

Bergin

Dr. Roy: I'm so glad you're here today and I am pleased to introduce someone who's made a big difference in my life: Dr. Barbara Bergin. Austin is known for its great physicians and my great general practitioner referred me to Dr. Bergin who knows more about my knee than anyone else in the world. She has operated on me twice, but that's beside the point. Here is what her biography says: she's a graduate of Texas Tech University, we forgive you for that, where she completed undergraduate school and medical school. She completed an orthopedic residency at the University of Missouri Medical Center and Texas Tech School of Medicine. She's Board Certified by the American Board of Orthopaedic Surgery and is a Fellow of the American Academy of Orthopaedic Surgeons.

Dr. Bergin: What do I have to say to librarians? I can talk about my book. No, wait a minute. Librarians get hurt. I see a lot of librarians with pain. And you'll soon see why. I like to talk to librarians because I would like librarians to live long happy lives and have healthy bones and joints. And so I've got something to say.

When I think about people's jobs, I start thinking about what that person has to do forever. What do they have to look forward to in terms of how their job affects their body? And your job affects your body. What are my risks as a doctor? I might get cut, I might get stuck with a needle, I might get stressed. If you are in a technical field or writing field you might get carpal tunnel. You might have to sit too much and get whatever it is people get from sitting too much. You might also have stress.

So, it's not like librarians are out there trying to get in trouble. They're not trying to get on top of ladders. They don't dare to wear flip flops and then stand on top of slippery books that can come out from underneath. And I'm sure they wouldn't dare wear crazy shoes in the library. So it's not like you're out there doing things that naturally get people hurt. It's because you're squatting down, reaching up, and grabbing things. It's because of these books, heavy books, awkward books, lots of books.

So there's a bunch of conditions that librarians can get. Of course, you can fall off a ladder and break your arm but we're not going to talk about that. There are these four conditions that really cause librarians to stop working for periods of time or ask for job modifications. In talking about these four conditions you're going to be empowered to learn ways of taking care of yourself, you'll learn about prevention, and you'll learn how to help your friends.

### **Myofasciitis**

So, has anyone had myofasciitis? I have and it's a permanent condition. It's this burning pain that sometimes goes down the side of the shoulder blade. It's a pain in the trapezius muscle running down the spine side of the shoulder blade. It can be burning, it can be chronic dull pain or sometimes radiating pain, sometimes it goes

up the sides of people's faces and necks, making them feel like they're having a heart attack. Sometimes there is numbness and tingling in those areas. It's a very bad ailment and it is very common.

So the fascia is like a sleeve of tissue over our entire body. You know how you peel the skin off a chicken and there is this filmy stuff between the skin and the meat? That's the fascia and we have it too. And in the fascia is a web of nerves. They're not the nerves that make your muscles move and they're not the nerves that make you have sensation. Those nerves run through that area to get into the muscle. They're the nerves that tell your brain that your parts are the way they are.

So right now even though you're not consciously thinking about this, your brain knows exactly where your big toe is and it is setting it right where it wants it to be. You might be thinking about your big toe now but in general your brain puts everything where it is and makes it sit there. And your brain's not thinking, "Where's my big toe? Where's my little toe? Where's my pinky?" So when those nerves get aggravated now all of a sudden they're saying, "hello, I'm here, pay attention to me, if you're not going to pay attention here's some burning for you, here's some radiating tingling." And all of a sudden you have this terrible pain.

If I see 100 people with myofasciitis, 99 of them will be women. And the reason for it is, I believe, because our shoulders are under constant stress from a very young age. Remember your mom told you to stand up straight; my mom did. In those days our mothers actually put books on our heads and made us walk around. And, sorry guys, but it's the breast thing. Guys, as soon as they start getting aware of their bodies, they start standing up straight, they want their chests to stick out. Whether they're small or they're big we want to hide our breasts. And that puts tension across this entire area of your back for your whole life because that's how you stand.

So this tension is created and then all of a sudden you get into your 20's, you're going to school, you get into your 30's and 40's, you start working, and you have even more tension. So this condition is very prevalent in the population in general and I see a lot of librarians with it. Probably more so now than in the old days because there were fewer computers and more digging around in files and books. So the good news about myofasciitis is that it's a benign condition. It's not something terrible like cancer, it's not a nerve disorder or a herniated disk, and it's not harming you, it's only hurting you. There are things that you get. The other three conditions that we're going to talk about are harming you, but this one is not, it just hurts. It's just a painful condition that you can live with and it will cause no further damage to you. The bad news is that it's probably the one condition that's not preventable because you would have to start with your teenage girls. I tell you what my mom told me: "stand up straight." I was standing up straight but not straight enough. And it's not curable.

You have to look at myofasciitis as a condition that's only treatable. It's like if you had hypertension. If you have hypertension you have to start taking a pill for it,

then hypertension goes away. Is it cured? No, it's just being treated. You stop taking the pill it comes back. So the treatment for this is something you will continue to do for as long as you want to continue to do it. I am not a big fan of long-term use of medications for chronic conditions that I think are not harming you. I look at medications like this: they have their beneficial effects and they have their side effects. And both of those things are there in the medication and there has to be a good reason for taking it on a long-term basis. Since this is a chronic condition use them intermittently if you need them, but not forever. I prefer over-the-counter things like *Aleve* or *Advil*. I like *Aleve* because it's a twice a day dosing if you're going to take an anti-inflammatory. And nothing against *Advil*, but you have to take it 3 to 4 times a day to get a kick from it. *Advil* and *Aleve* are anti-inflammatories, they reduce inflammation. Needless to say, many people want narcotics for this stuff but we got to stay away from that stuff. It's bad news all the way around. The unfortunate thing about cancer is it doesn't hurt until it's eroding into something else. You know what I mean, that's bad news. I wish cancer hurt so that the minute you have a little pain you know you need to get that checked out. That's some bad news.

Ok, I'm going to pass this handout around. These are home exercises for myofasciitis. Once you've got it, you've got to start doing some stretches. You're going to reach to the inside of some kind of a wall like this and you're going to turn your hand down and grab and you're going to rotate in until you feel that little pull to the back of your scapula, right back in here. Once you learn how to do that, you'll actually start learning how to do this without having to hold onto a wall.

The next exercise is one I like to call the sexy shoulder, a little Marilyn Monroe shoulder. You'll learn how to stretch, stretch, stretch this and then massage, massage, massage it, and I mean get somebody to massage it. Not someone that goes "is that good, does that help?" Massage therapists are wonderful, they really know how to do this. Massage is a little bit painful but it is good pain. But you can do it yourself. You can go online to the Relax the Back store and buy this little gadget called the back knobber. The problem is you can't do it yourself because it's just too awkward with your own arm all the time.

