How to Conquer Inguinal Hernias and Reclaim Your Vitality — Interview with Dr. Eric Pinnar

By Dr. Joseph Mercola

Dr. Joseph Mercola:

Welcome, everyone. Dr. Mercola, helping you take control of your health, and today we're going to do something I've never done before. I'm going to interview Dr. Eric Pinnar.

Who is Dr. Pinnar? He is a general surgeon who has chosen to specialize in hernia repairs. Why? Because I developed an inguinal hernia, and I thought it would be very useful to share my journey with you and what I learned because it was a lot. And I've known many of these details before, but it is a nightmare for someone without medical training to navigate this course.

It's, literally, almost impossible, and you're just at the mercy of the luck of the draw unless you do your homework. And I think, fortunately, now there's a movement towards empowering patients and developing a good relationship with their patient and the surgeon, but the last thing you want to do is be at the mercy of someone and not do your homework, not to know the scope of what's necessary and important.

Now, today we're going to focus on inguinal hernias because that is a common surgery. There's about a million of these surgeries done every year. That's a lot. It's one of the most common surgeries, probably in top three or four in the country, maybe even number three. It's hard to get data on this, but it's definitely up there. So many people watching this have probably had them and hopefully some of you have it now and are considering having this procedure done. But we're going to go over all the different options so you have the information, and you can make an informed choice.

Because I can assure you with the highest degree of confidence, Dr. Pinnar, he had his comments on this because he's been doing this a long time and he's, literally, at the top of his field. I couldn't have identified a more ideal surgeon for me. First of all, have to be local. He has to be highly qualified. He's at the perfect age, perfect experience, and his bedside matter is exemplary.

And I know because I had... He's not really close to me. He's actually another full hour away, one way each way to get to his office and is in hospital from my local surgical group, who I fired because their administration front office was horrendous that they shouldn't even be allowed to be in business. I mean, they failed to return calls dozens, dozens of times, and they just were inept. And there was no way I was going to work with a group that had that type of professional or responsibility.

So, I chose Dr. Pinnar because one of my friends, actually a good friend Patrick, I'm going to be interviewing next week, you'll see who he is. Patrick Gentempo had met with him, and I was so impressed when Patrick shared his experience and said, "That is like amazing. I didn't know surgeries like this existed."

So, what I'm going to have Dr. Pinnar discuss is some of the things, the details, information that almost no one is told before they're going through the surgery so that you have the knowledge you need to do. Because, first of all, I'll tell you offhand, there is no specific perfect answer for everyone. It's customized for your specific circumstances, and a lot of that has to do with your finances and availability of a whole variety of other things, and your...

Well, I won't waste more time because Dr. Pinnar has got the goods and I want him to tell you firsthand what it is. So, with all that introduction, welcome today and thank you for joining us.

Dr. Eric Pinnar:

Yeah. Thank you, Joe. I appreciate it. Very happy to be here. Very happy to have met you and very happy to have done your surgery. So-

Dr. Joseph Mercola:

Yeah, yeah. And, folks, I am, literally, 10 days post-surgery, post-surgery, and I'll share my experiences afterwards because there were some major epiphanies, and we'll share those afterwards. I'm going to give you some treats because there is knowledge I have gained that will help anyone who is going to have a surgery massively, and I don't think it's widely understood on how to implement these things. So, it's some really simple things, but we're going to hold that until after Dr. Pinnar finishes his explanation.

What is a hernia? How common is it and why is this such a big deal and why did you choose to focus on it and how you, essentially, what makes your practice so much different than others? Because it is significantly different.

But I neglected to mention, and I'm going toot his horn because I don't think he'll mention it. He started this process, literally, in the COVID area, right when everything was shut down and, listen, inguinal hernias don't respect COVID. They're going to happen when they happen. Just because there's COVID out, they're not going to shut down. So people lost their jobs, they had no insurance, they could not afford the surgery.

So, he essentially did domestic missionary work to figure out a strategy to allow people to get this surgery and not suffer in pain and potentially die because this hernia progressed to the point where incarcerated, and it caused a potential failed complication. So, I admire and respect him for doing that. I learned of that decision that he made through our process, and it was really quite exemplary. So, an enormously committed individual who truly, as a physician, is focused on the reason why most people go and sign up for medical school to do this, to help people. Otherwise, you wouldn't be engaged in that type of behavior.

So, okay, with that, maybe start us back then and how you got into this not taking too long because I really want to focus on the surgeries.

