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Hip and Knee Cases - Draft

with Joyti Saskena

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TRANSCRIPT

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Steven Bruce
I'm joined today by Joyti Saksena, who is a very experienced consultant orthopod. Down in London working out of the Royal Free is his second appearance on the show. Last time we talked about patella problems. Today we're going to look more at his main speciality, knee and hip. And he's got a number of cases which are a little bit as he described them off the beaten track for us. Josie, great to have you with us. Again, thank you for joining us for a second time.

Joyti Saskena
I thank you very much for having me, Steve. And thank you to all your audience out there.

Steven Bruce
What I didn't say is that you're also the chairman of the North London Orthopedic Clinic Sunday, which is an organization designed to take the load off the NHS waiting lists that must be keeping you busy at the moment.

Joyti Saskena
Yes, I think even in the private sector, actually, what's happened is they've actually really curtailed down a lot of the the weighting of type work. I think the main reason as we were discussing earlier is that in this current lockdown in the first lockdown, all specialties, including trauma through everything was just shut down. And there was a lot of capacity in terms of, you know, bodies, people available in the second or lockdown 3.0 as they're calling it, actually, orthopedics EMT, Max packs are all the services are still running to a capacity. So the number of bodies aren't being freed up. And therefore, what they've done is by reducing the private sector, amount of work, they've allowed to free up, you know, consultant time and nursing time to be able to then support the NHS. So actually, the workload, although is down, it's just, you know, forever building.

Steven Bruce
For you, of course, at the moment, I'm not working terribly hard, I got

Joyti Saskena
no unfortunately, self isolating at home. So my wife, she's an anesthetist, she did some ICU shifts last week, and unfortunately came down tested positive COVID last week. So although I'm negative on having to self isolate for the next 10 days, and even help out with the homeschooling. So that's another challenge. What things

Steven Bruce
should we do to move on to your ability cases?

Joyti Saskena
Okay. So these are four cases that I'm going to going to give essentially. And I'll try and stop after each case. And it's really the discussion, I really put these cases up for discussion, just to hopefully stimulate some

questions and then happy to talk through so I'll start First of all, this first case is a 32 year old female. She's a marketing executive, so predominantly, a desktop male role that she was scout skiing, couple of years ago, when when people could ski and sustained an injury to her knee, slight twist, bit of a bruise on the inside. She was able to carry on, but then soon enough, had to stop. And then these are when she came back to UK she was she was able to wait, they're not in too much discomfort. Yeah, so these are the plain x rays at the time. And arguably, there's not not too much one can see at that stage with with the sort of I have faith on the on the lateral view, there is some sort of bony changes on the on the medial femoral criminal condo, but the real kind of thing is that, you know, after managing for 612 months, it just really wasn't getting better. And then she came into clinic and we did these MRI scans, which, you know, effectively show kind of a large Meteor osgeo condra defects on the weightbearing portion of the meteor federal Condor. At this time, what I would say is that, you know, the options at this stage really are essentially, you know, do you, you know, she's 32 she's got quite a significant, you know, defect there. She is symptomatic affecting her everyday activities, and she's not really able to do much in the way of sports. And then in terms of, you know, what are the decision making, once you've managed to, you know, through, you know, rehab, physio or COPD, tried to strengthen the muscles trying to offload that side. We even considered a offloading knee brace, which helped but she found it a little bit cumbersome. So then she got onto the stage, what are the surgical options and at this stage, it is quite difficult. She's, she's got a full thickness defect. So just doing some kind of cartilage. You know, microfracture or cartilage transplantation, is not really going to help because the bone underneath it, the bone supporting that cartilage is just not good quality. And likewise, she's not really in that age group where one could consider any sort of replacement options, obviously, you're not going to go down the route of, you know, joint, your total knee replacement, or even a partial replacement. But sometimes you can get these metallic kind of focal replacements that people are are doing and, you know, with a reasonable success, but at the end of the day, that is still a metallic implant, there's no sort of, you know, you can't, you can only progress from there to some sort of replacement, or, you know, partial replacement. So, we were trying to look at, you know, ways of, you know, what can we do from a biological perspective. And so, in terms of, you know, the options we have as either some kind of, you know, putting some sort of plug or bone in there using our graft. But again, the issues are with, you know, disease transmission and rejection and that sort of thing. So, then we use the technique of CUDA and oats procedure osteochondral procedure to effectively take a plug of bone. So, these are the findings that arthroscopy again, not obviously, sort of significant wrong, but you see this kind of discoloration in the cartilage. And when you probe that area, it just pushes right

