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ACJ Instability - Ref 76AN - Draft Transcript

with Ali Noorani

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TRANSCRIPT

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Steven:

I'm joined today by Mr. Ali Noorani who is a consultant orthopedic and trauma surgeon, who is the medical director of a group called orthopedic specialists whose main clinic is in Holly street, London. And he's also a specialist in regenerative medicine, Ali. Great to have you join us. Thank you for coming along,

Ali Noorani:

Steven, thank you for that introduction. It's a real pleasure to attend this lunchtime. And again, thanks to the kind of reduction. I as you know, I'm an orthopedic surgeon, I specialize in mostly insured as an elbows. And then today we're talking about ACJ and stupidity and there's one of my favourite topics. So I'm looking forward to catching up

Steven:

Just a, just a quick one. I'm I have not come across your organization orthopedic specialists before. How does the group work? Are you a varied and multidisciplinary organization?

Ali Noorani:

That's right. So the concept of orthopedic specialists been around for a, when I was a registrar. So being something that you can think up to it, the group's been around for three or four years. We have now 20 consultants that work with us. Most of us work in central London with some of them practicing in the periphery of London's. So they tend to come in and out. We actually have quite a few Europeans in our group as well. Right? So it's like the number one elbow surgeon in the world, Roger van Reed, based in Belgium as part of the group, you know, Christian Clay Ronan oven, two big osteotomy guys from the knee world based in in Germany they are part of the group as well. So the ethos of the group is very simple, right? We've gone out and said, grow slow, grow organically, but really get the best of the orthopedic community out there to work together. So or the surgeons tend to be smart people. They tend to be cutting edge as far as surgery is concerned, but also ahead of, you know, other stuff like biologics and rehab, et cetera, so that we can offer the patients the best treatment. So that's the basis of what the PD group and I think it's a, it's a really fun being the medical director of a bunch of orthopedic surgeons that are regarded as some of the top of the road.

Steven:

Yeah. I noticed actually, when I was reading up on you earlier on that, obviously you've got an interest in regenerative medicine, but actually this is because you were trying to get away from surgery itself. Do you want us to, before we talk about the ACG, would you want to tell us a little bit about regenerative medicine?

Ali Noorani:

Yes, of course. I mean so for those in the audience that don't notice that I I'm also a member and on the education committee for a group called YUSA, which is a European Scholer of European society of shoulder and elbow rehab. So I've been very, very you know, rehab orientated in my practice throughout, right? So you told us it was, most people don't need surgery, they need good rehab. Some people would do surgery, but the student could rehab afterwards. Right. but like most surgeons it's very difficult to work by myself. It's easier to acquire somebody like a niece that she, for example so we have quite a few knee specialists that are regarded as some being some of the top in

the world. And they're moving the way like I am doing from shoulder replacements. They're moving away from knee replacements.

Ali Noorani:

And why is that? Is they figured out that actually the concept of joint preservation is where we should be heading out and enjoying preservations that are surgeries that can help you. There are braces that can help it can rehab can help. But there's also a role for biologics, which include PRP bone marrow. Fact-Based none of that stuff. So we became interested in that about four or five years ago. And because we, each of us had a big goal of the patients who were young with arthritic shoulders in my practice that I knew just shorter places would not be a good option for them. And traditionally you just can't do anything for them, but you start looking at, you know, treatment options for them. And there were some interesting surgical options, but was really interesting was that he would back to nonsurgical options. So we formed a separate entity Gordo regenerative clinic which offers patients these alternate treatments.

Ali Noorani:

But the concept is very interesting. So as a group, we have a very wide approach to everything. So we don't focus that everybody needs surgery or every nurse rehab. You know, you have to look at a patient for who they are figuring out what they need. Right. Sometimes they do need surgery. Sometimes they definitely don't need surgery. So if you're not blinded by the approach and you have a wide approach that can offer patient anything from rehab to surgery, to biologics, to a combination approach, I think you've been to do best for our patients. So that's where the regenerative clinic concept came about. And it does, it does really well for the patients.