Dr. Eric Pinnar:

Yeah. Let's go back. One big step just to go forward, but my father was a general surgeon, and so part of the reason I went into general surgery was my experience with him and getting to know him and spending time with him. I used to make rounds with him in the hospital when I was two and a half feet tall, and I did that for many, many years.

And I was actually just telling a patient last night on a telehealth visit that my first time in the operating room, I was 11 years old and it was my wife, my wife, not at the time. My mother and my brother were away on a trip so my dad was basically watching me, so to speak. So, it was just the two of us, and he got called in for an emergency surgery, and he had nobody to watch me. It was in the night. So, he took me to the hospital, and they allowed me into the operating room. That was a long time ago. It was like 40-some years ago.

So, I had a very keen interest in surgery, and I went to medical school with that plan. And I eventually went and did my surgical residency, and then the plan was for me to join him in practice, which I did.

And we practiced together for a long time until I moved to Florida, which is a very long story. But he passed away a few years ago, but I learned a great deal from him all the years and then when we were in practice together.

But general surgery encompasses a wide range of sort of now of specialties, but really general surgery is a specialty. You know, I tell people I'm a general surgeon like, "Oh, just a general surgeon?" It's not just specialty in and of itself, but general surgeons do everything from head and neck surgery to all types of intestinal surgery, lumps and bumps, thyroid and parathyroid, colon and rectal and small intestine, and obviously hernias.

And it's a wide range and some people tend to focus on some particular thing because it's so broad now, and our technology is so broad now that it's really hard to stay current on everything. When I re-certified for my board certification, it was really daunting because a lot of it, everything from trauma, thoracic surgery and I hadn't seen or done in a bazillion years. So, it was very stressful to have to study all of that stuff and learn all of that stuff again.

Dr. Joseph Mercola:

So, you pivoted to hernia surgery?

Dr. Eric Pinnar:

Yeah. Well, not at that time, but I've done a lot of things in my career, and I've gotten older, and I've narrowed my career down.

I tend to gravitate to things that are dynamic, things that are changing, things that where you can be, I guess in our field we call it, you can be an innovator, so you can be an inventor or you can be an innovator. So, you can invent a lot of things in terms of medical technology, but you can be an innovator in the terms of developing new techniques and using new technology in different ways. So that's what really has interested me is sort of making a difference.

And hernia surgery has always interested me from way back in the beginning, and it's actually one of the first surgeries you do in surgery school. So, when you go to your general surgery residency after medical school, hernia surgery is one of those first surgery cases you do because especially back then, back then surgery, hernia surgery hadn't changed in a couple hundred years. And so, you learn pretty much the standard way of doing things, but it was a pretty easy repair and it still is to some degree.

The first hernia surgery I did actually was as a fourth year medical student, so somewhere around 1990.

Dr. Joseph Mercola:

Yeah. Well, let's get into the different options that are available. Let me share my experience because that might help some people.

I first, yeah, I was surprised. I've noticed a lump and it got bigger and bigger. And why healthy Dr. Mercola getting a hernia? Well, it's common in men. It's almost unheard of in women because of this spermatic cord comes in through that inguinal canal and it gets a defect.

But I've come to the conclusion, the reason that most people get, including me, is that most of their life, they're not eating enough connective tissue, otherwise known as collagen. And you need those raw materials to build the strength of that tissue. So that's what I did. And I was doing a heavy resistance training, too. This doesn't help. So that's a combination I'm fairly convinced that's why I got it.

But I had been a fan and respected Dr. Peter Attia who was also, I don't think he was a general surgeon, maybe he was. He was Hopkins-trained, and I respected his opinion and heard him on podcasts talking about hernia surgeries. And it was maybe a year or so before I got this. And he had mentioned this clinic in Canada called Shouldice, I believe. They do an open repair, and they do it without mesh because your two options are mesh, which is typically synthetic. We're going to go into that. It's a graft. Well, it's big and you'll go into details, but there's either a compatible or synthetic graft, the biocompatible or synthetic, and they didn't do that. So it was a mesh-less surgery, but I thought that was the best, according to Peter.

So, I called them in December, maybe in November, went through the process, applied because they don't take everyone, and I got accepted.

I was supposed to go there like the middle of January in Toronto for five days, and boy, am I so glad. That would've been a mistake. I couldn't recommend more confidently to anyone to avoid that place like the plague because, and I'm sure you'll agree, maybe they were pretty cheap. They were only $7,000 for that included the hospital stay, the anesthesiologist, everything, nuts to tails $7,000.