Joyti Saskena

in. Okay, so what we're seeing here is the medial femoral condom, I've obviously marked it in purple, the extent of the defect, but that is a really full thickness defect, that cartilage is very poor, and the bone underneath it is very poor. So we then elect to take that core out, effectively with an apple corer. Yes, this is taking out a core of bone, and cartilage, you can see the thickness of the cartilage, a couple of Mills, and around eight, nine millimeters of bone from an area of the knee. So we actually take it from the sort of lateral aspect of that medial femoral canal, so right on the edge of the non weight bearing area, and we then create an apple core to the to the area that's damaged, and essentially put that back into the area, just like a

jigsaw puzzle, you got a spare piece of jigsaw, and you're cutting out a piece exactly like that, and putting it into that into that area,

Steven Bruce
where replacement coming from. So where's the replacement piece coming from?

Joyti Saskena
This is coming from effectively, an area of non weight bearing bone. So on that on that picture, it's in the sort of top right hand corner. So we don't have a slide of that. But it's essentially just literally in the on the on the edge of that medial femoral Condor. So, where where the patella glides, we're not taking it from the chocolate part, we're just sort of more medial to that trochlea. And we feel that we backfill that defect with some bone graft. In fact, that bone that we've taken out of this area, we sort of crunch it up, we put some platelet rich plasma has taken from the patient's own blood, we mix that as a kind of a scaffold, and we put that back into the defect. So that fills up that that secondary defect, but that cartilage in the weight bearing area, we can take good cartridge and good bone and effectively put it as a as a graft. So that is kind of, you know, effectively, you're you're plugging a defect with a biological graph, as opposed to using any kind of muscle or anything like that. And as I say, you know, ideally, we would want to just do a microfracture procedure where we drill a bone stimulate bone, put some, you know, cartilage cells in there or a scaffold, but because the underlying bone is so kind of soft, and it's just not going to hold it, it's going to fail. So we need to structure our graph. And obviously there's no better graph to take them from the patient's own own supply.

Steven Bruce
Coming at you the first point of contact with this lady when she came in,

Joyti Saskena
no so like a lot of these people they do go around the houses a little bit so you can see what those she was seen and casualty plane x rays done and in hindsight, there are some changes on those x rays. But she then went from casualty back into to GP, saw a GP for a good few months went into didn't factor in some private physiotherapy, the physiotherapist and actually picked up a look she's just not progressing here. I think at the very least she needs a scan. Then she gets referred in Or role for Risa 3d NHS, that process, as you can imagine, takes a fair bit of time. And then eventually, in a season of the team gets a scan, and then it's discussed with me. And at that stage, she was actually seen by another consultant and put on a lift for an arthroscopy, just to have a kind of a look and see, but a very clear, you know, from the MRI and the arthroscopy findings that this was not going to settle down by itself. And it was really hampering her lifestyle.

Steven Bruce
To the point and my question, of course, is that we could find ourselves as two best chiropractors in that position of being nearly the first point of contact, is there anything in the way she presented that you think,

should have alerted us earlier on to the fact that there was an underlying problem? Or what is it inevitable that we would go through a couple of months of trying to get a better before we thought, so