Steven:

Yeah. I guess thinking back a few years and I emphasize this is not my opinion, but other doctors would have said, is it very often if you went to see a shoulder specialist, the only thing he would consider that would be shoulder replacement or whatever, because that was where that was, how he earned his money. That's what he did. And it's nice to hear that, you know, you're not alone, there are lots and lots of people we've interviewed who are saying, well, actually we've got to take a wider approach to this. And I guess also it's probably very helpful for your insurance, if you do fewer surgeries, because there are fewer adverse outcomes that can occur.

Ali Noorani:

That's right. I mean, the, to be honest, the amount of practice insurance don't really care that much. And the insurance companies care that much. What are the insurance company like is, you know, you do make a decision, you fix it and you let the patient go. Which is a bit difficult concept. Sometimes what you need to do is not fix a patient and do an operation, but maybe seeing them a bit more often to make sure that it's getting the right milestones. And that concept becomes really difficult for the insurance company, all those cheaper for them. They do like the system to say, here's a problem, fix it, discharge it, please. Right. And that's not what fits most people. A lot of my practice is also tertiary referral. So off my NHS and about 20, 30% of my practice will be Doshi practice.

Ali Noorani:

And by definition, that already becomes a little bit more complicated because somebody already has, it had a go in some ways. So, so, so I think overall, you know, the, the, the idea is that you know, every patient is really different and, and you know, you see some, and you tell them you don't need surgery, but others, you meet them and you kind of say, you need to fix that. Right. and it's, it's getting the right decisions. What I think makes us as good surgeons and certainly us in our group. And so I, myself, you know, you know, surgery, I wouldn't say surgery is the last option, or I want to say surgery is the correct option for some people is the majority of the patients don't need it.

Steven:

So let's get into the meat of this. Let's talk about ACJ instability. You said that's a particular interest of yours. How did that happen?

Ali Noorani:

Well, you know, as part of the shorter, as, you know, as a shorter node was surgeon, that's definitely an interest. But living in London is quite interesting. So London has a lot of cyclist, right? Also has a lot of people that do Laurel sports, specially we can worry us zoned or rugby. So you end up seeing AC J injury scored a lot, right? So there are a lot of people that cyclists cycle and the follow up the bikes. And if you are on a cycle and if you're a reasonably good cyclists, you will hold on to the hundred bars and he ended up falling on your right on your tip of your shoulders. So you either break your collar bone, or you have a clavicle fracture or you have an ACJ injury. So as, as, as a shorter surgeon in London, the practice of CAC J injuries is Pitt, right?

Ali Noorani:

So I see a lot of ACG injuries. And, and what I was noticing was that there are lots of different opinions on how to treat ACJ injuries. And when there are a hundred different operations to fix it and a hundred different opinions whether to fix it or not fix it it was certainly became very industry. I knew that people hadn't really figured out how to treat a situation. Then you have to start looking back into why that is a problem. And then it was obvious. The problem starts off with the basics are people don't diagnose it correctly. The, the, our justification in my opinion is incorrect. So it's not prognostic on how to treat it. And certainly the ways of fixing it is all over the place. And so I spent a lot of my early career figuring out what works in ECG, what does work, thinking it from a logical point of view, you know, one of the forces across the biomechanics around it, how do we need to make somebody better and then apply those in my patients with the evidence, and then you figure it out.

Ali Noorani:

You can get really good results in almost all your patients, if you apply common sense, backed by good research. And that's what we've done really. So it's become my interest and interest in people find me because if they have ACG and stupidity and therefore, I tend to see a lot of patients that have major problems that have gone wrong because it know that I can, I can hopefully sorted out for it.

Steven:

Can we talk etiology for a minute? You've mentioned a number of sort of traumatic possibilities there, are there non traumatic causes in your experience?