And I learned from you later on that their results are so good they're viewed as like as one of the best strategies out there because they picked their patients. They pick healthy patients. Normally I got picked, but if you're heavy, they're not going to pick you. So, they're not good numbers.

So anyway, why don't you go through the options? Because you've got this thing and you're exposed, all of a sudden, with all this knowledge you have to acquire. So why don't you say like me, after I just hit the Shouldice and I knew that's not what I wanted. It wasn't good. I was actually, I was trying to find a Shouldice trained physician in the US and then when I went to my first surgeon, I discussed and he opened my eyes on that one. So that was a mistake that I got from Attia.

So, I'm at your office now and I wanted to do the show as to why don't you walk me through what my options are.

Dr. Eric Pinnar:

Well, the first thing I would do is explain what a hernia is because most people who come to my office have no idea. You know, they come just like you said, the most common story is... Let's jump back even a further step.

So, there are many different types of hernias. So there's groin hernias, so there's inguinal hernias, there's umbilical hernias, there's ventral hernias, incisional hernias, spigelian hernias, hiatal hernias, lumbar hernias. They're all different types of hernias, and they're all basically a hole. So, they're a hole in something, and they pretty much get their name from whenever they're a hole in. So, the umbilical hernia is a hole at the umbilicus, which is the belly button. The inguinal hernia is most people would think of as a groin hernia, which is in the inguinal canal. So, you call it a groin hernia or an inguinal hernia.

Usually what I start with is, the easiest one to understand is the umbilical hernia because the anatomy is very simple. So, most hernias occur... Basically could be broken up into two things. There's either a natural hernia and then there's an unnatural hernia. So, the natural hernia is either occur through a hole that's supposed to be there, so a hole you're supposed to have, or it's a hole that you were supposed to have that's now you're not supposed to have. And the other one, the artificial one is usually one that we've done because we've made an incision for something, an appendectomy, a gallbladder surgery, a hysterectomy, something like that where you've made an

incision, you've closed it up, but now it's come back and that's considered an incisional hernia so we've made it.

So as far as the natural hernia is, the easiest one, like I said, to understand, is the umbilical hernia.

So that's a hole where the umbilical cord came through the abdominal wall. So when a baby's born, they cut the umbilical cord, it sort of dries up and falls off, but there's still a hole there where the umbilical cord went through, which is what attaches the mom to the baby. And that hole will typically close, will fibrose shut and scar shut within the first year of life. So now, not a hole.

But in some kids it doesn't close up all the way. Sometimes it's open just a little tiny bit and sometimes it doesn't close at all. And those are the kids you see running around with outies. You can see that they've got an umbilical hernia because they have a little bulge in the belly button. And those ones we fix when they're kids, if they don't close. We fix those. But the ones that are open just a little tiny bit, we don't know about until later in life.

So, through the course of living, so lifting, coughing, sneezing, straining, sports, anything that increases intraabdominal pressure pushes out on a weak point. So, pressure takes the path of least resistance. So, if there's a little weak point somewhere, pressure's going to preferentially go there.

So, the analogy I've come up with after all these years is a brand new tube of toothpaste, because most people know what a brand new tube of toothpaste is. So you go to the store, you buy a brand new tube of toothpaste, take it home, take it out of the box, you got this tube. If you squeeze that tube, that pressure that's generated inside by you squeezing it is evenly distributed on the walls of the tube.

But if you go and poke a hole on the side of the tube and then squeeze it, all the pressure's going to go there because pressure takes the path of least resistance, and it's going to take with it whatever's inside. So, in this case, toothpaste.

Or if you just unscrew the cap and squeeze the tube, all the pressure's going to go there and take with it toothpaste. So, your body, your abdomen, and also your chest, but your abdomen is a tube with stuff in it. So, if you've got a weak spot, when you squeeze that tube, which is all those activities we talked about, you lifting, coughing, sneezing, straining, sports, anything that causes you to tighten your core muscles, increases your abdominal pressure, and that pressure will take the path of least resistance. Normally it would be evenly distributed on the abdominal wall, but if you had a weak spot, it's going to go there, and it's going to take with it whatever it can.

So, in the umbilical hernia, you got this little tiny hole. And then over the course of life, doing all of those things I just mentioned, you can push through a little tiny bit of fat.

So, everybody's got fat on the inside. Even skinny people have fat on the inside, and there's a blanket of fat that sits over the intestines, which we call omentum, but it's very soft and squishy. So, most people, I tell most patients, it's like chicken fat. You would think of it like chicken fat. So very soft, very squishy, and you can push it or even squirt it through a small hole.

