr. Raju

Ghate. Dr. Ghate, before the break you were explaining about cortisone shots, for example, and all the different approaches pre-surgery to see can that help someone. So where are we now?

Dr. Ghate:

We were just finishing up with the cortisone shots. And to summarize, basically, they are more of a band-aid, a short-term solution to, obviously, a long-term problem. A little bit more potential long-term solution, in terms of six months to a year at least potentially, is something called Sinvisc. Or there's multiple--there's Orthovisc. It's basically called viscosupplementation. There's numerous companies that make this substance. For lack of a better phrase, it's a clear looking-motor oil type substance that helps to lubricate the joints.

The mechanism of action is not completely well known by us, but, certainly, it provides nutritional environment for the remaining cartilage in your knee to survive in and to get some sort of pain relief from the arthritic pain. It's either three to five injections over the course of three to five weeks, depending on the type of product you choose. Sinvisc can provide up to six months to a year of relief in about 70 percent of patients with mild to moderate arthritis. Certainly, it is not as effective in patients with severe arthritis. So it's definitely something that's in our armamentarium and something that we try to use to help people when they first come in with mild to moderate arthritis.

And then, obviously, once you get beyond the injection therapy you're looking much more toward the surgical interventions, which are knee replacements. There are things that are partial knee replacements that are out there that we do. And that's where we start getting into that realm.

Different Devices and Surgical Approaches with Knee-Replacements

Andrew:

Okay. Let's talk about knees now, for a minute now. The thing is people read the paper or they see some ad somewhere, and it's confusing because there are a lot of device manufacturers. Everybody is trying to compete or get an edge, and there are surgical approaches as well that seem to vary. So help us decipher this. First of all, about the devices, how long can we expect them to last? There's even been advertisements for gender-specific knee replacements.

Dr. Ghate:

Yes, absolutely.

Andrew:

And then also we hear this term "minimally invasive." And then the one other thing later on, on top of that, there's been some thought about could surgery be better or more accurate or that knee placed just so, you know, to last longer with the

assistance of a computer figuring out exactly the orientation of the joint. So take us through that of where we are and help us understand what you think are significant innovations and what the jury is out on.

Dr. Gbate:

Well, to touch on your first question, which was the issue of the advertising and certain heavy amount of advertising that's gone in recently in the knee world, at the end of the day there's very little difference between manufacturers in terms of their knees. The data nationally that we've collected and been presented at numerous meetings, basically there's no difference between any companies' knees. So what the company is after is a certainly amount of market share, and there aren't a huge amount of differences company to company. There's no differences in terms of long-term outcomes with one knee versus the other that are dramatically different.

What you want to look for is you want to look for the person doing your surgery, that you're comfortable with them doing your surgery, and then let them use what they're most comfortable doing. That's the most important thing is you want your surgeon to be doing what they're most comfortable doing so that they can give you the best outcome.

In terms of the gender-specific issues, certainly we have come to realize as we're refining these surgeries that there are differences between men and women, I guess taking us several decades to figure that out. But, again, at the end of the day there's not a huge difference, and there's no statistical data to support the use of a gender-specific knee. It does potentially have some advantages, but, again, those have not been borne out in the literature or in any scientific paper that would indicate that it's somehow a panacea for women that is unique.

What it does for us is basically give us more sizing options. And so it allows us to better or more customize the knee to the anatomy that we're seeing in front of us. And that may be male and that may be female, and at the end of the day it's more about customization options that a gender-specific knee potentially gives you. And I don't even think of it as--they purposely talk about a gender-specific knee in a sense that they don't really want to specify that it's certainly just a woman's knee. So I think what it has done for us is create more sizing options.

In terms of the minimally invasive talk that is certainly prevalent throughout our society. That has been in many ways a good thing and in many ways a bad thing. In the sense that it's been a good thing it has gotten us and trained us to be able to put knee replacements and hip replacements in through smaller incisions, cutting significantly less muscle than we've cut in the past and hopefully getting patients up moving quicker. That has been at times controversial in a sense that through a smaller incision you're not able to see as well and perhaps you're not putting your implants in as straight as possible. So there are those people who still use a

traditional approach. And then there are those of us, myself, who use a less invasive or a more of a minimally invasive approach.