But you can create a device that you can control with a little tennis ball and a sock. I have one at home, I have one in my car. Stick the tennis ball in a long sock. Then you're going to put it over shoulder and you're going to just find that little spot. Even if you don't have this condition it's a great way to just rub that back. Ok, so when your friends are at the library and the other teachers and people that you associate with tell you about this little pain back here, this is what it is. It will be sore to touch. Any questions on myofasciitis?

Audience: Does it only affect you right there or can it affect you in other areas?

Bergin: Some people can get it in other areas and this gets more into fibromyalgia. The thing you test for fibromyalgia is if you hurt everywhere that you touch

someone. And women are definitely more sensitive like that than men. There are people that get it elsewhere but this is the most common area that people get it. When people hurt in other places it is usually more related to other problems and I've got to make sure there not something else going on.

### **Rotator Cuff Problems**

Next, rotator cuff problems. Now again this is a very common condition in the population. I probably see six patients with rotator cuff problems every time I have a clinic. And, so there's a spectrum of disorders. Bursitis, you've heard people say I've got shoulder bursitis. Tendonitis, rotator cuff tendonitis, impingement syndrome, bicep tendonitis, rotator cuff tear. So there's a spectrum of disorders involving the rotator cuff. These are areas that can have rotator cuff pain. Now that's opposed to myofasciitis which is in the back. Rotator cuff people you see is here and down to this deltoid muscle.

So what's wrong with the rotator cuff? What happened? You have this bone called the acromion. In the way that humans evolved from walking critters to when we became two-footed, this shoulder didn't get all the way quite done evolving in some people. So this bone right is supposed to be straight and, instead, it's got a little curve. In some people it didn't quite straighten out and your rotator cuff is in this space. Here's your shoulder and when you raise your arm up it bumps into that little forward end to that bone. And it causes damage, damage to the tendon, damage to the rotator cuff tendon. So, some of us are susceptible to having it. So 95% of people that I see that have rotator cuff problems have a downward turn of that little bone. I have a special eye trained to see that.

So, why do librarians get problems with the rotator cuffs? Because of the reaching: this movement affects the rotator cuff. How do we prevent rotator cuff problems? You carry fewer books. You give the heavy books to the young librarian and now she or he carries the books. Make her put them up here and down here and you get to the shelves we love, right there in the middle.

Once you've got it, you've got to lift smart. You've got to do this. You should do this anyway. This is something people should do. Lift smart. Keep your lifting here, lift with two hands. Do it at work and at home. See here is the happy librarian whose lifting right here because she's got the young librarian doing the high and the low lifting. But do this at home as well. Get up on stools to do things. Guys and gals are affected by rotator cuff problems equally. You do too much and all of a sudden one day you have a little pain. I see librarians with this problem often. And if you're the sole librarian and you have to put books on high shelves you might be out of work for a while.

We're going to talk about recognizing extremely early that there's a problem. And not working through it. Get somebody young to do overhead work. A big injury, like a football injury can tear your rotator cuff when you're young, when you're 20. Once

we get older we do not have to have a big injury to tear your rotator cuff because it's being rubbed all your life and one day it rubs a little hole right through there. Don't carry all of your grocery bags at once. You want to make it in one trip so you've got one bag on each of your fingers and before long you've got tendonitis. So before long you're going to tear up your rotator cuff when you lift the full bags up to your counter top. Do not do this, just stop doing this for the rest of your life. But when you hurt yourself at work you have to fix some things at home, too.

A lot of people think they're just going to stop doing these things at work. No, you've got to stop doing this everywhere. Give the heavy books to the young librarian and to the guy librarian. Lift less if you can, delegate. Point: "Go do this." If you've got staff, if you've got students, get them to go do that heavy stuff, the high stuff, the low stuff. It's ok to take an inflammatory. It's good to decrease inflammation. I'm not going to put people on NSAIDs for the rest of their lives for this. I've got other things that I can do for this if people want to try to get well. It's ok to take for short periods. You wake up one day, you're putting books on a high shelf one day at work, and you feel this pain right here and here. "Man, when I feel that, I go get some *Aleve* and I start taking it for four or five days and I modify my activities, and it usually goes away."

I've got a bunch of great little rotator cuff exercises. And here's the thing when I put people on exercise programs. Now first of all I want them to not be super inflamed. If your shoulder is killing you then I don't want you doing a bunch of exercises. But if you are not having pain, once that kind of calms down, then we need to get you on a strengthening program because we want to move that shoulder away from that bone. These are little bands. They are knotted and you stick the knot in the door so that you close the door on that knot. Then pull on the knot. And the further that you pull away from the knot the easier it is to do the exercises, the closer you get to the knot the more resistance there is.

With this one little band you can do a bunch of things, you can do little leg rises and things like that. Follow this little rotator cuff strengthening program. They're a good little group of exercises to help you strengthen your shoulder. You can just carry this little band around like when you're traveling. It's very good when you have it. This is upper extremity strengthening, very easy stuff.

Audience: Quick question on the previous point. When you lift weights, are there positions that they should not be in?

Bergin: Yes, I don't like anything overhead.

Audience: Can you not lift overhead?

Bergin: Sure, you can do a little overhead. You have to pay attention when you're doing any exercise program. This is an important thing. If you're doing an exercise program, like a weight lifting exercise program, and something hurts when you do it,

you should not do that. It's a common thing for people to say, I'm going to work through that pain, it will get better. And it will not get better, it will just get worse, and you could be doing some damage to yourself. Let's say I'm bench pressing and I'm lying down, and I rotate counter-clockwise. Oh, it hurts right there. Ok, so now I'm going to stop here and go back up, stop here and go back up. Now it doesn't hurt and then that's ok. I'm going to lower my weights, I'm going to change my position, change my arch of range of motion. You know, I have a bad arm because I busted it up in horseback riding. It hurts me to go do this all the way down, I just stop right here. I'm still exercising my triceps, you know, doing press up press down. Just stop there. So don't quit the exercise. Figure out a way to change how you do it so it doesn't hurt anymore.

Audience: Dr. Bergin, I've seen so many people with injuries from Wii.

Bergin: You know, I think Wii paid for a semester of my kids' education. These programs where people are encouraged to be doing a whole bunch of impressive and repetitive activities harm people and you've got to be careful about getting into some program like that and just doing a bunch of repetitive stuff. I can give you a list of things not to do, but then everybody's says she's just mean. But I can just tell you, when you're doing new things, even a new yoga program, listen to your body and what it's telling you. I took yoga when I got rotator cuff problems. I couldn't do my sun salutations because it was irritating my rotator cuff. But I could do it if I went the other way because sometimes it's easier going with gravity than against gravity. So I just modified how I was doing those. Alright, so once you have the rotator cuff and get things calmed down, you do your little strengthening program. It wouldn't hurt you to just do these. Last but not least, if things don't get better, you come see me. I've got all sorts of other things to do. I treated my rotator cuff problems with no pills, just modifying my activities, lowering shelves in my refrigerator, putting a step stool in my closet so that I don't have to climb. Just modifying activities and it went away. Any questions about rotator cuff?