Ali Noorani:

Yes, actually what's really interesting is that you know, there is that obvious stroma, as you know, somebody said, I kicked myself a band, here's my ACJ up in the air. Right. but there are the atrium Arctic versions as well. You know, you still need to be careful whether there is true a traumatic, I know, trauma at all, or there has been subtle minor trauma, or there has been through peated over you. So there is some element of traumatic elements, but we tend to see patients rarely Vanguard, but there are patients who have collagen disorders who have generalized laxity that also get ACJ problems. Right. In fact, you know, I think firstly that even in patients who have ACG pain, right, without any trauma is usually due to some kind of micro instability because most people know that ACJ arthritis is part of growing up, right?

Ali Noorani:

By the time you have gray hair, most people have ACJ. Why is that? Because you know that the joint is the size of your nail on your thumb, right? It's tiny. And throughout your life, you know, the collarbone is the only bone that connects your shoulder to the rest of your body. So throughout your life, you have this tiny joint that is taking all the forces from arm and transmitting to your body. And with time the joint wears out. So if you see more 40 year olds, especially people that have, you know, done sports and activity in their life, they will have imaging to show that they have ACP arthritis, but that is not symptomatic arthritis. That is just normal part of growing up. Basically, as I say, it's normal age related changes and they're normal, they're all hurt. They don't have stupidity, but you see some people that have normal looking at CJs and they have pain.

Ali Noorani:

Of course, you see some people that have some arthritic changes that have been as well. And invariably, if you look deep in the side, it is not the arthritis perhaps that caused the pain, but it is that movement in the joint that aggravates the inflammation. Right? So if you can have a joint ACJ that is stiff as anything it's course, it won't because it's not moving. Whereas if you have something that is moving a little bit in the rubs, then that causes pain. So you do have a traumatic causes of ACJ pain that I personally think is due to instability as well.

Steven:

I was just thinking whether a particular sports might be vulnerable to it through reuse. And I know it's not a joint that one normally thinks of as being subject to overuse, but perhaps rowers or gymnasts do they do they have particular problems?

Ali Noorani:

So I tend to the cohort that I tend to see quite a bit is actually weightlifters, right? So professional weightlifters tend to have a lot of ACG changes. They tend to have occasionally they get a condition called osteolysis, right? So not just arthritis, but the end of the clavicle breastfeed starts breaking down because of the over pressure. You know, every joint, like every ligament goes through a process of remodeling. We always breaking and rehearing. And when you have braking going at a slightly higher rate than reheal, and you tend to see that most utilizes and those tend, tend to recover pretty quickly, or they usually require some conservative treatment and they do well, very rarely. They don't require any surgery

Steven:

Quickly just through normal rest and a gentler or different exercise, do they?

Ali Noorani:

Yes, exactly. Once you start offloading the ACJ in order to recover, unless they've lost so much bone that they recover and the joint is then unstable and starts causing them pain. So there are, there are some people that do require injections or even surgery in the end, but that seems to be quite rare. So surgical intervention for something like an ACJ pain a would be like eight to 10% at max. Right. So cause cause after treatment usually takes care of most of them. It's interesting that you mentioned about certain sports, right? So I just mentioned something very briefly when we were doing when we do surgery for PAC J there are lots of smart implant companies that say, we need to have implants designed for the shape of the collarbones. And quite a few companies have databases of CTS, of collarbones and other bones.

Ali Noorani:

And what they do is they're designed very specific implants to fit those bones, right? And then they say, well, if somebody breaks a bone at pleasing, we know what the average looks like. But the interesting thing is that the, the AC joint is not always the same shape and number of people. So if you are a young man or a woman and you start loading your AC joint early in your life, like doing a lot of cycling in North lifting your shape or the lateral and the clavicle is actually slightly different. So some people may have a very flat end or those guys that lower their joints quite a bit. You find that it becomes a bit more often an elephant foot slightly wider. Why? Because, you know, nature in your young age is remodeling to make the surface area slightly bigger so that you're able to take all these high impacts. Now I find that patients that tend to enjoy today's CJ's other rugby players or other cyclists, the huge they've been doing it all their lives. The people that injure the messages tend to be the ones that have slightly bigger land cloud, because anyway so then the implants that you have designed on a normal population to work on them because they have a slightly different shape. And that was, that was a small, interesting comment that we made.