But at the end of the day the knee has got to go in perfectly straight and perfectly balance, and that's the most important thing. So the size of the incision is not critically important. And there's good long-term data that does show us now that regardless of the type of approach or type of incision used the most important factor is that the knee goes in well aligned and well balanced and that there is no true long-term difference in terms of outcomes beyond three months comparing a less invasive or minimally invasive approach to a traditional approach.

See, the advantage really occurs in the first couple of weeks after surgery. I don't know if Gil could potentially speak to that down the road that a less invasive approach does allow for a little bit quicker recovery, and that's really where the meat of that is.

And, finally, your last question about computer navigation. Certainly in everything in our world, obviously--we're on a computer tonight--we're getting more and more close to being computerized, and taking computers in the operating room is probably the next step. It's not wide scale. Certainly at Northwestern we have some of the developing surgeons in the computer navigation industry in knee replacements, and while I'm not personally doing that right now what they've learned and have been able to teach us from computer navigation has been very interesting, very intriguing, and it has helped us become better knee surgeons. And that's been probably the greatest thing that's come out of computer navigation.

I don't know that the knees are going in any more precise, because it does rely on certain human inputs to set the computer. So from that perspective that hasn't changed in terms of needing a human input.

Andrew:

But it sounds like the use of the computers that you were discussing right there, that's just sort of an evolution of medicine. But what you need is a good surgeon to begin with and, as you said, a straight implant.

Dr. Ghate:

Yeah. Absolutely. And, you know, Gil was talking about the length of the incision. That varies based on, also, the size the knee. Because obviously we're putting in certain size implants in certain size people. While Gil is not a large man, he's certainly a tall individual, and he's got large bones. And he required the second largest implant that we have. So certainly to get that implant in you need a little bit more space in terms of an incision. But again, a patient--in a smaller older

woman you definitely don't need that type of incision. But somewhere between four to five inches is typically the average incision for a knee replacement at this point.

Recovering From Knee-Replacement Surgery

Andrew:

Okay. And what should somebody expect for a recovery? So Gil was talking about, you know, three days in the hospital and not really a lot of pain and now into rehab and now five weeks later he's a--at least with that knee, he's pretty mobile guy and getting ready to go to South Africa and do a lot of walking and running around. What would you say, what's typical or what's the range of recovery for people?

Dr. Ghate:

What I typically tell patients, you're in the hospital, typically, three days after which, depending on your situation, you either go home with home nursing or home therapy or you go to a rehab facility, like Gil did. I'd say it's about 50/50 that people do one of the two things. From there you typically leaving the house walking with either two crutches or a walker. And then transition over the course of the first seven to ten days from that walker to a cane. And hopefully by the two-to-three week mark the cane is more of an accessory than a tool. And by four to six weeks you've kind of left the cane behind and are at that point ambulating without any significant difficulty.

In terms of return to recreational activities, with a single knee and not having any arthritis on the other side I typically tell people it's about six weeks before they can start swinging the golf clubs comfortably, eight weeks before they're walking the full golf course. And in terms of tennis, I've had patients go back to play single tennis as soon as six weeks, but I'd say it's more like the eight-week mark that people are doing something like tennis.

Andrew:

And if somebody were a skier and let's say they had the surgery in the summer or the spring, when winter comes around could they hope to ski again?

Dr. Ghate:

Oh, sure. Sure. It's a little different from an anterior cruciate ligamentary construction or something like that in a younger person where, you know, the rehab protocol and whatnot we have from watching our athletes that we hear about in the newspapers, they lose a season or something like that. I don't necessarily think that--a knee replacement, you don't necessarily lose a season. If you had your knee replaced in June or July I think certainly that following winter you could be out on the slopes skiing.