Audience: When you're lifting your arms, and it hurts to do it up here, can you do it forward?

Bergin: Yes, sometimes you can do it forward.

Audience: So, or just stop when it starts to hurt. Sometimes it's a postural issue. You know, we have bad posture, this is a common condition in our population.

Ok, tennis elbow. I call it tennis elbow. To medical doctors, its lateral epicondylitis. It's real funny to say you have tennis elbow and patients will say, well I don't play tennis. So then you have to explain. Then you decide I'm going to start calling it lateral epicondylitis, and I say, "you've got lateral epicondylitis" and then they say, "well, I thought I had tennis elbow." Anyway, so most people don't get it from playing tennis nowadays, because we do a lot of repetitive activities now that we

didn't do even 20 years ago or 40 years ago. Back in the early 1900's it was called washer women's elbows because washer women were always ringing rags out.

Audience: I got it twice, once from picking up a laptop one-handed and setting it down and the other by picking up a vacuum cleaner. It was multiple one-handed very quick actions.

Bergin: That's exactly right, one day you will lift something up that you've lifted up many times before and you'll feel a little \*noise\*. Boom, take a couple *Aleve*, put an ice pack on it, don't do any lifting like that for a couple days, which is very hard to do, and then it is gone. Not like my patients that come to me after they've got it for 6 months. So why do librarians get tennis elbow? Because of grabbing books, that's the position of strength, and that's why librarians get it, and you try to grab three books rather than one because you're in a hurry and there's three books and you go \*noise\* and that's how you get tennis elbow.

How can you prevent tennis elbow? Same as before, give them to the young librarian, give them to the guy librarian. Point, tell other people to do it, give it to other students, lift fewer books at one time, be careful about grabbing. Use a book cart. And you should make it your habit to function like otherwise one of these days you're going to do something. For some people it comes on slowly, slowly. For some people that first thing you do that day, boom, tennis elbow. Once you've got it, lift smarter, lift lower.

Don't work through the pain. This is the biggest problem for people; they continue to work through the pain. So, if you came to me and you had a cut on the end of your finger and we sewed up the cut, you are not going to think, I can get better if I continue to do this, that's a no brainer. And if I told you, please do not tap your finger on the table, you'd think, I'm not an idiot. But people work through these things all the time and then six months later, I see them. There's no working through this stuff. You feel that pain right here, start thinking about what you do that makes it worse, stop doing that thing, maybe take an anti-inflammatory if you want to, but you don't have to, you just stop, and recognize it early and start treating it early. And you can treat it yourself until you can't treat it yourself anymore.

Once you've got it, go get some tennis elbow braces. You can go get wrist braces. I tell people to wear the wrist brace to bed at night. Because at night, you pull on that tendon all night long. Wear the wrist brace to bed. Wear the wrist brace to work if it's hurting you that bad at work.

You can just go to the drug store, CVS or somewhere and get wrist braces and tennis elbow braces. Academy probably has a better selection of them. That's the kind that has some kind of sleeve like a band. I tell people put it on tight enough so that maybe your veins are popping just a little but not to where it's getting numb or swollen. It's got to be a little snug for it to work.

Audience: Is there also one that goes around on the wrist and has Velcro on it?

Bergin: Yes it's just a little Velcro brace, not just a sleeve or ACE bandage or something. It has a little piece of metal that holds your wrist straight because at night, let me tell you, the forces that make your body do this are not gentle forces. Your body is holding your hands down. You think that you're in a relaxed position at night, but no. Part of the cause of plantar fasciitis is that at night people have their feet pointed down. One of the treatments that we give for it is to put you in a night-slip that holds your feet up. Some people cannot tolerate it because they have blisters on the bottom of their feet. Your feet are pulled down into that position by your brain.

Audience: Why would the brain do something that isn't relaxing to the body?

Bergin: It wants you to be in the fetal position. We start out that way, we end up that way. The body wants to be like that. All your flexors are stronger than your extensors. If you do a bicep curl you're much stronger doing a bicep curl than a triceps press down. You can do more weight because our flexors are just that more strong. Once you've got it, ice and more ice. Ice is good for acute problems. Heat for more chronic problems. There's no law about this, ok? This is just a general thing.

I've have got two little ice techniques right here, home-made gel-packs, and ice cups for ice massage. So gel-packs are great, you should always have gel-packs at your house. Get a Ziploc bag, two cups of water, one cup of rubbing alcohol. Zip it over to about an inch and squeeze all of the air out of it, zip it the rest of the way, put it in another bag, squeeze the air out of it, zip it, put it in the freezer, on a paper towel. Have three of those in your freezer at all times. You should have ice cups in the freezer at all times, especially if you've got kids. Water expands, makes ice and it will go over the top, peel the top down like a snow cone, it's frozen solid, and now you've got this little ice massage thing. You know when I had kids in the house, any booboo they got, I went to the ice massage. Sometimes people think if you've got something sore, you take a pill. We normally get into that habit early in our lifetime: "I hurt, I need a pill." Even if it's just Tylenol, I don't care. Parents often say, oh the pain, let me give you a Tylenol, let me give you a little children's Advil. With my kids, oh you've got pain, go get my ice massage thing out there and rub. You're rubbing it and you're putting ice on it so it's not hurting, and now they're grown up and when they have a pain, they put some ice on it.

Ice is some good stuff. And ice massages in particular. You don't want to put ice bags or the gel-packs directly on the skin because you'll get burned but you can do ice massage directly on the skin because you're moving. You only have to do that for two or three minutes. They're good for pimples. And massage, just rub it. I don't want you to rub anything that hurts, that's bleeding, that has pus coming out of it, or any bones sticking out. Don't rub those things. I always have to give disclaimers. Anyway, rub anything. Tennis elbow, just rub it. If your knee is hurting, rub it. It



brings circulation to the area, it gives it TLC, it desensitizes it. You sprain your ankle, rub it.

Audience: Do you have objection to frozen vegetables?

Bergin: No, I like that. That's often something people keep around. They thaw out pretty quickly and again you can't put that directly on your skin. That's something generally everybody has around. Frozen peas, frozen corn. I heard broccoli doesn't work that well. But frozen peas and corn are pretty loved. But I like the gel-packs because they're reusable. What happens with the vegetables is that you ruin the vegetable. When you re-thaw them they form a solid block of ice. The gel-packs stay soft, you know. Everybody ought to just have one of those. I'll have to Tweet about ice cups. You can take anti-inflammatories, they're good temporarily. I keep a bottle of Aleve around I've got to give the disclaimer that you can use this unless if you have ulcers or you're taking blood thinners or you have some kind of renal failure or liver failure, but anti-inflammatories are good if you get sore. They're helpful. They decrease the pain. If all else fails, come see me. I've got some things, some additional things. Ok, so any questions about tennis elbow?