Joyti Saskena
to be fair, I think the the mechanism injuries is probably key, you know, the fact that she did have difficulty weight bearing, and difficulty for quite a few weeks, it wasn't just sort of a few, a few days, things have settled down, I don't think it's unreasonable to try even, you know, one or two months of rehab, you know, for six sessions, because you guys, you know, we'll see patients, you know, patients that they're either, you know, making progress, in which case, you continue with that rehab pathway, or they drop down or plateau. And at that stage, I think it's worth, you know, referring or not even referring, you know, I think, for me is getting the diagnose that people aren't getting better, you need some kind of diagnosis. And generally, that's going to be an MRI scan, to find out what's going on. If the MRI comes back, and it's not, you know, showing too much of the way of concern, then you continue down your rehab route. And at least you know, that you're not doing more by delaying it, you're not doing you know, more harm as well. I think that's where the discussion is so important. And I always tell, you know, the people that I work with in the rehabilitation sectors that, you know, give me a phone call, give me a, you know, send me an email, send me, you know, just ask me a question. By and large, it's going to be, well, if we're not progressing, let's get a scan. And let's, you know, move them on to that to the next stage, let's get that diagnosis.

Steven Bruce
And so it's a, it's a difficult position, which I think we find ourselves in a lot in our form of private practice, because, on the one hand, a patient won't thank us if we send them off for an expensive MRI that shows us nothing, and they carry on with no rehab. But on the other if we chose them for two months worth of our rehab sessions, and then say, well, we better find out what's going on. Now. They'll ask us why we didn't do that in the first place.

Joyti Saskena
Yeah, I think you're right, you're down. If you do any damage, then I think, you know, I would, you know, again, it's been clear with the patient that look, these are the, you know, when you see him, I'm sure, you know, austere personalities, as well as orthopedic surgeons, you know, you're going to go through your, your history, your examination, and, you know, what is your differential diagnosis? And what things are we going to be treating here, what things we're going to work on. And by and large, you say to that patient, we'll look, we'll give this a few weeks, if they're not getting better than I think we need to, you know, do an intervention or or, you know, get some further imaging, get it, you know, confirm the diagnosis. And then it may still be more rehab, or it may or may change tack from

Steven Bruce
what was the underlying cause of injury.

Joyti Saskena

So this is effectively like an osteonecrosis. And I'll come to a little bit about that, and we've got got a case in the hip. But effectively, the bone dies, you know, it's taken such an impact, and the blood supply the underlying blood supply, select bone has effectively died, that bone then starts to degenerate the cartridge, then which is supported by that loan, then dies, but it's a slow process, and there'll be some creeping substitution, some, you know, bone healing, bone dying, bone healing, but over the course of time, it just doesn't survive. So it's one of those cases where you can't just try and, you know, often we're in our first port of call is trying to stimulate bone. So that's why we do the techniques of drilling into the bone or some kind of cartilage grafting some kind of biological stimulation, but she just gone beyond that. Clearly, at that young age, we didn't want to go down that route, you know, if that was a 45 year old are probably going down the route of more, you know, looking at partial replacements and things like that.

Steven Bruce
Caroline has asked how the boundary of your apple core part heals in the new position. Is it completely smooth? Is it just natural bone healing?

Joyti Saskena
it Yeah, so you're, you're essentially you know, it's a difficult one because we're dealing with a convex bone. So and when we take the is often in the flatter area. So we generally try and lead that that plug ever so slightly proud. Because we know that there's a little bit of impact as they wait there, that'll push it down. And January, we know the knee is good at sort of smoothing things off. But yeah, you're trying to get bone to bone and cartilage cartilage. And effectively using the host bone, and the the inflammatory mediators, cytokines, growth factors, to then with through the process of creeping substitution fill in that bone. So remodel that bone, the cartilage itself, you know, it's difficult to move, some of it will heal because it's, if you get blood supply back to that bone, that cartilage will stay alive, some of it does die, but the cartilage around the periphery, kind of starts to invade into that sort of space and fill it in. And I guess the true test is, you know, going back into that knee app, maybe, you know, six months, probably a year to see, because sometimes even a repeat MRI scan, it can be quite disappointing, you can still see very clear edges. But clinically, that patient is usually improving, she certainly noticed a quite a significant improvement to where she was clinically from, from the first, you know, few within the first few weeks, once the initial pain swelling went down, she could see that there was a difference. But we will follow up to at least a year 18 months to make sure she's healed.