Andrew:

Now, Gil, how's the recovery been for you? Is it consistent with what your doctor was describing?

Gil:

Yes, very consistent. I think I'm a little ahead of his schedule which I appreciate very much.

Dr. Ghate:

Yes.

Andrew:

Good for you.

Gil:

And I was, in a way, to be very honest with you, surprised that really all discomfort ended around the third week.

Andrew:

And do you take any pain medication or anything like that now?

Gil:

I'm not taking it now, no. Maybe I should be, Doctor.

Dr. Ghate:

I would say in terms of answering that, Gil was unique in that sense. He almost left the hospital without pain medication. I can tell you, I've been doing this a while, and I could count on two hands the number of people who left with the amount of pain medication he was taking.

But I typically tell people in terms of a narcotic you can expect to be on a narcotic for, you know, a fair dose for the first seven to ten days. That then probably gets cut in half over the next seven to ten days and then cut in half over the next seven to ten days. And then, typically, it's associated with going to physical therapy that you might want to have a pain pill on board so the therapist can really work with you in terms of getting the most motion out of your knee and the most amount of exercise out of your knee in that time frame that you're in therapy. So typically when I recommend the pain medication after the four-to-six-week mark is associated with physical therapy.

Having Both Knee Replaced at the Same Time

Andrew:

Dr. Ghate, just as we wrap up our discussion on knees, we have just about a minute left, some people have talked about having both knees done at the same time. What's your view of that?

Dr. Ghate:

You know, it's controversial. There's two to three times an increased risk of medical complications when you have them both done at the same time. Now, we're talking small numbers there. The numbers are .17 percent going to a .47 percent or a .5 percent chance of having a major medical complication. But if you do take that number and multiply by several hundred thousand knee replacements done a year in the United States, there is some complication risk that some of us are comfortable with.

I certainly consider it in people who are in their 50s and early 60s and with zero medical problems. I certainly wouldn't do it in someone over the age of 70. I think there's good data to suggest that it's relatively high risk. But it is very controversial, and there are people who will do it in their 70s. And I certainly will do it, and it's very controversial. Some would argue it's safer, some would argue it's not.

Andrew:

Right. Gil's 75 and chose not to, but he'll have his second knee done in September.

We're going to continue our discussion with Reverend Gil Bowen, who's had one knee done, and he's going to have another. But we're going to get on to hips as we continue our discussion with Northwestern Memorial orthopedic surgeon Dr. Raju Ghate. Remember to request an appointment online with Dr. Ghate or one of the other surgeons, just visit nmh.org.

I'm Andrew Schorr. Stay tuned for more Patient Power on HealthNet brought to you by Northwestern Memorial Hospital.

Thank you so much for joining us tonight for our live webcast as we discuss the latest in knee and hip replacements. And we're visiting with Reverend Gil Bowen, who's normally from the Kenilworth and Evanston area. He's up on vacation in Michigan but joins us after he'd had one knee done, and he has another one coming up in September. But he's feeling good and feeling active. Active enough with one knee replacement to go with a bunch of people to South Africa next month, so that says a lot.

Hip Replacements

Andrew:

And Dr. Ghate, of course, not only does knee replacement and other orthopedic procedures but a lot of hip replacements. So let's continue and talk about hips.

So as I was saying at the beginning of the program, Dr. Ghate, my dear mother-in-law, and I really do love my mother-in-law, Ethyl, so she had a lot of pain, was sort of limping around. I don't think she used a cane or anything, but, you know, enjoying her retirement years, she was getting cold water thrown on that. It was just a problem, and the pain pills were not helping enough. So finally the decision came, and she was about 75, to have the procedure.

So how do you decide when somebody should have a hip replacement? And is it the same story as you talked about with knees beforehand? Is there a shot you can have? Should you have anti-inflammatory medications? How can you manage it to see are there more conservative approaches, or when do you then make the jump to surgery?