So, what happens is you're lifting your coughing, you're sneezing, you're increasing your intraabdominal pressure, and you're pushing out a little tiny bit of that fat through that hole. And then every time you lift or cough or sneeze or strain, you're pushing that fat out. And over the course of time, that hole becomes a little more dilated, and then you get a little more through there and a little more through there until you get something big through that hole. So you're making the hole bigger and bigger and bigger.

So, we'll talk about what that means later, but that's very easy to understand because that anatomy is very simple.

The inguinal anatomy is much more complicated. As you probably know, I usually draw it in the office to explain it because it's a little difficult to understand without seeing a diagram or a picture.

But basically the inguinal hernia, there's two types, and they're the most common hernias worldwide. 75% of all hernias are inguinal hernias, and as you said, much more common in men than women by 19 to one. It's estimated that one in four men will require a repair of an inguinal hernia in their lifetime. It's like a 27% lifetime risk.

So, the inguinal canal conceptually is like a tube. It's really a pathway between layers of the abdominal wall tendons. So, the abdominal wall, you have three abdominal wall muscles. You have the external oblique, the internal oblique and the transversus abdominis. That's what makes up the abdominal wall, and they run all different directions, which is why you can bend forward and backward and sideways because they run all those different directions.

But all muscles attach to bone by tendons so the tendons are the strong part of a muscle. You would think of it as gristle, but it's what attaches muscles to bone because muscles contract, and they need to pull on something. So, they all need to be anchored at both ends, and it's to bone.

So, the abdominal wall muscles are anchored to the pelvis, and there's a pathway between layers of those muscles. And that pathway is a natural pathway, and it's the pathway that the testicle takes in development.

So the testicles actually develop up near the kidneys, way in back up here near the kidneys, and then they descend down through the abdominal cavity before birth while in the womb, and they'll come out through the abdominal wall through an internal hole, which we call the internal ring, and then pass through those layers of the abdominal wall tendons and then come out of the

abdominal wall through what we call the external ring. So, it's almost a tangential pathway through those muscles.

So that's the inguinal canal. And there's two types of inguinal hernias. The most common type would be what's called an indirect inguinal hernia, and that's what comes through that internal ring. So, it's the same thing and so it's a natural hole. So, the internal ring should look like this, and then the connections to the testicle all run through that canal because, as I said, they came from up near the kidney. So, all of their blood supply, the nerves come from up there, travel through the abdomen and out through that ring.

So that connection we call a spermatic cord. It's like a cable that leads to the testicle, so that's the attachment of the testicle to the inside. And so that internal ring, the top of that cylinder or tube should look like this, and the spermatic cord comes through it.

In an adult, the spermatic cord is about the size of my pinky, and it comes through that hole. And obviously that hole has to be bigger initially to accommodate the testicle, but the attachment to the testicle is smaller than the actual testicle. So, this hole would be bigger initially, and then it should close up. Like the umbilical cord, it should close up around that cable or the spermatic cord. It can't close all the way because of that cable. The belly button should close all the way, but this can't, so it should look like this.

But in some people it looks like this, and some people it looks like that, it looks like this, something like that. But it starts out small and just like the umbilical hernia, which is why I use that analogy, you get some fat alongside that cord, and every time again, you lift cough, sneeze, strain, you're pushing some fat through that hole until it gets bigger and bigger and bigger, and the hole gets bigger until you can get something important through there.

The bulge that people see on the outside is the stuff that comes through that hole and bulges into the canal, so that whether it's a clump of fat or whether it gets big enough and you can push intestine through there, that's what you're seeing on the outside is a bulge. And as you said, or as I started to say, the most common presentation of that is somebody-

Dr. Eric Pinnar:

Or as I started to say, the most common presentation of that is somebody says, "I just noticed this bump." They'll say, "I was in the shower one day and I noticed this bulge or this bump, I've never seen it before, didn't know what it was, went to the internet and it looks like it's a hernia from my research." Or they went to their primary care doc who said, "It's a hernia. You need to go see a surgeon." Sometimes they get sent for some type of diagnostic study, like an ultrasound or a CT scan, but by and large, that's what people come with, a bump. It's always, always kind of a red flag when people come and say that they're having pain because it's not usually painful. It can be painful as it gets bigger and you push more stuff through it, people can get sort of an aching pain to it, but it's not like sharp stabbing pain like some people come with.