Steven Bruce
We will converge to get back to sleep eventually,

Joyti Saskena
um, am I confident? I mean, I don't know if skiing was was her thing. It was the first time and probably she's been put off for life anyway. But yeah, I don't see any reason. You know, this is not. If you think about, you know, even a fracture where, you know, once they heal, you're happy for them to go back. This is kind of like a fracture, but a very contained fracture. So, you know, I'm confident that that just won't fall out or as long as possible integrates. And we generally guided by the patient centers, as long as she's

improving, then we'll continue, this is only concerned, yes, we will get a repeat MRI scan. But as I say, that doesn't always give us the answer. And sometimes you don't have to go in for a second look and actually probe the area to see whether you do get sort of bleeding into that area, or whether it's your firm, as opposed to your soft and mushy one, then you know, it hasn't taken but these are the because allograft sorry, autographed. A really good chance of feeling

Steven Bruce
a bit lost what you'd expect the long term outcomes to be you have data on this particular procedure and whether she's likely to get earlier osteoarthritis

Joyti Saskena
or Yeah, so the outcome for defects less than 10 millimeters are pretty good. So around 80 90% have minimal or sorry, no or minimal osteoarthritis, five years, where you get slightly larger defects, and where you're having to put multiple plugs. So sometimes we do simple a mosaic plasti, which is where you're effectively if you imagine that defect was nice and circular one core filled up. But if you've got more of that sort of oval shape, you haven't put two cores on top of each other, almost like a sort of figure of eight type pattern. And that's where the supporting bone is less good. So defects we knew above 10 millimeters at five years have a less than 50 sorry, a 50% chance of healing and that goes up sort of statistically as your size your defect goes up

Steven Bruce
as well. So for the best for this service lady whether or not you go skiing.

Joyti Saskena
This is a 43 year old gentleman, he works in the cities the banker, he's a very keen runner has been running, you know, pretty much all his life from his from his teens. And has recently been, you know, training up to do his, you know, marathons is now probably 18 months ago. And he presents really with bilateral anterior knee pain after you know, a number of you know, significant runs that he's done. These are the MRI scans at that time. And you can see really both knees or you know, fairly fairly symmetrical, slightly tilted patella slightly longer lateral facets but significant edema as a bone edema within the patella. So we know that there's patellar being overloaded. He's got cystic changes on that right side. And also the cartilage affecting it as as all the carpet underneath has significantly worn out. Yeah, so for him, you know, again 43 One could argue well, look What are the replacement options replacement options would be effectively a patellofemoral replacement. Again, replacing metal, the rest of his knee was pretty good as to the femoral joint was pretty good. So again, in this particular situation, we need to address both the articular cartilage and the bone. But as opposed to the first case, the bone isn't too bad, it just needs some kind of stabilization. In other words, trying to increase the pressure, you know, in that area just to stop that bone from collapsing, it's not quite got to the stage where it's collapse. But also we need to do something to the cartilage. So in this particular case, what we did we took use the shaver and we took articular cartilage, again, from a non weight bearing portion of the knee, some take it usually from the notch of the knee, we then put it through this process on the right side, which is effectively separating that cartilage from all that from the

fat and all the other things. And then we mix it with a patient's own platelets and thrombin and create a kind of piece of cartilage. And we put that into that area of defect. And then on top of that,

Joyti Saskena
just

Joyti Saskena
this one, this is a technique called a subchondral plasti. Where we're with we're actually under X ray control and under, you know sort of flat, that sort of vertical probe is the arthroscope. So we're looking at the knee, and we're using X ray control to inject calcium phosphate into the bone. So now we then supported that bone. And that deals with the sort of bony edema part of it. And the cartilage, we're using a cartilage graft in the form of a paste and their own cartilage to put into that defect. Again, you know, these are biological options to try and stimulate new cartilage and stimulate new bone. But without going to the mobility of taking a bone plug, which obviously does have a mobility, because you're taking it from somewhere. And with the patella, because of the shape of it, it's very difficult to get a plug to fit into that area. So this is a sort of an alternative option, where you can stimulate the bone, in other words, uses calcium phosphate, which is just naturally bone bone materials injected into that area to to effectively make that bone a bit more stronger, supported more, and then put the cartilage as a kind of a bit like, you know, when you're working when you're filling a hole in a wall with a bit of firm polyfilla, we're putting that haste into it with the hope that the surrounding bone provides enough nutrients blood supply to try and heal it.