Audience: So you said use the heat if it's chronic. So, say you have chronic myofasciitis. Should you do the heat with it or should you keep icing it?

Bergin: That's a good question because people often times put ice in a bottle and roll that. If you acutely start stretching it's alright. But otherwise I think stretching it and massaging it is the best; you want to bring circulation to that tendon. There are certain conditions where you get little micro tears. These are chronic conditions like tennis elbow and plantar fasciitis where you get little tears and they don't want to heal. And they've got tendons and poor blood supply. And so you bring blood supply to the area--massage it, stretch it, that's better to me. I used to do the rolling the foot on the ice thing. I think it's better to fill it up with hot water and roll your foot on it. Get some Tiger Balm, it gets warm. Every woman after 30 should stretch her feet in the morning before she got out of bed. Take the sheet, hold on to the sheet, and push your foot down there against the sheet and stretch it back or reach down and pull your toe back like that then get out of bed and kind of sit there for a minute and just make that your habit. I would cure plantar fasciitis if every woman in the county did it. Then I would get, like, a Nobel Prize in medicine for saving a bagillion dollars.

Audience: I've had that twice too. It was after wearing aqua shoes at a water park.

Bergin: When you wear certain kinds of shoes your toes have to hold the shoes on. When you wear mules and flip flops, when you come through the stance phase, swing phase of your stance, to keep the shoe from coming off, you got to do that with your toes. That overworks your foot, strains your plantar fascia. But particularly, if you're a woman over 30 or 40, I don't ever see 20 year olds with plantar fasciitis. So it is a condition of a habit of strain, a sort of aging phenomenon, or maybe a

hormonal phenomenon because 99 out of about 100 people that have it are women. If everybody would start with about 30-35 stretches when you get out of bed in the morning. Maybe you strain your plantar fascia, but what happened is you went to bed that night, the plantar fascia shortened, and the next morning, boom you strained it.

These are Dansko flops. This is the best shoe but you got to fit it right. You need a finger-width of space right here and a finger-width back here. Because people look at that and go, ooh, that looks hard, that would hurt the back of your heel. Yes it will, but you got to fit it like you would a normal shoe. That piece across the back is just a bolster to keep your foot from coming out of there. This shoe comes in mule, but you've got to hold them on. The only way mules work is if you're holding them on with your toes or they're too tight. People often say that mules are very comfortable, but the reason they're comfortable is because when you sit down you can slip your feet out of the bottom of the shoe. But when you're walking you have to hold it all with your toes or they have to be tight. And tight is not good. The human foot is meant to be free. Why do women have more bunion issues than men do and men hardly ever have them? It's because men can wear wide shoes their whole life and they tend to wear the same kinds of shoes for long periods of time. We squeeze our feet into tight shoes and pointy shoes. So this is a great shoe, and often I have lots of people come back to me and say, "I got that shoe and my feet feel great."

Audience: Where do you get them?

Bergin: In Austin you can get them at InStep and Karavel. If you're from out of town I know Nordstrom's carries them. Austin is kind of a healthy happy shoe place and you can find tons of them. But other cities, not so much.

These are the shoes that I wear in surgery because they're patent leather. And I'm jumping the gun on this because I usually wait until after Easter to wear pink. And after Labor Day I wear red patent. I get water on my shoes in surgery and sometimes I get a little bit of blood on them and it doesn't show. So I wear red and pink patent in surgery but then I have leather that I wear on a regular basis. The down side to wearing a healthy shoe is that it makes it hard to wear anything else.

Audience: Do you wear those without socks?

Bergin: Yes I do. Now I am blessed with feet that don't get real sweaty, but if the foot is loose in the shoe, then air circulates. So when you're stepping then your foot comes up and your foot kind of floats in the air and the air floats around. In cold, cold, cold winter I'll put socks on, but generally speaking I don't.

Audience: Are you saying that your foot should not be grabbing?

Bergin: Right, your foot should be relaxed in the shoe. You've got shoes that your foot can relax in. How many people here are wearing healthy shoes? Looks like librarians are all doing good. You can relax in a regular shoe, too. You don't want it too tight, regular shoes can be tight, you want your toes to be relaxed.

Audience: Do you believe in arch supported shoes?

Bergin: I like arch supports because they help relax your foot. Then there are arch supports for conditions.

Audience: Do you have an opinion on other types of shoes?

Bergin: Yes, yes, yes! Those people wearing certain kinds of shoes are paying for my kids' gas. I saw so many fractures from people going out running. When we were cavemen, we were living in an actual world running around barefoot. Once we started committing to being a shoe-wearing world, then we're a shoe wearing society. The bottoms of our feet are soft, we can't step on hard things, and glass and thorns and things like that. Our feet are protected and used to wearing shoes. The big problem is, as with everything, conditioning. So let's say I really want to wear those funny shoes, then I really want to run in those funny shoes. Then go running, go to a junior high track, I love junior high tracks, those are the best surfaces to run on. High school too, but you have to put up with whatever game is going on. Jog the straight away, walk the curves, do it just a couple times around, wait a day, and the next day, every other day, and for a week or so do that exact same thing. Then go up, and then do it three times around, slowly condition yourself to wear the shoe. But I still can't promise you that's going to work, I just wouldn't do it. I'm going to Tweet that, don't wear those shoes.

Yes, your foot is not conditioned. You've been conditioned your whole life to wearing shoes. You know, did you ever think, I'll go out and just run around the track on my hands. No, because you're not conditioned to run on your hands, you know. So, anyway, alright, I'm glad I got that one in though. I'm seeing tons of people with stress injuries due to wearing shoes with rocker bottoms.

Ok, carpal tunnel syndrome. Everybody knows about carpal tunnel syndrome. It's the most common surgery done, I think, in the world. It's compression of your median nerve in your wrist. The bones in your wrist form a trough and then there's a ligament that holds the top of the trough, like a lid on that trough and your tendons and your nerves goes through there. Who knows why people get carpal tunnel syndrome. Nobody really is sure why people get it but we're thinking it's because of doing too much of this, but I'll talk about that in a minute. Numbness and tingling. Some people say, "my whole hand is numb." It's only three fingers and half of this one. It's cool how we evolve because this is a very important nerve. It's an important nerve for how we feel things here; we don't want to have one nerve that does our whole hand. So if we bag one of our nerves we still have another nerve to have some function of our hands.

Audience: Is it true that if you have carpal tunnel they will also check your thyroid?

Bergin: Well, there are some hormonal connections and, in fact, with diabetes, also. There's a high number of people with diabetes that have carpal tunnel syndrome. But you know what, I think it's just a lot of us have carpal tunnel syndrome. I have it and I don't do a whole bunch of typing. So I think a lot of people just get it.