Steven:

So the, the companies that are making those implants clearly they're selling them to somebody. Otherwise they just stopped making them. Does that mean people are fitting the wrong implants to people because that's all they have.

Ali Noorani:

Yeah. Well, there's subtle differences, right? So, you know, if you, you know, you can have something that is close enough, but when these companies go for something that is specifically designed for the, you know, the so there's team, the same company makes collarbone plates and they have a thousand CTS. And when they made the collarbone place, I can tell you that collarbone plates fits better than any other plate out there. But when they designed the clavicle plates for the ACJ, it doesn't quite fit in perfectly. There's a few millimeters of gaps here that Esther does a job beautifully, but if you want to make it perfectly fair, they just had the wrong cohort of CTS. So we encourage them to go and do the measurements on patients that have been cycling all their lives and then have a better implant. So the patients don't come to any and you know, like I said, the implants do a really good job, even as the don't perfectly fit, you know, we'd like them to fit know millimeter. Perfect. But we know what that is. That really make a difference. Probably not.

Steven:

Earlier on, you said that you see a lot of patients who've been misdiagnosed in the past. How does that happen? What would be your diagnostic process for looking at the AC joint?

Ali Noorani:

Okay. So I guess again, I'd have to think of some of the more recent examples, right? So so for example, I've had a, you know a patient come in quite recent fee that had a AC joint pain. And, and his extras were pretty good on every view looked perfectly lined up and so on. And he had what would be the normal treatment to allow some rehab, yes, three or two or three injections. Every time we had an injection of steroid in number, it took the pain away for a while and we started working less and less and eventually decided instead of let's share the joint and he shared a joint and this Justin, right, it just didn't work. And he was in neural bane and give it more time, give it another store, injection didn't work. And and then he came.

Ali Noorani:

And so me and, and it was obvious you as a, somebody, you have to start from scratch. And so we, of course you have to see the imaging and see what's been done, you know, and we picked up various problems. One of the, one of the problems that we picked up was initially that there was a lot of fluid in the area that was receptive to the whole area and a lot of fluid in it. Right. The first question was easy in pain because he's had postsurgical infection, right? Yeah. So you do all the blood markers and they were normal. And then you have to, you know, you know, you're a slow down a little bit of everything. Every step you had to eliminate the big step. So we took some aspiration out, lots of fluid came out. We sent it to, from microbiology to the extended cultures, including in know enrichment culture, sometime things like pediatric needs.

Ali Noorani:

And so on only comes out of two weeks of culture. We did that all negative, which was great news. So we know that this loiter infection problem, once we took the fluid out, I've noticed that he did have a lot of instability, right. There was a lot of anterior posterior instability. And he had not lost the end of the bone, which is important for providing stability. And he also had, you know, damage to the ligaments. He probably had damage to Lincoln before, but he had now quite a bit of antidotal street and stupidity. I also got him a CT scan to have a very close look. And I found out that the resection was done in a, such a way that the contact of the bone was corrected, but there was a roof that was leftover. So the bottom bit had been resected.

Ali Noorani:

There was still something that was touching. So now you had a row surface, which was partially resected and just still catching plus a lot more antidotal post-treatment stupidity. Then we had to go in and solve all those problems. So, so he required is three D reconstruction. So I got his clavicle three D printed is very easy to do, right. Is it necessary? Probably not because you can imagine the whole thing, but if you have a model in front of you, you can really tell what's left behind because it's not normal anymore. Somebody is partially resected it. So you have to respect what they've left and not left. So he said, fine. So we've got that bridge. So we know we need to chop the end off in certain ways to sculpt it. We knew that we need to do tighten up the ligaments around it.