Dr. Ghate:

Yeah, you know, the hip is a little bit different from the knee in that sense. The knee, you can obviously from an injection standpoint it's a much easier joint to inject. The hip, on the other hand, you need a special x-ray device to actually consistently and safely inject the hip. And from a conservative care standpoint it, of course, starts with anti-inflammatory and physical therapy, much like the knee. Then, again, we have the conversation about activity modification much like the knee in terms of, you know, watching--conserving your steps, using them for what you want to do and exercising and trying to keep your weight down, using nonweight-bearing activities such as a swimming pool or elliptical exercise bike.

But in terms of beyond the activity modification, anti-inflammatories, we don't have that role of injection therapy. Now, there are people out there who are using--and people at Northwestern who are using the is Sinvisc-like materials and injecting into hips, and they've had decent results with it. And there are people at Northwestern who are doing that, but it's not as consistently done and nationally done as, certainly, the injection to the knees are. So people with hip arthritis tend to come to surgery a little bit quicker than those--I'm sorry. Those with hip arthritis tend to come to surgery a little bit quicker than those with knee arthritis because of that.

Who is a Candidate for Hip Replacement Surgery?

Andrew:

Okay. Now, Ethyl was 75, pretty good health, some high blood pressure. So it's major surgery, I know. I mean, I know you have less minimally invasive approaches, and let's talk about that related to hips, but still nobody considers

surgery likely, but yet it's often older people who need the surgery and want to get back to activities, and we talked about the importance of that. So how do you decide who's a candidate for surgery?

Dr. Gbate:

Again, we talked about it earlier. Age is not necessarily the cut-off for surgery. I mean, I've done hip surgery on people as young as their 30s and as old as their early 90s. Again, it's a patient characteristic. Every patient is an individual, and they need to be evaluated as such. In terms of when you come to surgery, it's a pretty simple question. It's patient driven. As a physician I feel my role is more in an educational standpoint than it is in a decision-making standpoint.

The reason to have your hip or your knee replaced is pretty simple. It's pain and lack of function. The pain is something that comes from the arthritis itself. The lack of function is a very simple question that patients have to ask themselves, and that is, is their hip or knee running their life or are they running their life? So when they get out of that bed in the morning are they looking at their knee or are they looking at their hip trying to ask them what they're doing for the day, or are they just going about their business?

Andrew:

That was Ethyl's case.

Dr. Gbate:

Those are really at the heart of the indications.

Andrew:

Yeah. She couldn't do what she wanted to, and people don't want to use a walker or a cane if they can help it. They want to be striding around in their walking shoes and, you know, leading their life, and so I know that's so important to people.

So let's talk about that. What's involved in the surgery? What's the typical length of the surgery and what's the recovery like?

Recovering from a Hip Replacement

Dr. Gbate:

So the recovery--typically, one of the issues that people are always concerned about, just to address it, is the anesthetic aspect of it. People are worried about going under, having a general anesthetic. Typically at Northwestern we do most of our hips and knees under a regional anesthetic, which is that of an epidural combined with a spinal. So typically the patients are numb from the waist down, they're put into a twilight sleep so they're not conscious, they're not aware that they're having their hip replaced, but they're also not undergoing the medical risks associated with having a general anesthetic. And that's been very beneficial and

something that's really changed at Northwestern in the past ten years. It's gone from minimal use of epidurals to almost routine use of epidurals.

In terms of the length of surgery, the surgery itself takes about an hour and a half to two hours, depending, again, on the size of the patient and the size and complexity of their arthritis. The recovery for a hip is actually much quicker than the recovery for a knee, typically. The recovery for a hip is about, again, three days in the hospital, perhaps either home with home nursing or home therapy or a short stint in rehab. It's then followed by a pretty quick progression of the weight bearing and ambulation that is much less painful than a knee replacement. There's not as much manipulation of the joint that goes on with knee replacement in the hip. I mean, the hip, most of the therapy is just getting up and walking again.