Why do librarians get carpal tunnel syndrome? It is debatable that this is a workers comp injury. A lot of workers comp carriers are now saying they don't cover carpal tunnel because studies are showing that the same number of people in the general population as in an work related office will get carpal tunnel syndrome. But typing, grabbing lots of books, same deal, repetitive, it's probably some kind of repetitive strain disorder. Maybe your nerve gets rubbed by those tendons or compressed by those tendons. How can you prevent it? Less of that stuff maybe. But, you know, then you've got to think about doing less of this stuff, less playing the guitar, less sleeping at night. If you have carpal tunnel syndrome you're going to wake up at night with numb fingers and then you go back to sleep. Stop living, ok, because activities of our everyday living that contribute to carpal tunnel syndrome. Once you've got it, wear a wrist brace to bed at night that will keep you from bending your wrist. Typing on a lap top is the worst thing. So if you type a lot, if you use a keyboard a lot, if you're in situations like this, you should get yourself a keyboard and attach it to your computer to use it.

Yes, the wrists should be more straight. You can't rest your hands on laptops. Get a little angled keyboard to carry around with you when you're coming to stuff like this where you will be typing a lot. So once you have it, stop doing so much of that stuff. Diminish the same activities at home as for work. Anti-inflammatories don't work very much for nerves, nerves just don't like anti-inflammatories. I don't take it for that, I usually won't prescribe it. Sometimes I prescribe a short course of Cortisone pills because nerves do like Cortisone. Cortisone gets a lot of bad press but it's very good stuff for certain things if used the right way. I mean, my philosophy is I won't do anything for you that I wouldn't do for a member of my family. Except for a shot in my plantar fascia. I'll do that on you if you want to but not on myself, because man, they hurt. Who you gonna call, if it doesn't get better? Not those guys. Because carpal tunnel syndrome, if it gets too bad, just go have the operation, it's a simple operation and it cures it. I'm going to have my operation one of these days, I just haven't picked who I want to do it.

Audience: How long does it take to recover from it?

Bergin: Not very long. You've got a little incision and a few little stitches. I've got two partners, one who does an open one with an incision. Or you'll have a little poked hole with the endoscopic. You know, if you've got a scope you're going to figure out an operation to do with it, I don't know the difference between this incision and two that big. You know the Brown Hand Center where they show this

guy with an incision like that. Nobody does that anymore. Those guys are just trying to scare everybody and make them think that they need their operation.

If you come see me and you haven't done all the wrist braces and stuff like that I'm just going to put you in wrist braces and tell you to modify your activities. Pay me your copay for telling you that but you guys are going to know what to do, right? You're going to know you're going to get the numbness and tingling and exactly what to do and by the time you show up at your surgeon's office, if it doesn't get well, you're going to say, man I've done everything, because I knew what to do. Any questions about carpal tunnel syndrome?

It does feel good to stretch after surgery to get your range of motion back. I just have never found that stretches work or help with carpal tunnel syndrome.

Audience: But you know, one of the problems I see is that people's range of motion really shuts down so much just given the kinds of sedentary kinds of work that they do. And the repetitive strain to always be in the same position. So it seems to me that anything you can do that would kind of open up your range of motion just a little bit more, it doesn't have to be extreme, would benefit, wouldn't you say that?

Bergin: Absolutely. And so anything that helps you over your lifetime--more of stretching everything, the spine, the hips, the knees, the ankles--is going to be beneficial. Do most people do that? No way.

It is preventable. I mean, I wish everybody would love to eat a little better, stretch a little more, but people just don't do it and they need to do it. My mom does yoga, she's been doing it since she was 50. She's 77. One day she and I went to walking and she says, "let's stretch" and my mom has her leg up like on the side of this bench. And I'm like what?! She's all straight up and down; they go tango dancing. No question, stretching is the best one, the most important things we could be doing, but we don't do it. Any more questions about that?

## **Patellar Malalignment**

Alright, last, oh, this is a good one, patellar malalignment. Ok, knee cap pain. A lot of people have that. 99% of them are women because of the way our pelvis is put together for bearing babies. It's a pain in and around the knee cap, crunching or grinding of the knee cap. The next time you go up some quiet stair well listen and see if you can hear anything coming from your knee caps, pain going up stairs, pain getting up from chairs, getting up from a squat. What causes it? Increased pressure on the knee cap. Because it is the fulcrum through which you extend your knee. So, it's more likely to occur in women because of the way our legs put together. Because we have a wider pelvis, which means because of our wider pelvis our hips start out at a wider place for having babies. Most women are a little bit knock-kneed and the ones who look like they're bow-legged are actually still knock-kneed, it's a rotational hip-knee thing that makes some women bow-legged. Men are most often

either straight legged or bow-legged; you very rarely see a knock-kneed man. If I see men with knee cap problems, most of them are knock-kneed. And many of them are heavy, heavy weight lifters, like squatters too. This is just bad for your knees in general.

So, why do librarians get problems with their knee caps? Because they are always climbing up on stairs, going up and down stairs, squatting. So say no to stairs. Everybody says stairs are good exercise. Honestly, the benefit to taking the stairs for people that have problems with their knee caps do not out-weigh the risks. I'm not saying for everybody to not take the stairs, I'm just saying if you have knee cap problems, if you have pain in your knees, you should avoid stairs. The benefits do not out-weigh the risks. When you go up a single stair, four times your body weight ends in your knee cap. So if you weigh 100 pounds, that's 400 pounds of pressure. If you're carrying 25 pounds of books, that's 100 extra pounds, that's carrying a baby. I have this in my knee cap and I have stairs in my house, so I do take stairs occasionally. I have a special way I take stairs when I have go up. But at my office I have to take the elevator, one floor. You can also help yourself on stairs by using the banister. Always put your hand on a banister when you're walking up and down stairs; it has everything to do with tripping and falling and busting things up. But when you're going down you can really put your weight better on the banister, you can really keep your hand on that and prevent and slow down that force that's going against your knee cap. So saying no to stairs means doing no squats or deep knee bends or lunges. Avoid squats, deep knee bends, and lunges at home and at work. Number two, avoid squats, deep knee bends, and lunges at home and at work. Let me just tell you that I am anti squat 100%, and women should not get involved with squat, deep knee bend, and lunges programs. They have these guys, these trainers that have women doing squats, deep knee bends, and lunges, and women will quit those programs because they say, that's hurting my knees real bad. Everybody loves squats because it uses your big muscle groups, your quads, your gluts, your hamstrings, and that burns a lot of calories, but let me tell you those people paid for two years of my daughter's education.