Ali Noorani:

We knew that the Delta trapezial fascia was very important part of stupidity. We had to correct that as well. And ideally we thought that would be enough to provide him a good resection and stupidity. And as a backup plan, I said, if it's not enough, I'll put some artificial ligaments in. So in his case, what we did was just resect the end a little bit. And we made sure that we tighten up the ligaments and repair the debtor trapezium fascia. So it gave him good dynamic stability and he did well. It was a relatively easy fix. Obviously rehab played a big part in it afterwards. I had a similar case. And this is quite a common problem, right? So there are, there is a whole cohort of patients, especially a young female patients with hyperlaxity that have a lot of ACJ pain sitting on her desk or today.

Ali Noorani:

Right. And the temptation is to offer consult to treatment is to shave that joints and just say doubts all the problems. Or quite often, they continue to have pain for a very long time. And I found that, that those patients that have ACJ resection that have very good recession, still continue to have pain because of instability. And you go in and you put them, put some artificial ligaments around the CJ to provide stability again, the pain goes away. So those are the kind of the subtle things that I tend to find actually quite often in my practice when things haven't gone wrong things haven't got quite right. And when they've had something else done before,

Steven:

But what do you use as an artificial ligament?

Ali Noorani:

So the question always is, do you have occupational ligaments or do you use a patient's own ligaments? And certainly if there is any hyperlaxity or any college and issues is preferable to use artificial ligaments, and I've now moved to using artificial ligaments, even in normal patients, because why use attended that can be used for the ACL. Some of those change are the normal things you can use. So there is the last ligament which is available commercially. There's also a ligament called lockdown, also known as surgery leg. And these are basically, you know, polyester materials, some kind of plastic material, but it looks like a Vive that they tell you that incorporates into and, and becomes, you know, normal tissue and corporates on it. Whether

Steven:

Are they effectively permanent or do they break down over time?

Ali Noorani:

Yeah, they're permanent. Yeah. They're permanent. Yeah. Yeah, of course.

Steven:

I'll take you back to something earlier. A couple of people who asked for clarification, did you say earlier on that the clavicle is the most variable bone in the body?

Ali Noorani:

No. it's just not the most variable bond body. I think there are two things I said about the clavicle. One was that if the only bone that connects your arm to the body, right? So it is something that takes a lot of forces across the arm, right? Everything else that connects your arm to the body is

muscles and tendons. The collarbone is the only bone that connects it and all the forces go to day CJ. The second thing I said was the lateral end of the clavicle, either the end of the clavicle, where the ACJ is that has a lot of variation and right, right. Sometimes even the big wide ones, sometimes you have a narrow one. Sometimes you have one that slopes like this. Sometimes you have a slope like that. And all of those subtle things can make a lot of changes into patients dynamics.

Steven:

Thank you. More questions coming in from the audience this one's anonymous do you find that after surgery, that the range of motion of the shoulder is effective?

Ali Noorani:

Are we talking about particularly ACJ? So yeah, so the, the idea is that your shoulder motion should not be affected and, and certainly doing surgery. If it effects the shorter motion permanently is probably not the thing they're aiming for. There are, you know, there are people who develop a stiffness response and a piece of gaps who liked the stove, response, et cetera, in the mean shoulder joint, or yes, that can happen. And this is something that we try and limit as much as possible by early rehab, appropriate rehab, et cetera, but AC joint surgery itself is not something that limits shorter. And although some people may get a reaction to any surgical trauma to get stiffness.

Ali Noorani:

The idea is to limit that as much as possible. And the plan is that when the rehab is over, nobody should have less movement in the shoulder. After surgery.

Steven:

Alyssa has asked us to ask you what sort of rehab you recommend for patients? What do you leave that to the physios and osteos and chiros.