Steven Bruce
You may incur orthopedic surgery, so I'm very primitive and brutal.

Joyti Saskena
Online tension

Joyti Saskena
there's a lot of finesse involved in it. This this chap

Steven Bruce
you just described, he sounds like the sort of person who would come to an osteopath, chiropractor or physiotherapist. And we probably get quite lengthy treatment trying to sort out bilateral knee pain, you know, we might well have gone through soft tissue treatment addressing things in the hip or the lower back or even orthotics for the feet before we thought saying, well, nothing's getting better now that send him off to you. Well, I

Joyti Saskena
don't actually disagree with any of that. I think, you know, in fact, that is the right really the right approach to take. And again, we you know, I strongly believe in in, you know, non surgical options are always the best options up to the point where they can't tolerate it, you know, in other words, once the condition

progresses, and that's where the relationship comes in, that's where the, you know, the, the, you know, getting the imaging, and then the discussion, because even with that discussion, it wasn't that he just opted for it. We had the discussion, you know, and then he, you know, we said, Look, we look, you can try and try to rehab as much as you can, he got to a point. But I guess the issue with him is that he wasn't prepared to simply just give up running, giving up, you know, as a cyclist, as well as a very keen sports versus he wasn't happy to just give those things up. So it was like, well, what's the next step? What else, you know, is out there that we can do, but doesn't involve, you know, kind of replacement? He definitely knew he wasn't ready for that side of it. And I agree, he wasn't ready for that. And therefore, this was, you know, for me, having had the discussion

Joyti Saskena
with him.

Joyti Saskena
We, you know, we came to that conclusion.

Joyti Saskena
Literally prescriber available on the NHS.

Joyti Saskena
Yeah, I mean these things are available to an extent now. What happens is is that isn't sometimes you get these things under the radar If, you know, these procedures, you know, certainly the two that I mentioned are not that expensive, because you're using the patient's own bone is where you where you have to order bone or take allograft, or that sort of thing, that's where it becomes really expensive. Because we're using all the pieces own material, it's actually just the cost of the disposables. So actually, a lot of these things come in under, you know, one or 2000 pounds in just in terms of cost wise, for the for the actual equipment, some hospitals will certainly have a role free, we've been able to do it, and we do quite a lot of this work with with a couple of my colleagues and other trusts, you sometimes have to put in what they call exception type, meaning the CCGs and question these things that you put in these kind of exception performers. So they are available, that, you know, you sometimes have to push quite quite hard if it's, it is not freely available.

Steven Bruce
So does that mean that elsewhere in the country, the patient himself, or probably the osteopath chiropractor wouldn't know which of these procedures is most appropriate? And are there are most orthopedic consultants, these specialists familiar with this? And would they ask for it? Or they just accept the constraints that an interest applies?

Joyti Saskena
Yeah, it's a good, it's a good question. I mean, I would like to say, Yes, I would, I would, I would expect the most, you know, nice, nice fishes, they would know about these things. I mean, again, these are not things that have just come out. In around, they've just been, you know, with, with, with the companies that we

work with a modified it that made it much easier. You know, for example, that that last procedure, we've done it all through arthroscopy, as opposed to, you know, initially, you could do the same procedure, but it would be an open procedure, you'd have to take, you know, shape its cartilage, or do all open flip the patella, and that has a mobility as everyone can emergency, they've refined everything. But in terms of, you know, do people do it, I think it's still considered, you know, even even with insurance companies, you know, you

Joyti Saskena
often can't

Joyti Saskena
get these through insurance companies, because they will say, well, the data is not there to support it. And in fact, some of the older data is actually not that great. It's just that now we've got new new procedures, new techniques, we need to collect that data within the to, you know, get that published. And that's, that's the slow part of that process, as we all know, can take quite a few years before you get that long term data. You can collect the patience, but it can be through five years before you know whether it's been a real success. So the simple answer is really Yes. You know, most people are aware of it, but I guess it's known whether that surgeon, you know, does these kind of things. That's the thing that the bit of homework that I guess you need to do.