I used to be able to do them but you also used to not be 55 either. But these are bad for women. There is no way to do squats. Just don't do squats unless you're giving CPR on someone, then you can do squats. Teaching you how to do a lunge, is like telling you how to eat sugar. Is there a good way to eat sugar, sure, there's probably a good way to eat sugar. It's easier to say don't eat sugar than to say here's a good way to eat sugar. Eat sugar once a week or whatever. Same with squats. Can I tell you there's a good way to do squats or lunges? Sure, but it's easier for me to say just don't do them.

Audience: If you have to get down low, though, is it better if you just kneel, or is that worse?

Bergin: Yes. Like if I'm going to garden. I get down there and I'm sitting down on my butt until the ants find me then I'm done for the day. Ok?

Audience: Just stay off your knees?

Bergin: Right, I'm not going to squat and stay in a squat. In fact I have converted all of my low cabinets in my kitchen to those shelves, so I don't have to get down on my hands and knees to find things during Christmas time that are way back. Convert those lower things, do anything that you can do to modify our household and such to keep yourself from doing squats. Oh. Did I say don't do any squats, deep knee bends, or lunges?

Audience: Is it better to have a pad under your knees?

Bergin: Getting on your knees is just painful because you're leaning on a sensitive part. You don't have any fat in the front of your knee cap and it's hard. Yes, get one of those little gardening pads or one of those little things like a memory foam or a plastic one, just any pad, a pillow, anything that will pad the knee cap. That's not going to diminish any stresses on your knees. Better you should get a rolling stool, and sit on it and go around on a rolling stool. And this is what you need working in real life librarian situations, like getting books and all that stuff and shelving books. So you can try some anti-inflammatories if your knees are really inflamed, if they swell or something like that, but this is a chronic condition. You can try some icing I guess every so often.

This is a mechanical condition, requiring mechanical treatment. So, we've got little exercises. There's just two of them, they're very simple, and everyone should do them for the rest of their life. And I do these every day. I have patellar malalignment. I was about, 31, it was the very first year of my practice. They took forever to turn over my rooms in between cases, so I was angry. I went and I ran stairs and, boom, all of a sudden my knee caps are grinding, and swollen, and crunching, and everything is in pain. My day to day as an orthopedic surgeon involves recognizing everything going on with me from day one. Anyway, then I started treating it. So that's what I did. I stopped taking stairs. I minimized stair climbing at the time. Bedrooms were upstairs so I put my toothbrush, deodorant, hairbrush downstairs in the parlor room, so I'm not running up and down the stairs to do those things.

I started doing this exercise. I would say I probably do it four days a week. I demonstrate it to my patients every day. I see four people with this every day, so they get to pay me to do it. All women should be doing this exercise. Because there's some weird mechanical things with the way that our hips are and the way that they rotate out and strengthen the greater external rotators of our hips. And this helps too. Ok, so do those exercises, start doing them now and avoid tears. Ok, so modifications at work. If you can pull yourself five pounds worth and stairs are four times your body weight so then that's 20 pounds of pressure decreased every time you climb the stair. Ok, if you can push off the banister five pounds worth, then that's a benefit to you so when I'm going up the stairs, I've got that banister and I'm

going to pull myself up. I don't want you climbing up stairs with books in your hands. Fewer stairs, fewer books in your hands when you're going up and down stairs. This is why some librarians end up not being able to do their job, it's because of squatting and stairs and climbing up on stools. I see people who say, "I have to do this every day, I have to put shelves upon books up on shelves, and I have to climb up" and they literally can't because it's too painful in the knee caps. You've got a bunch of books to put on lower shelves, organize your books so you climb up on your ladder and you do your high ones all at once, do your low ones all at once and you just scoot down the aisle on your chair, you know, your little rolling stool. You can wear a brace. There are these braces that you can wear neutralize your knee cap. You can take anti-inflammatories if it gets swollen. And you can come see me.

Audience: What about acupuncture?

Bergin: I like acupuncture and acupressure, its pain relieving, but it's not going to do anything for the condition. You know, I had this for a long time and did some acupuncture, and it helped with the pain, but it doesn't make the condition go away. Most of these are mechanical problems so acupuncture/acupressure are pain relieving things, and they're fine. Ok, so, any questions about patellar malalignment?

So, in review, librarians are susceptible to a lot of repetitive strain disorders. It's best to recognize where there are liabilities in your work environment. That goes for everybody. Then try to prevent injuries. Recognize things early and start treating it before things progress too far. Often treatment centers around modification of activities. This is my main thing. You do not do this if you have a cut on the end of your finger. Do things both at home and at work, try to decrease inflammation, and then try to strengthen the area involved. And somewhere in there, a visit your local saw bones, that's me.

Look. We're both scary. The scary orthopedic surgeon, the scary librarian. [drbarbarabergin.com](http://drbarbarabergin.com) is my blog and I write about straight up orthopedic stuff like repetitive strain disorders. If you read it you will prevent things that are going to happen to you. A reason I do this is I think we're going to go into a period of time where we just need to take better care of ourselves. And my blog is going to help people to do that. Follow me on Twitter because every few days I'm going to say something like don't squat, or eat your vegetables, or don't forget to take your calcium every day.

Audience: What's on the passenger seat of your pick-up truck?

Bergin: Oh, my calcium. You know that stuff, Viactiv? We need to be taking our calcium every day and that includes all of us. You guys probably not. Once you're 40, you should be taking calcium, and you can't just take it intermittently, you've got to take it every day. Viactiv, which are these caramels, taste pretty good. I keep them in my car so when I get in my car I take one, and when I get in my car in the



evening I take one. Because otherwise I'm going to forget. Some of us should be taking them three times a day but that at least gives me two times a day.

I think, unless you've got some kind of kidney disorder or something like that, you should be taking calcium. You don't feel osteoporosis, y'all know that? You don't feel yourself getting osteoporosis. Once you've got it, you know. You have got to do all sorts of stuff to get your bone density back.

That's my group, [Texasorthopedics.com](http://Texasorthopedics.com), you know, I've got stuff on there too, but, really, if you follow my blog and my Twitter you'll get lots of good information. I'm at [barbarabergin](http://barbarabergin.com) now. And that last picture is me on Senior, my horse. Look at him, isn't he cute. See his little ears? Horses are just so fascinating. If they're angry they put their ears back. He's got his ears turned listening. He's listening to me because when I want to go faster and I cluck to him. I'm clucking because that's a particular maneuver where I'm getting ready to go fast and we are both looking where we're going.

Audience: I have a couple of questions for you Dr. Bergin. I don't know if you want to share the story about your son.