Ali Noorani:

Yeah. So it's, it's, it's milestone driven. And, and and a lot of the times, the way there are some good physios and osteopaths out there they know what they're doing, but my job as a surgeon is to just tell the, so in any shoulder surgery is to give an indication to the surgeon, to the physios or the quality of the tissue, the quality of the repair and any restrictions that I think should be imposed because of that. Right. so you want to aim to fix your shoulder, especially the ACJ in such a stable way that you can get the patients moving and going. Right. What does that really mean? Right. I mean, people say, Oh, get it going. Well, there are certain things you can do and certain things you can't do. And there's what we call kind of protective rehab.

Ali Noorani:

Right? So for example, in the typical ACJ, right, we know that a lot of forces go across the construct of an ACG repair when you do end range movements, right? So there's no problems doing things down here, right. It doesn't really know the ACJ. So why limit somebody in a slang whenever they can do something freebie or they can move as much as possible as well, or in some cases, movements like this, where it's really enraged, cross army reduction, or really hand behind the back when, again, right towards the end of the motion or any elevation kind of around one 20th. So that is when you start were torsional forces across the ECG. So typically speaking, I would allow the patient to do full hand wrist, elbow, scapular, setting, neck exercises, and most shoulder things at

waist level, or I'll lost even loading the cuff. Right. Cause you don't want that to waste even noting that that is your fascia or our limit for the first four weeks or so cross only deduction and behind the back or any kind of elevation above 90 degrees. Right. But the physios that work with me regularly know that occasionally there are certain patients with the mild sort of sport, well, good stupidity and no problems at all, or for two weeks, they'll go beyond. Sometimes you've got to hold the patient's back for six weeks or more as well.

Steven:

Boba Bobo has sent in a question about a specific patient. Apparently he's got a patient who suffers from psoriatic arthritis and also has ACJ pain, which may or may not be related. He's asked what you would recommend as being the best diagnostic tool for ruling it in or out whether ultrasound scan would be adequate or whether it has to be x-ray. Okay.

Ali Noorani:

So again, a very interesting question about ACJ, right? So if you rely on imaging for ACGs, it will lead you in the wrong direction. Okay. There most extreme will be shown arthritis in the ACJ and then may be a normal person. Right. and then there are some cases where ACJ pain don't have any signal, any imaging signs at all on an X Ray. So, and x-ray although very useful tool to rule out the bad, the ugly like tumors and other stuff, and obvious problems with the CJ B in most cases, whether you have arthritis or you don't have arthritis is not relevant because you can have one or the other, right. So the clinical diagnosis is the key in ACJ. An MRI scan could show you a little bit more, but again, when you see an MRI scan in everybody, so if you send an MRI scan that there's sometimes the GP sent for diagnostic purposes, which I think is wrong.

Ali Noorani:

MRI scan, an orphan report, there is ACG arthritis. Why would they report that? Because they see it on the extra, on the MRI scan, the CA they have to mention it was almost never clinically relevant. So I think the, the way I think about ACJ is, is that 90% of your information comes from a good history and examination. And then the, any kind of imaging afterwards is just confirm your diagnosis or add a little bit more, right. So I tend to always go for an extra and an MRI scan if I need something or, or an ACJ. I often not, don't tend to get an ultrasound scan, unless I think the problem is only ACJ next year, when I'm sending them for an image garden injection, for example or imaging modalities, don't help me with a diagnosis as much as other places, other sites,

Steven:

If they, if the other way, if also arthritis is irrelevant, what is it that what's issues? What what is producing the pain in the patient?

Ali Noorani:

I think it's instability.

Steven:

I say the pain sensors are in the ligaments or the capsule.

Ali Noorani:

Yeah. So I think that, I think there is instability and there is inflammation following that. And, and you have a pain fibers in the disc. You have pain fibers in the posterior capsule, and you have generally speaking a lot of pain, fiber neurogenic things all around it. And, and that is where you get the pain. And we know that people have a lot of, most people will have arthritis and have not validated yet, but we know that finding the arthritis by itself is not as relevant.

Steven:

We've got a lot of questions about hypermobility in the ACJ. And I'm wondering what the challenges are for you in dealing with a hyper mobile patients specifically we've had whether it's possible to stabilize it through

Steven:

Sclerosing injections,

Steven:

Prolotherapy the aim being to passively state.