Steven Bruce
You said you had four cases for us, but we don't have an awful lot of time after you consider your your hip case. Next. Yes, let's,

Joyti Saskena
let's move on to that. Right. So why 10 year old female, she's Afro Caribbean and origin. She's actually originally from from Kenya. And she's studying nursing, actually in Toronto. But she presents with, you know, bilateral sort of hip pain, she's had a number of sickle crisis. So she has she has sickle cell disease that has both both the genes. So this is quite a common thing for her. She's very used to it when she gets a crisis, but the new thing on this occasion is that she started developing bilateral hip pain, she has family in the UK, so they actually brought her back here. And then we saw her and these were playing x rays. Again, nothing really impressive, you know, to see on those, those playing x rays,

Joyti Saskena
or just move on to the MRI scans. And

hopefully your your, your viewers will be able to see these are both T one T two images of MRI. And it shows and again, the superior weight bearing area is that sort of on the top left one for example, you see that little white Crescent tick circle to a lesser extent on the on the left hip, on the T two images and you know, on the MRI on the right of the screen, again, you can see both hips are sort of lighting up. Yeah, so we we grade these MRI scans visa classification to the fee cat classification. And essentially, what we're

looking for is that, you know, we, we know that the the etiology is the sickle cell disease, it causes a vascular necrosis that interrupts the blood supply to the femoral head. And the reason why it often affects the femoral head because of these end arterials they're kind of looped arterials you get needle sickle cells, which are effectively abnormal blood cells, they form clots, they get stuck in these arterioles the blood supply stops the bone effectively dies, the cartilage dies. Now if you leave it too much, then eventually you'll get wear and tear joint space narrowing arthritis, you know you've gone beyond the In the realms of were sort of, I guess non replacement therapy can work. We're at a stage where now had she still got a reasonable joint space, as you've seen on those x rays, she still has cartilage, and therefore we need to get blood supply back. What would we typically do? And can you see that it's just a picture of quality pressure, which is very crude, you're drilling into the femoral neck, and you're relying on the bone around it to bleed and help bring blood supply back there

Steven Bruce
is a long term solution, it sounds as though it would be very temporary.

Joyti Saskena
It's, well it can be if you get it early enough. If you if you get it into the, you know, what we call grade two. In other words, there's no joint collapse, it can be enough. But the issue is, is that as you correctly sort of, you know, imply that sometimes it doesn't work, and then they will just go on to collapse. And then you get to that point where you're ending up having to replace, we've done slightly, something slightly different here, in terms of, we've done a core decompression, this is a device called the extreme, which is effectively you know, a fancy drill that goes in straight, but then expands, you can see that sort of balloon shape at the end, it has a sort of a fan shape that opens up so you can really get so you can use a minimal hole to you know, in the bigger the hole in the net, the risk of fracture, and those things are there. So we don't want to drill a big hole into net one, the smallest one that we need to drill that sort of bone where it's effectively died, the subchondral bone. So this is allows you to do what's called an extra human effects, it just opens up like a fan.

Joyti Saskena
And then

Joyti Saskena
on top of

Joyti Saskena
that, what we can do then is to backfill that area, again, with a calcium phosphate, just like with that subchondral plastic is calcium phosphate, which you inject into that area, and it fills that track. And that effectively acts as a as a scaffold, or just enough again, unshare here the effect of the acts like a scaffold, to allow the new bone to grow into it, you know, through that process of what are called creeping substitution. And, and again, because she's 19 generally expect her biology to be good, it automatically takes away her pain. So within a day, that procedure becomes you know, a success in that that pain that she gets from the

from the a vascular necrosis literally goes straight away. And then it's just a process of that bone, you know, healing and filling in, and you haven't burned any bridges here, you you know, you still can, you can, it's just calcium phosphate. So you get will become bone, you can still do something later on or replacement or anything like that, or any other more potty compressions if it's if it's required. So these are just some, you know, another sort of case in the hip, which is a biological way to stimulate, you know, bone bone healing. If point sorry to, you know, if you got to the point where the cartilage is destroyed, then obviously, this wouldn't be appropriate.