Andrew:

Okay. So when you have the surgery how long does a hip replacement surgery take and what would be the amount of time typically in the hospital and then the course of recovery?

Dr. Gbate:

So, again, the surgery itself takes about an hour and a half. Typical hospital time is about three days. The course of recovery, most patients are back doing most normal activities by a month to six weeks with a hip and with much less pain in terms of therapy pain compared to a knee.

Andrew:

So there you are, you want to plan that vacation, trip to Europe whatever. How much time for recovery should you allow before you're going to be walking up and down the narrow cobblestone streets?

Dr. Gbate:

I would typically tell people that it should be two months, two to three months, if you're going to take a major trip to Europe or something like that, just to allow time for recovery and make sure you're comfortable with your hip and what's going on in terms of rehab. So I typically tell people it's, you know, two to three months before I want you flying out of the country.

Points to Consider for Patients with Diabetes

Andrew:

Now, where does diabetes come in? You know, we've got 15, 17 million people with diabetes. When you think of major surgery and you're diabetic are there worries there or cautions there?

Dr. Ghate:

Certainly from a medical standpoint--and myself being an orthopedic surgeon I'm not a medical doctor in that sense--but certainly there are increased risks from a medical standpoint. From the actual surgical standpoint the risk really is with infection. Diabetics tend to have a little bit higher rate of infection, and we're much more conscious of that. On the knee side we're able to put antibiotics in the cement to help reduce that risk of infection. On the hip side we typically don't use cement to do a hip replacement anymore. The risk is there but not nearly as high as the risk for infection on the knee. The knee is much more superficial and the risk for infection on a knee is probably a half a percent and on a hip is probably a quarter of a percent.

Different Devices and Surgical Approaches for Hip Surgery

Andrew:

Okay. Now let's talk about the different approaches for hip surgery. So you've got a minimally invasive approach there too?

Dr. Ghate:

Absolutely. And, honestly, the minimally invasive approach on the hip I think has made a greater difference than the minimally invasive approaches on the knee. The hip side, we're cutting significantly less muscle. We're able to get our implants in through routine incisions anywhere from three and a half to four and a half inches. We're splitting muscle and cutting less muscle, so I think patients are just recovering that much quicker. And I think there's pretty good data that support that patients are recovering quicker with less invasive surgery at this point.

Andrew:

Okay. So, again, there are different devices there and different materials. So talk to us about where we've come with materials and maybe the durability of these materials. It's sort of a high-tech area now, that hip joint. So where are we now with the devices you use and how they've improved?

Dr. Ghate:

Yes. It's a very interesting question. The bearing surfaces for hip replacement, and what I mean by bearing surfaces is how the ball of your hip moves with the cup that's in your pelvis, is very high-tech. It's probably the most researched area in all of hip and knee replacement in terms of company investment trying to build a better hip. The typical hip can be expected to last 10 to 15 years in 95 to 98 percent of people and 15 to 20 years in about 90 to 95 percent of people.

The issues are the hip that we put in is not the one that God gave you, so it can wear out. It can wear out quicker than the native cartilage that we all were born with. The options for bearing surfaces are ceramic, there's also metal on metal. The most common bearing surface we use--the most common bearing surface we

use is metal on highly cross-linked plastic. It's the most researched plastic in the world that we're aware of, and a great amount of work has been put into designing a better plastic. And the plastics we have today will hopefully last 20 to 30 years in 95 percent of people. The metal on metal bearing surfaces will hopefully last 20 to 30 years.

So the data I was quoting earlier is based on hips that went in ten to 15 years ago. So we hope the hips we're putting in now will hit more towards 20 to 30 years than 15 to 20.

Andrew:

Right. And that leads me to a question. You made a comment earlier when you were talking about knees about maybe somebody getting their knees replaced at age 50, and you talked about the range of people you've done. Well, the same with hips. Let's say somebody had rheumatoid arthritis, a lot less common but not uncommon than osteoarthritis, and it made sense for them to have a joint replaced like a hip. So then you say, well, they're younger. Hopefully they're going to live like that lady, your patient, into their 90s, so how will this joint be replaced and could you do it again?