Bergin: For those of you from Austin, you might remember this about, well, it's going on 6 or 7 years now, my son was offensive lineman at Westlake High School, and he actually had a scholarship to play at UT. During his senior year we were at a football game and he collapsed in a sudden cardiac arrest. My husband and I ran down on the field and started CPR on him immediately. People don't recognize when people are in cardiac arrest. They think he's having a seizure or something. Of course, we came out of the stands, and no pulse, started CPR. Our team had a defibrillator, someone had donated one about four years before, that meant 10 years ago, before people we're really thinking about one. So, we got his stuff off and gave him the shock, and he came back to life. And he is alive and well. This is a lesson learned. And then he had to have a [device] implanted. And Mack Brown called him the very next day and said don't worry about your scholarship, you have committed to us and we are committed to you and so they gave him his full scholarship. He served as student assistant coach for four years. He went out and started speaking about this with the Lt. Governor and a couple of senators and they passed that law to put defibrillators in all the school and save people's lives.

That's why I was saying don't get down on your knees unless you have to do CPR. We should all know how to do CPR. You don't have to take a class, you don't have to be certified. The American Heart Association has this thing called CPR Anytime and it's a little \$50 video. You get a human model that's a half of a head and half of a chest and you blow it up, and you can actually practice and it makes a little clicking noise to let you know you're doing it hard enough. And a 30 minute video teaches you how to do CPR. Most of the time we're not going to have defibrillators around but, keep somebody's circulation going. Now these days they say you don't have to do mouth to mouth. Of course we did mouth to mouth, it was our kid, you know.

Mouth to mouth is a good thing to do because they are getting oxygen. But what they are trying to do make us all willing to do CPR. Because most people are not willing to do CPR on strangers, or they're reluctant to, and that reluctance wastes precious moments. Three minutes without oxygen and you will have the beginnings of brain damage. Exactly three minutes can mean life and death because they got so much toxic stuff floating around in their blood stream that it starts eating up the cells. Cell degradation starts occurring very rapidly. But three minute without blood supply means brain damage. Learn how to do CPR.

Audience: How is Matt now?

Bergin: He's doing very great. He graduated and he's working for St. Jude's medical; he makes these devices. They called him up out of the blue and said can we talk you out of coaching, because he was going to stay on at UT and be a graduate assistant and he was like made an offer he couldn't refuse. So he has a passion for this.

Audience: Is bursitis preventable through exercises?

Bergin: We've all got bursas all over our bodies any place where a tendon rubs on something else. That can't be cured and you can't really get rid of that, you have to stretch it and massage it.

If it's really bursitis you can take some anti-inflammatories and sometimes that will calm it down. We have bursas all over us, they're necessities, and sometimes they get inflamed and sometimes exercise can cause it to become inflamed. Your massage therapist knows how to get in there and really stretch that out.

Although I can tell you I am certain that most certified massage therapists have learned how to do this because it is so common. You know those little chair massages? People say, "I can't afford massages." Go to those little chair massages at your car wash. Because that's the area that they work on. Physical therapists know what they're doing, yes, but you can't do that for the rest of your life. You can't use your health care insurance to get myofascial release for the rest of your life, you just can't. Financially it's best to go to a good massage therapist. A lot of times they'll say they're doing myofascial release on other parts of your body but that's really more just massage and stretching. Again, I'm, my opinion is that if this is myofasciitis right here is probably tightened tendons that create this weird pain syndrome. Your doctor can write a prescription that says myofascial release. A lot of times that's just straight up massage therapy by a person who's hired by the place that you're going. I just think, if you can afford massage therapy, everybody ought to do that. A little bit of that is probably good for all of and they help you stretch yourself out and stretching is good to do.

Audience: Can you say something about the SI joint?

Bergin: The SI a weird joint, it doesn't move, it's not like these joints, it's like your skull or your sternum, joints that just don't move, they do have cartilage in them. I know your skull closes up, but I'm saying that these are flat bones or stationary bones and what happens is we do activities that torque. I've got this situation. The reason is because of when I stop my horse, in order from going over the front of the horse. I'm riding with just one hand, so when I stop and I'm stuck in my saddle and that distorts my pelvis, and that torques my SI joint. Honestly, my opinion is there's not a whole lot you can do about it. You can stop doing the thing that hurts it.

You can strengthen your core. It's always good to strengthen your core. We all should be strengthening our core. You can do treatments. You can take anti-inflammatories. You can have massage. You can stick needles in there, inject Cortisone into them. I'm not doing that. Some people have it bad enough they are willing to do that. It is a very difficult problem to deal with, and I would not say that it is easy to cure. Good news, it isn't going to kill you. It's not ruining anything, it's not ruining your hips, or anything else, but it is giving you a stiff, sore back.

Here's an important thing for all of us. As we get older, we start saying we hurt when we get out of bed. We have transitional pain getting up out of chairs after we've been sitting for a while. When you wake up in the morning and you start feeling yourself, and it's hard to get out of bed, start stretching a few things, stretch everything. I do my feet, I do everything. Lay on your side and push yourself up, then sit up, stop getting out of bed like this. Because your body has been like this all night and you strain these. And I find that as I start breaking down my movements to more square movements doing less of this, you know, stand up out of my chair and then then go where I'm going to go. Push myself up in the bed, straighten up, stand up, then go where I'm going to go. We must all learn how to get out of bed like that, and sit up. So break your movements down. Anything else?

Audience: My last question is about you as an author.

Bergin: I'm working on the blog a lot; that takes a lot of my time working on my blog. And, you know, I was compelled to write that first book and I've got 100 pages written of the second book. It's just going to be a wonderful story and I hope that I'm going to get it done one of these days.

Bergin: Read my first novel, Endings. The ending is a surprise, you have to open your mind. I call it my literary special effects so, if you're doing a movie, you can have black and white, you can have color, you can have computer graphic things, you can have music, but an author just has ink on paper. And so this is sort of a special effect on the ending and you have to have your mind open to the special effect. You know what a romance novel is. A romance novel, is defined by a happily ever after ending. People who are romance novel bloggers have a H E A E, happily ever after ending. They'll just write that my novel, Endings, didn't have a H E A E, so it's not a romance novel. Now I'm insulted that if you try to imply that it's not happily ever after. There is a component of this that is happily ever after but it's not

defined so I couldn't make it a romance novel. My publicist wanted me to change the ending to happily ever after but the editor is, like, no way, this is what we're paying you for. Endings it's a very good book and I think you will enjoy it.