Sometimes if it occurs, and we'll talk about the second type in a second, second type of inguinal hernia, I guess we can talk about it now. The other type of inguinal hernia also occurs in the inguinal canal, but instead of coming through the top of that tube and through the internal ring, it comes out through the inguinal floor, so in the bottom of that tube. So, it's usually caused by a tear in the inguinal floor from doing some type of activity. So, like heavy lifting. I see it frequently and in movers, landscapers, construction workers, where they're lifting something extremely heavy and it's kind of what you think of the average public thinks about. You've lifted something and you got a hernia. That's the kind of thing that usually happens. So, you get a little tear in those tissues and the stuff from the inside bulges into the inguinal canal from really the backside of it, not through either one of those holes.

And so that's called a direct inguinal hernia because it comes directly through the abdominal wall, through the floor, and both of those, same stuff. Initially it's fat into the inguinal canal and it'll follow that inguinal canal. So often patients that have had it for a long time will notice that it was a bump. Maybe it was small like a walnut, maybe it was like an apricot or something like that. But then it starts to become more tubular. They'll notice that it's sort of oblong because what happens is that stuff that's filling the inguinal canal follows the inguinal canal, and so it'll traverse the abdominal wall just like the spermatic cord, and if left to its own devices, what'll happen is whatever's coming through it will follow it and go into the scrotum. It'll follow that spermatic cord in its course and then down towards the testicles in the scrotum.

So, people who've had one for a long time can progress to that. Now, the scary part or the downside, the risk, of having the hernias is when it gets bigger. This is all hernias. So, when it gets to be about, when it's small like this, like I said, you could get some fat through there, but when it gets to be about this, maybe two or three centimeters, now you can push something important through it. And the important thing that we worry about is intestine. So typically small intestine.

The colon, is the large intestine, is relatively fixed to the retroperitoneum, so it's not really floppy. It doesn't move so much, at least not in the pelvis. It's floppy at the top, but not in the pelvis and the small intestine, which is what attaches the stomach and follows all the way down to the large intestine, you have about 23 feet of small intestine in there, and it's very loose in there, like a bowl of spaghetti. And it's also very soft and squishy, kind of like I described it like penne pasta. So, it's very flexible, very soft, and you could push a knuckle of it through that hole like this. Whichever hole, whichever type of hole, you can push a knuckle through there, and you're okay with it as long as you can push it back in.

The worst part about it is, especially one that's progressed that far, is out most of the time. When it's a hole like that, it's usually out most of the time. So very common story too is that patients will say, "Sometimes it's there and sometimes it's not." Sometimes they notice the bulge and sometimes they don't. Or, "It's there when I'm up on my feet and when I lay down, it's gone." That, I can tell you is a hernia without even looking at it because that's a perfect description of a hernia, is a bulge in the groin that comes and goes. It's usually not there when you lay down and usually there when you stand up. Or, "I can push it back in. It comes out, I can push it back in."

So that's pretty much a hernia. There's very few things in a male that happen in the groin and that's pathognomonic of a hernia.

So, if it's out all day or you do something, it's typically there, but then you cough or you sneeze or you strain. So again, like a construction worker lifts an eighty-pound bag of cement. You can acutely push a knuckle of bowel or a couple of knuckles of bowel like this out through there, and then it can get stuck. And the longer it stays out, it can compress the veins. So, all tissue has arteries and veins that supply and empty blood from it. So, the veins I usually show patients in my hand, are very soft and pliable and squishy. You can compress the veins very easy. Venous pressure is very low, arterial pressure is much higher. So, you push that out through there and then veins get compressed because it's something bigger through a tight hole. And then once the veins become compressed, blood can flow into it, but blood can't flow out of it. So, then it starts to swell, and as it starts to swell, that hole gets tighter. The hole itself stays the same size, but what's in it is bigger.

So, it becomes tighter around the tissue that's in there, and eventually the more it starts to swell, it'll eventually overwhelm the arterial pressure and now arterial blood can't flow in to it. So now that tissue, whatever tissue is in there, whether it's fat or intestine, is deprived of oxygen, and when it's deprived of oxygen, it dies. And what happens is, I don't know if you can see on there, but what's happens is what's happening to my fingers right now, is they don't look so good. So, the treatment is emergent at this point. You've got to get this back inside. So, the first thing to do is try to push it back inside. If you can get it back inside, everything will pink up and look happy and healthy. But if you don't get to it in time, that tissue will die, becomes a much bigger deal.