So what approach do you have with younger people now when, again, the jury's still out how long will these devices actually last?

Dr. Ghate:

Certainly. With younger patients we used to be very hesitant to replace their hips primarily because there's two basic types of hip replacements. There's the cemented hip where we use glue to basically glue the hip in place, and there's the uncemented hip where the body actually grows into the metal implant. And over the past 15 years with the development of uncemented implants, where we have haven't had to rely on glue, we've gotten pretty reliable fixation of the devices within the body. And what that allows us to do is those liners, that plastic liner I was telling you about, allows us to change that out. Whether that's a plastic liner or ceramic liner, it can be swapped out for a new liner.

So in a younger patient where we used to be very hesitant on moving forward with surgery, we are more comfortable telling these people, Yeah, you might get 15 or 20 years out of it and at that point we might need to change this liner out. But to do that operation versus the traditional revision or redo surgery that we were doing 10 to 15 years ago is incredibly different and much simpler and much more straightforward. It's not like getting your oil changed in your car, but it's more like going in to get a tune-up.

So from that perspective we've been able to really change the landscape of the revision surgery, and that has gotten us a lot more comfortable in operating on people like you were mentioning who are in their 30s and 40s. We're much more

comfortable moving forward with them than we have been in the past. And that's expanded the scope of people we can help.

Andrew:

Now, when you talk about the liner are you discussing what you call hip joint resurfacing? Is that the same thing?

Dr. Gbate:

No. Hip joint resurfacing is an interesting topic. Hip joint resurfacing is trying to preserve the current bone stock and basically putting a metal cap over the femoral head. The femoral head is the round ball that articulates or moves with the hip joint. And then in a similar fashion you do a hip replacement, you do put a cup or a shell in the person's pelvis, but instead of taking out the head and putting a stem, as we call it, down the hollow canal of the thigh bone or the femur, we actually put a cap on top of the femur.

Andrew:

We're going to talk more about this right after the break to just understand that, because I know it's been advertised too. We're discussion hip replacement now with Northwestern Memorial Hospital orthopedic surgeon Raju Gbate. We'll be back with more on this right after this.

Here we go into our last segment of our Patient Power program discussing hip and knee replacement surgery and approaches, nonsurgical, as well, with Dr. Raju Gbate from the medical staff at Northwestern Memorial. And also we'll hear again in a minute from his thankful patient, Gil Bowen, who has had one knee done and is going to have another in the fall, and it's made a big difference for him.

So just before the break we were talking to Dr. Gbate about hip resurfacing, and you were saying that's a different thing. It's been advertised. And I've also heard it suggested as an approach for people who are younger who want to avoid--you know, want it to last a long time or want to preserve their options. So put that in perspective for us.

Dr. Gbate:

So certainly. The hip resurfacing is actually something that's been tried before. It's been tried probably two or three times at least two times in the history of hip replacement. It's made a comeback because of the thought that if we could preserve bone we potentially would be helping younger patients. The problems associated with it are that the research behind it is foreign based. We don't have a lot of good North American or United States research that validates it. And certainly we're exciting to see what's going to come down the road as it's being used.

The theoretical advantages are that it's a bone-preserving operation. The downside of it is it's not a less invasive operation. It's actually a more invasive operation in the sense that it involves cutting more muscle and more dissection and can be a little bit longer of a recovery than a standard hip replacement.

It has, on the other hand, brought us some new and exciting ideas in terms of bearing surfaces or the type of ball socket joint you use to put together a hip replacement. And that's been very beneficial. And so that's really been one of the very good things that's come out of hip resurfacing that we look forward to kind of using with our normal hip replacements, with our normal stems that we use.