Steven Bruce
noise is going to say very useful from our perspective to take into account sickle cell aspect of it when a patient presents to us with their symptoms. Lucas asked what size drill bit we should use for that procedure. But building on there, so you're extreme entries must have been about a quarter of the width of the neck of the femur, but still quite a substantial hope isn't it is it is and you know, you you

Joyti Saskena
sometimes have to protect those patients, obviously, what you're seeing is a two dimensional representation. So we know that you know, the neck is strong. And generally, if this was in a, you know, 4050 year old because we do for example, someone who has a fractured neck of femur where we actually put screws candidate screws in you know, you it's not an uncommon procedure, but her bone quality would be such that it should take it but you would warn them of that small risk of neck fracture if she was to have a you know, significant fall or trauma. If you're a concern of so you can protect weight bear them in January should be on crutches anyway for a period of two to three weeks just to for comfort. But yes, it's it is a risk. But 14 common in that age

Steven Bruce
group. Someone who is appropriately enough calling themselves knock me asks how much focus advice do you give patients regarding nutrition and lifestyle to help the body heal?

Joyti Saskena
I think you know those are real key key factors for me surgery is just one facet. You know, I would never do No, I don't think there's any surgery I do without those three facets of you know the rehabilitation both pre and post Surgery. And as you correctly point out the lifestyle changes, because specific specific things like osteoarthritis, you know, if you're not going to change your lifestyle, yes, you can replace their knee. But what about the other knee? What about the hips, you know, so you've got to get them to change their mindset. And that may be, you know, you know, psychology really getting into the bottom of, you know, what is it that's bringing on those those things, you know, why are they not able to lose the way or push themselves with the exercises and that sort of thing. And also, you know, changing habits, you know, making sure you know, we always say, when you, when you make that decision for surgery, again, I'm concentrating on replacement surgery, we use it as a pivotal sort of stepping stone similar, if you're going to get that bit of your life sorted out, let's get other things sorted out. And that whole holistic approach, again,

is really our focus to try and make sure that, you know, other joints are okay, other conditions are okay, and making sure that we talk and refer to our colleagues and try and deal with the whole patient.

Steven Bruce
Thinking again, longer term, this 19 year old girl, she was a young woman, she's obviously more prone to osteoporosis, because she's female, I presume the sickle cell must affect that as well. Will she be more vulnerable as a result of this procedure when she gets older? Or will it be so solid by then the risk factors are the same.

Joyti Saskena
So this, you know, as you, I think, implying that this sort this problem out now, the sickle cell, there's no cure for that, you know, we all know that we you're just managing those crisis. And therefore, there is no guarantee that another, you know, emulating a sickle cell, just abnormal blood cells that sort of have a propensity to clot or form clots. So another area that hip bone can be affected. Likewise, it can affect other other large, you know, typically large joints, shoulders, knees, it can affect it goes to the hip, because of these kind of loose end arterials. It's just where blood flow is sluggish in that area anyway. And then on top of that, you've got a clot floating around tends to stay there. So that's why the hip is so commonly affected with, with sickle cell, but you're right, it can affect it from a density point of view. I mean, you know, osteoporosis, obviously, a quantitative thing, I think, I don't know if there's any sort of significance with that, but more to do with, you know, just her general hormonal levels, and endocrine sort of aspects as opposed to the signal.

Steven Bruce
Right. So how is this how is this young woman progressing at the moment?

Joyti Saskena
So she's doing good, I mean, she's now over a year out. And she's back to back in Canada. She sends me an email every now and again. And you know, she's pleased I think she's, she's used it as as, as an opportunity to to manage your sickle well. And yes, she's in good.

Steven Bruce
Excellent. Georgia. And we're at the end of our time, and I'm very grateful as always that you've given up so much of yours, even though you are confined to a cupboard, it seems back at home, are you self isolate? I certainly wish you and your wife the best of you. Get out of my patients who don't I'm sure that you since you've both been vaccinated, you're unlikely to be affected by this disease yourself.

Joyti Saskena
Yeah, it'd be a pleasure and hope you look forward to the next time.

Steven Bruce
Thank you very much.