So, what I tell patients is the first thing to do, if that happens, and I tell them all of that, not to scare them, but to tell them what to do if it happens. So, if they start to get pain, so they don't usually have pain, but if they start to get pain or it's tender to push on, I tell them to lay down, because again, that's when it usually goes away. And then try to massage it gently and push it back in. As long as they can push it back in, they're good. They're good to go at that point. But they really should get it fixed before the next time and the next time because the next time they might not be so lucky.

But if it gets really painful, and I'm usually fixing these at one or two o'clock in the morning when this happens, because it's somebody who's at work, they're at work all day, it's out all day, starts to bother them, it's aching. They go home, they lay down on the couch, it's still bothering them. They eat dinner, it doesn't go away. And they say, "Well, I'm just going to go to bed," because normally when they wake up in the morning, it's gone. So, I'm just going to bed and it'll fix it and whatever. They go to bed and then they can't get comfortable to sleep. They're tossing and they're turning, and then they say, "Well, I can't sleep. The pain's getting worse." Then they go to the emergency room. That's the thing that makes men go to the emergency room, is pain.

Dr. Joseph Mercola:

Most people do.

Dr. Eric Pinnar:

So that's now at 11 o'clock at night. By the time they get seen by the ER doc and get labs and get a CT scan, now it's about midnight. And that's when they're calling me to say, "We got a patient with an incarcerated hernia and on CT scan it looks like it's strangulated or looks like it's becoming strangulated." And then so by the time I get there, first thing I try to do is push it back in, as long as it hasn't a long time. And what I'll do is I usually tilt the patient on their head a little bit and lay them flat, tilt them on their head a little bit. Sometimes I'll tell the emergency room docs to put an ice pack on it to see, occasionally it can reduce the swelling just enough to push it back in. But if none of that works, it's a trip to the emergency room right then. Because when all this started, the clock started ticking, and so that bowel can be compromised.

Another indication that you're getting bowel in a hernia is noise. So, the patients will say, and the patient I talked to last night, same thing. He'll say, "When I push it back in, I hear noise." And so that's usually an indication there's intestine. Because intestine, small intestine is always filled with air and liquid. So, when you push it back in and you hear gurgling noises or squishing noises, that's an indication that there's intestine in there. He also said that he's starting to get intermittent crampy abdominal pain. So, one of the things he's probably getting is an intermittent bowel obstruction because when one of those knuckles gets pushed in there, a couple knuckles get pushed in there, not only is the blood supply potentially compromised, but they kink like a garden hose. And when they're kinked, stuff doesn't go through. And when stuff doesn't go through everything upstream from here towards the stomach or towards the mouth, nothing goes through. So that intestine gets dilated, gets swollen, and when intestine gets stretched, that causes pain. And that pain that we sense it as is crampy pain.

So, once we've diagnosed it, to get to your last question is, what do you do about it? So now you got this hole. Whatever kind of hernia it is, you got a hole. So, what do you do about it? So, the answer is you fix it. Because it's a structural issue, it needs to be fixed. So, in my book, there's three reasons to fix a hernia. The first reason is it won't go away. Like I said, it's a structural issue. It's not going to heal up-

Dr. Joseph Mercola:

And they usually don't.

Dr. Eric Pinnar:

... There's no physical therapy, there's no exercise that you can do for it. It's a physical hole.

The second reason is it's going to get worse over time. So, the longer you wait, the bigger it gets, the harder it is to fix. I've probably said that 3 million times in my career, is the longer you wait, the bigger it gets, the harder it is to fix. So, the analogy I use typically is a hole in drywall. Every man understands a hole in drywall. So, if you've got a nail hole in drywall, super easy to fix, you just spackle it over, sand it and paint it. Easy. Easy fix. But if you get angry and you punch a hole in drywall, that's a big hole in drywall and you can't just spackle it over. So, then you got to cut out a piece of drywall and put it in there with some drywall cement, and then spackle it over and then sand it and paint it. Never looks right again.

So, there's a big impetus to fix it when it's little. So, what I tell patients all the time, the time to fix a hernia is when you diagnose it. Because it'll always get worse. There are many primary care physicians and many nurse practitioners who see a patient and say, "Well, if it's not bothering you, leave it alone." Or "It's little. Just watch it. We'll just wait and watch it. I don't know what we're watching it for. But if it starts to bother you, we'll then refer you to a surgeon." Always the wrong advice. Because by the time it's bothering you, it's now significantly bigger and much harder to fix.