End Transcription

Begin PowerPoint/Dr. Roy Notes

X = slide titles

### Danger Zone! The Library (slide 19)

Possible work related injuries in the library profession:

- Myofasciitis
- Rotator Cuff problems
- Tennis Elbow
- Patellar Malalignment

### Myofasciitis (slide 20)

### Myofasciitis (slide 21)

- Pain in the trapezius muscle
- Pain running down the spine side of the shoulder blade
- Burning pain
- Chronic dull pain
- Radiating pain
- Numbness and tingling in the same areas

### Why do we get Myofasciitis? (slide 22)

- The fascia is a sleeve of tissue which covers all of our muscles
- Our shoulders (particularly women's shoulders) are under constant stress, and this starts young

### The good news about Myofasciitis (slide 23)

- It's benign
- It's not cancer
- It's not a nerve problem or a herniated disc
- It's not harming you, it's only hurting you

### The bad news about Myofasciitis (slide 24)

- It's not preventable
- It's not curable
- It's only treatable . . .like hypertension

### But once you've got it . . . (slide 25)

- Not a big fan of long-term use of medications

- Prefers *Aleve* or *Advil*, twice per day dosing
  - Both are anti-inflammatories

### Stretches for Myofasciitis (slide 26)



### Another Stretch (slide 27)



### Massage Techniques for Myofasciitis (slide 28)



- Get a back knobber
- Tennis ball in a long sock

### Myofasciitis: Questions? (slide 29)

### Rotator Cuff Problems (slide 30)

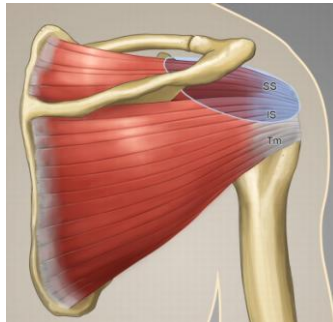
- Bursitis
- Tendonitis
- Impingement Syndrome
- Biceps Tendonitis
- Rotator Cuff Tears

### Rotator Cuff Pain (slide 31)



### What's wrong with the rotator cuff? (slide 32)

- The bursa, rotator cuff, and the biceps tendon are all positioned under the bone called the acromion



### Why do librarians develop problems with their rotator cuffs? (slide 33)

- Reaching

### How can you prevent rotator cuff problems? (slide 34)

- Carry fewer books
- Give books to younger ones
- But once you've got it . . . (slide 35-40)
- Lift smarter at work and home
- Lift less if you can
- Delegate, if possible

- Take over-the-counter non-steroidal anti-inflammatories (NSAIDs) for a short period of time, if you can
- Once things have calmed down, you can start a gentle exercise program



And last but not least . . . (slide 41)

- Once you've got it, modify your activities and take *Aleve* for a couple of days

Rotator cuff: Questions? (slide 43)

Tennis Elbow (slide 44)

- Lateral Epicondylitis

What's wrong with the elbow? (slide 45)

- The tendon which raises your wrist and bends your fingers gets damaged; either repetitively or acutely
- Take *Aleve*, ice, don't lift anything

Why do librarians get "tennis elbow"? (slide 46)

How can you prevent tennis elbow? (slide 47)

But once you've got it . . . (slide 48-51)

- Lift smarter
- Lift slower
- Don't work through the pain
- Recognize it early
- Start treatment early
- Tennis elbow brace
- Wrist brace
- Ice and more ice
  - Gel packs
  - Ice massage
  - Ice is good for acute problems and heat for chronic problems
  - Also good for pimples
- Massage
  - Just rub it

- Tiger balm, capsaicin, etc.
  - Don't rub anything bleeding or with bones sticking out
  - Take NSAIDs
- 

... And come and see me ... (slide 52)

- Plantar fasciitis: massage will help a lot at that point

Tennis elbow: questions? (slide 53)

Carpal Tunnel Syndrome (slide 54)

- Most common surgery done in the world

Carpal Tunnel Syndrome (slide 55)

- Compression of the median nerve at the wrist
- There is a tunnel which is formed by the bones of your wrist and a ligament
- You get numbness and tingling of the thumb, index, middle, and half of the fourth fingers

Why do librarians get carpal tunnel syndrome? This is debatable ... (slide 56)

- Typing
- Grabbing lots of books

How can you prevent carpal tunnel syndrome? (slide 57)

- Wear a wrist brace at night, the wrists should be straight

But once you have it ... (slide 59-61)

- Diminish the same activities at home and at work
- NSAIDs don't work well with nerve problems
- Who're you gonna call?

Carpal Tunnel Syndrome: questions? (slide 65)

- Stretching is one of the most important things we can do

Patellar Malalignment (slide 66)

- 99% are women

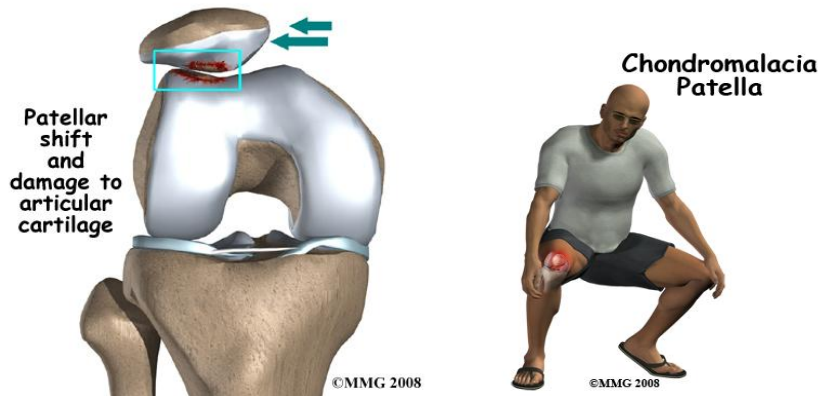
What is patellar malalignment? (slide 67)

- Pain under or around the knee cap
- Crunching or grinding under the knee cap
- Pain getting up from chairs, going up stairs or getting up from a squat

What causes patellar malalignment? (slide 68)

- Increased pressure on the knee cap, because it is the fulcrum through which you extend your knee
- More likely to occur in women because of the way our legs are put together





Why do librarians get problems with their knee caps? (slide 69)

How can you prevent knee cap problems? Say no to stairs ... (slide 70)

- Up a single stair: 4x the body weight on the stairs; always put your hand on the banister

But once you've got it ... (slide 73)

- Avoid squats, deep knee bends and lunges (at home and at work)

Oh, and did I say ... (slide 74)

But once you've got it ... (slide 75-83)

- You can try some NSAIDs
- You can try some icing
- But this is mostly a mechanical condition, requiring mechanical treatment, including:
  - Exercises, everyone should do these everyday
  - Some modifications at work
  - Wearing a brace can neutralize the knee cap
  - Wearing the right shoes
- Acupuncture and acupressure are pain relieving

Exercises: Vastus Medialis strengthening (slide 76)



Exercises: Hip External Rotator Strengthening (slide 77)



### You can (slide 82)

- Wear a brace
- Take NSAIDs

### Patellar malalignment: questions? (slide 84)

### So in review . . . (slide 85)

- Librarians are susceptible to a lot of repetitive strain disorders
- It's best to try to recognize where there are liabilities and then try to prevent liabilities
- Recognize injury early and start treatment before things progress too far

### Treatment (slide 86)

- Often centers around modification of activities, both at work and at home
- Try to decrease inflammation, and then try to strengthen the area involved
- And somewhere in there . . . maybe a visit to your local saw bones

### (Slide 91)

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