And some of the concerns that brought about hip resurfacing, again, relate back to the use of the cement or the glue. And now that we're not using that as much the concerns with that have been minimized and reduced to the point where a lot of us look at with hip resurfacing as potentially solving a problem that's already been solved. So that's really where it's at right now. So we're going to have to wait five to seven years to see whether it's something that's here to stay or not.

Final Comments: The Future in Joint-Replacement Surgery

Andrew:

So where are we headed? And maybe you can, if you want, talk about them individually, knee replacement surgery, hip replacement surgery. But when you look at it, where are we headed? Hopefully, you've got a long career ahead of you, Dr. Ghate, so what will you be doing differently, do you think, in the years to come?

Dr. Ghate:

I think that we're headed toward more customized implants for people. You know, you broached earlier on the gender knee or the gender-specific knee. This is an implant for women type deal as much as it's been we're able to manufacturer implants, where we had seven sizes now we have 21 sizes. And so we're able to create a customized implant from off-the-shelf implants where we haven't been able to in the past.

On the hip side the real money or the real action is at that bearing surface or the where the ball and socket meet each other and trying to create a better articulation there. Because in terms of failure of the hip replacements, they don't fail at the stem that goes into the femur, and they don't fail at the cup that goes into the pelvis. They fail in between. So what we've really been able to do is focus in on that now. And I think that that's what the next thing is pairing that hip replacement that lasted 15 to 20 years--I think in my career the hopeful goal will be we'll be able say this one will last 30 to 40 years, which for most people when they're contemplating hip replacement surgery we will hopefully be able to look them in the face and say there's a 90 percent chance this will last you a lifetime. And I think that there's where we're headed.

Andrew:

That would be neat. I want to go back to Reverend Gil Bowen. So, Gil, you've had one knee done. You have another, and I'm sure there are a lot of people who know are around Evanston and Kenilworth, and they saw you had problems and now they see you doing better. And when that other knee gets done you'll be running the Chicago Marathon or something. But you'll be playing golf and doing well.

So what would you say to other people? There are certainly millions of other people suffering, tried different things. You've been one of these surgeries, not that everybody should have it, but what should they consider?

Gil:

Well, the same things I did, first of all. The question is how active do you feel you have to be in order to have an decent life, and I've been active forever, and how much pain are you putting up with. And in a sense the reason I got--or made the decision to have a knee replacement was simply that both the pain and inactivity got to the point which I found was intolerable. And so I was willing to go ahead with surgery, even though I was a bit--everybody is uneasy about surgery, I think. It's kind of a loss of control for some of us. It's scary. So I talked to people who had had it done and found that helpful in making my own decision. I would say one thing people ought to do who are putting up with pain and immobility is talk to others. There are a lot of them out there

Andrew:

Yeah, there sure are.

Gil:

And this can be helpful.

Andrew:

Well, I want to wish you well with your trip to South Africa and the mobility you have now with that one knee. And all the best with that second knee surgery that you'll be having. And you're a great example and inspiration for everybody. I know you've been doing that in your religious world, too, but now you're doing it just as a mobile guy who's 75 and still very active. All the best to you on your trip and in the future.

Gil:

Thank you for inviting me.

Andrew:

Thank you sir. And, Dr. Ghate, thanks for doing such a great work. And it sounds like the orthopedists at Northwestern Memorial have really considered this and trying to help people understand what's right for them and what are the available

options. I wish you well in your career, too, as you continue to make advances, because as we get older we may need it. Thanks for being with us, Dr. Ghate.

Dr. Ghate:

Appreciate it. Thank you.

Andrew:

Well, our next program is going to be with another orthopedic expert, Dr. Charles Carol. He's going to talk about repetitive stress injuries, you know, carpal tunnel and all those trigger finger problems you have. What do you do about that and when does surgery come into place? This is what we do on Patient Power on healthnet.nmh.org.

Thank you for being with us. Remember, knowledge can be the best medicine of all. I'm Andrew Schorr wishing you a good summer. Be with us in two weeks. Thanks for joining us tonight. This has been Patient Power brought to you by Northwestern Memorial Hospital.

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