Dr. Joseph Mercola:

And just to be clear, this is not self-serving. This is for your best interest. This is not self-serving advice.

Dr. Eric Pinnar:

Oh, no.

Dr. Joseph Mercola:

Yeah. This is something, this is wisdom that you can benefit from if you heed it.

Dr. Eric Pinnar:

Yeah. So, this is from having seen all the complications of people who have waited. As an example, and an extreme example, is several years ago I operated on a guy who was local who was a taxi cab driver. And again, one of the reasons I started this business is he didn't have insurance and he couldn't afford to get it fixed. So, he sat on it for a long time. By the time I saw him, he'd had it for five years. At that point, he had had a significant amount of his small intestine in his scrotum. His scrotum was the size of a football. And that was a very difficult fix because when it's been out for so long, I mean, there's no way he could push that back in. It had just been out for so long. And so, in people that have had it for a long time, again, stuff slides in and out like we were talking about, it comes and goes, but the more you get out, not all of it comes and goes.

You can push it in. Now people will say, "Well, I can push in some of it, but it doesn't go back in like it used to." But all of that sliding in and now causes irritation, causes inflammation, which causes scar tissue. And so, when that stuff's been out for a long time, it's stuck there. It's scarred. And a lot of times that small intestine that's been in there for so long is all stuck to itself. Lots of loops of small intestine that are now almost fused. And when I talk about how painstaking that surgery is, the way I describe it to patients is, most patients, especially men, have glued their fingers together with super glue. So, if you've ever glued your fingers together with super glue, you know how they're fused. And so, I tell them, "Okay, we glue your fingers together with super glue and now separate them with a razor blade."

Dr. Joseph Mercola:

No!

Dr. Eric Pinnar:

That's what I operate with, a scalpel, which is a very small razor blade. So, in doing that, you know that likely you're going to get into one or the other. And so that's what it's like to separate out small intestine that's fused together. It's like it's been superglued. So, it becomes dangerous, like we said. We're talking about the risk of complications, the risk of injury to the bowel, risk of injury to all other kinds of things in there. I told you there's a lot of important stuff that goes into the inguinal canal, not the least of which is the blood supply to the testicle, which most men consider extremely important.

So, the longer you wait, the higher the risk that something bad's going to happen, that you end up in the emergency room and it becomes an emergency surgery in the middle of the night when it's not convenient for anyone. And the other more common story is it just becomes a very difficult surgery. So, it's a very involved surgery. A surgery that would normally take a half an hour to an hour ends up taking three hours. And as I said, the post-operative complications are higher, which we can talk about whenever you want to talk about those. But the risk of surgical complications are higher. So, everybody's happier when we fix it early, when we diagnose it. It's a much simpler fix. And it's fixing a small hole, like I said, is much more durable than fixing a big hole. I don't know if that answers your question.

Dr. Joseph Mercola:

No, I think it does answers it. But what we need to do is progress to the options that people have because they are significant.

Dr. Eric Pinnar:

Now we decided we're going to fix it.

Dr. Joseph Mercola:

Yes.

Dr. Eric Pinnar:

So how do we fix it? Well, there's probably 20 different ways, maybe more, to fix a hernia. Hernias date back ... Hernia repair dates back thousands of years actually. The mummy of Ramesses V from 1145 B.C. was found to have evidence of a hernia repair where they basically plicated the scrotum. It looked like they plicated the scrotum to the perineum. So, hernia repair has been around since at least 3,100 years ago. But it's been pretty much the same up until, I would say, the last century, and even really up until the last, probably, 30 years.

So, there's been now even more advances. But all that's to say there's probably 20 different ways to fix a hernia, many different techniques. And I tell patients the fact that there's 20 different ways to do it tells you there's no one best way, because if there was, we'd all do it that way. So, of all the types of repairs that are out there, they pretty much now can be broken up into two categories. So, whether you fix it from the outside or you fix it from the inside. So, like I said before, if there's a hole in a wall, let's just say a through and through hole in a wall, you can fix it

from inside the room or you can fix it from the other room. So, whether you're fixing it from the front or the back, so to speak. So those are now the two common approaches.

Now, there's different ways to do those different approaches. And of those ways that can be broken up into at least the open approach or the outside approach, from the front approach, you can divide those up into tissue repairs or non-mesh repairs and mesh repair. So, whether you use mesh or you don't use mesh. When you're repairing from the other side, and when you're repairing from the other side, what I mean is, as opposed to making an incision in the groin and cutting down exactly right onto the inguinal canal, you're going from the inside where the inguinal canal starts and you're fixing it there. And that would be what many people term today, minimally invasive surgery or laparoscopic surgery or robotic surgery.