Ali Noorani:

Yes. so the, every joint in the body requires certain things to keep it stable. Right. Okay. So you have the bony anatomy, the surface area contact, right? The congruence congruency of the joint you have the capsules, the ligaments all around it or you also have the dynamic stability that comes from the muscles. Okay. Now every joint requires a different proportion of these things. So if you look at a hip joint, for example, a lot of these stability comes from the only inactivity congruency. Okay. And there is some added by the ligaments and there's quite a bit actually added by the muscles around it. Right. but not enough. Most of it comes from there. Naturally, if you look at a shorter joint, some come, it comes from the ligament. Some comes from the morning congruency, but a lot actually comes from the muscle.

Ali Noorani:

So 60, 70% of the shoulder glenohumeral joint stability comes from the rotator cuff in the ACJ. Most of the stability in my opinion, comes from the ligaments and the capsules around it is to join. That doesn't move that much. Sec. The second part of stupidity is second. Most important part is the stability of the day. CJ, I think is the only anatomy. Okay. And then the muscles around it. So if you have somebody who has laxity around the capsular ligaments, right. What you need to do to help that is you can't change the bony in that to me. Right. So the only thing that you can do is either make the capsules a bit more stiffer, or you can work on the muscles to provide better control, not better sprint, but better control of the ACJ, right? So your deltoid and your trapezius. So primarily the idea would be initially to decrease the pain so that you can rehab.

Ali Noorani:

So you can do any kind of injection in my practice and do rehab specifically to provide some dynamic stability around the shoulder. You can do a lot of other injections to help as well. So yes, you know potential of injections that can stiffen up the capsule and so on can help, right? There is absolutely no harm in drawing for sure, specially you know, as a next steps, then rehab has failed to provide muscle control is to consider surgical options, right? So if you have a hypo mobile patient, I will do everything possible to avoid surgical intervention. The reason is that surgery done needs to

be done for a good reason. If there is, if there is a reason not to do surgery, then you should do it. And secondly, surgery needs to be predictable. Right. and I find that if patients haven't engaged with a good rehab plan, then they're relying on surgery.

Ali Noorani:

There's more likely to fail as well. So I really tend to push them again with conservative treatment, get the rehab done. And in those patients that have engaged and have still failed the rehab, they tend to do okay with surgery. And if I do surgery on them, you can imagine that, you know, we're not really going to rely on their own ligaments to provide stability. So there will be artificial things, ligaments that you use to provide and to your poster instability, as well as cranial quarter instability, but it's big surgery. It is often not necessarily.

Steven:

There's two things. I asked an interesting question. We talk a lot about the ACJ, but if that's unstable, what's going on at the other end, if you ever have to deal with the sternal end of the year.

Ali Noorani:

Oh yeah, yeah, yeah. So, yeah. So I, so I tend to see, so the hypermobile patients tend to have more problems, obvious problems with the SEJ rather than ACJ symptomatic anyway that, that is a harder problem on, because you don't have that take muscle envelope around that you have on this side of the trapezius, so you have some muscles around, but you don't have a lot around here. So yes, we tend to see them. The the algorithms are pretty much the same and they tend to have injections to it. They tend to have rehab on it. And luckily most of them seem to be okay. What I do a fair share of surgery there as well. So I probably do about five or six of them a year. That's probably more than most people. It's a tiger country as we called it.

Ali Noorani:

Right. So there are major blood vessels as are limited life threatening if you Nick them. So you have to be very, very careful. And, and if I do surgery on them, it's, it's again, it's a combination of to provide stability. I tend to do two things. One is artificial ligaments and so on with anchors, but I also tend to provide some additional dynamic stupidity by using a, a sleeve of your sternocleidomastoid tendon, rolling it up and putting it through the cloud because it's very fancy surgery. And, and and the less I have to do of it, the more grateful I am, because I tend to get sent those surgeries when all else fails. And I still drive to try and avoid them.

Steven:

I got a lengthy question here from yoga, and I'm going to have to read it. Juergen says he's had a cycling accident and ruptured his AC ligament and has been given a false ligament. The end of the clavicle was removed. Supposedly this allows it to reset easier. This has undergone some lysis. I had a postop frozen shoulder and lots of pain for a long time severe for most of the first 12 months, you still have shoulder pain. Three years later, an arthrogram shows that he has a large slap tear and tear to the biceps tendon where the pain increases, if loaded, would that explain the pain. There was some talk of stapling, the slap tear and anchoring the biceps tendon are these procedures generally successful.

Ali Noorani:

Fantastic. So so let's, let's go with the first one for lunch, right? So so unfortunately, a lot of the surgical techniques published by a lot of the people out there talk about chopping the end of the clavicle out because you're worried about arthritis. Most people that do a CJ surgery seriously, don't chop the end of the clavicle off anymore. Okay. In fact, it's been shown as far as 20 years back by a guy called, was that showed that even in Kadaba is if you take the lateral end of the clavicle out, you pro you increase a lot of Austrians divinity. So you're going in to stabilize an AC joint and you put some artificial ligaments in which help. Then you forget about repairing the muscles and you chop off the lateral and the clavicle, which is counter intuitive, right. It doesn't make sense often when people do that you tend to get that license and so on, but you also tend to hold patients back from rehab because you provided them ligaments, but then you're afraid that your repair isn't strong enough.

Ali Noorani:

So you kind of hold them back and don't rehab demographic simply enough proactively enough. And they tend to stiffen up their shoulder. That is unfortunate happens enough. So my first advice is not the job at the end of the club cloth, address all the if you're doing surgery on, SEJ keep the club of gland repair the ligaments. If you need to repair the muscles, if you should do, if they are tuned and then rehab them quickly and make sure that Glenn and we're joined, doesn't get stiff. Now, there are other reasons as well. So 10 to 20% of ACJ injuries tend to have a missed global or joint injury as well. So slap tears tend to happen in 10 to 15, 10 to 20% of the patients who have AC do injuries. They may be from previous injuries, but we think a significant proportion of patients injured their biceps anchor, or in slab, or some kind of labored injury or some kind of tendon injury of a cuff in addition to the AC joint.

Ali Noorani:

So it is important when you have somebody who has an ACJ injury to make sure they haven't got something else, and that's usually involves a clinical examination. So unfortunately, in that case, they may have been missed. Now, if you have a glenohumeral joint injury, in addition to the ACJ, the immobilization with the secondary injury is more likely to give you a stiff shoulder because why'd, you get stiffness is a body's reaction to trauma. So you have more trauma inside the joint. Plus your immobilize, you will throw up a lot of scar tissue. The pain is probably mostly to do with stiffness, right? This, the stiff or DCF post-traumatic capsulated is more painful than Ashley has slapped her, but there will be patients who have an unstable biceps that get pain as well. So I would say that moving on from where he is right now, it does need a good look at, we need to make sure the shoulder isn't stiff.

Ali Noorani:

The shoulder is stiff and know, get rid of the stiffness. And yes, after that, the slap is still painful. Then surgery is successful or more often than not is unlikely that he's happy if he's had a stiff, painful shoulder without injury, that he will do well with a slap repair. What he actually needs is the laboring computer pad independently, but the biceps needs to be snipped unfortunately, and needs to be fixed in the pear Tino DCIS. So that's what you would do well, and by all means, Steven please give him my personal number and my email and I can, I can talk him through it. Okay.

Steven:

That's really fun. Allie. I'm very conscious that you have a patient at two o'clock and many of our audience have the patient at two o'clock and it's now one minute too. So sadly, I've got lots of other questions, which I could have put to you, but we've come to the end of our scheduled time. I fascinating stuff. And I think it's the first time we've addressed the AC joint specifically on this show. So I'm very grateful to you. Thank you for coming in.