So robotic surgery, because this is sort of a buzzword now, and that's the way we did your surgery, robotic surgery, it's just a fancier way of doing it laparoscopically. As one surgeon I heard talking about it, it just depends on whether you drove a Prius to work or you drove a Ferrari to work. So, it's a $2 million tool we use to do a laparoscopic repair. So again, there's the anterior repair, posterior repair, and from anteriorly you can use mesh or you can do a tissue repair, because there's tissues that we can use.

From the backside or from the inside, there's no tissues to close. There's nothing you can pull together and close like you can on the outside. So, it to do a laparoscopic, minimally invasive, robotic, all the same, repair, you need to use mesh because you need to have something to fix the hole with. And so you're patching it. The way I describe that to most people our age, remember back in the day when we were kids, and your mom would fix a hole in your jeans with a patch, she'd put a patch on the inside and either sew it around her or iron it on there. Nowadays the kids like the holes in their jeans.

Dr. Joseph Mercola:

They pay extra for it.

Dr. Eric Pinnar:

They pay extra for it. Exactly. So, you need to use a patch when you do it from the inside.

Dr. Joseph Mercola:

Well, why don't you talk about ... When you do the tissue repair, many people are opposed to the mesh or the patch. I think mesh is the more accurate term, because as I mentioned earlier, most of these are synthetic and there's a darn good reason to be concerned about a synthetic. And there's different types of synthetics. So that because of this concern, there are many people who are motivated to do a meshless repair.

And that's what I chose initially, a meshless repair, because why would I want to have a synthetic piece of plastic in my gut? Well, it turns out it's all not ... the grass isn't necessarily greener on the other side because there's downsides to doing a meshless repair big time. And the biggest one

is it's an open procedure. It's an open procedure, and that's one. And then even more importantly, what you explained to me and my friend Patrick, is that when you sew these tissues together, it's just a hole. Sew it together. Well, try. You can do that. But then the tissues are under tension, and that never turns out well. So why don't you explain, just because of this reason alone, it is very significant issue that you need to absolutely integrate and have some unbelievable need to circumvent that choice. Because that's probably likely never going to turn out well. But even if they still choose it, the beautiful thing about your approach is you'll still do it for them, whatever they want.

Dr. Eric Pinnar:

And there's a lot of surgeons who won't. A lot of surgeons, when a patient calls and says, "I want a meshless repair, I don't want mesh," the surgeon will say no. And the reason for that, so I guess it comes down to why do we use mesh? What is all this thing about mesh? Why is it even a question? Why do we do it? So, I have patients who will say, "Do I need mesh or is mesh necessary?" That's kind of the question, "Do I have to have mesh?" And the answer is no. No, you don't have to have it. The better question is, "Should I have it?" And the answer is usually yes. And so why is it yes? Why do surgeons ... We don't get kickbacks. We don't sell the stuff. We don't get any remuneration at all.

Dr. Joseph Mercola:

Unlike cancer doctors, oncologists who do sell their wares.

Dr. Eric Pinnar:

Yeah, we don't sell anything. The hospital pays for it, and in reality, the hospital doesn't get reimbursed for it. Honestly, that's a whole nother, a whole nother question.

Dr. Joseph Mercola:

Yeah, we could talk another hour and a half on that. We're going to skip that now.

Dr. Eric Pinnar:

But basically, we bill and the hospital bills for a CPT code, for an inguinal hernia repair. Say an open inguinal hernia repair that's without obstruction, without gangrene and non-recurrent. So that's a code. And we use that code, and the hospital uses that code and they get paid for that code whether you use mesh or not. And so they don't get paid for the mesh. So, it's actually a downside for the hospital. But why do we use it? Well, the answer comes from, again, at the time we were all doing open repairs. Laparoscopy, when I was a resident back in the nineties, in the mid-nineties, we were using mesh intermittently for ventral hernias or abdominal wall hernias. Reason being is in many of those, we couldn't close the ...

Dr. Eric Pinnar:

Abdominal wall hernias. Reason being is in many of those, we couldn't close them. There was no way to close the tissue. It was in a big hole like this. It won't come together. You can't bring it together. So, you need something to bridge the gap. Now, that's changed a lot too. And then maybe that's another day or another conversation. But we were using mesh for that, but we weren't using it for our inguinal hernias because again, we had tissue that we could use. So, in

the inguinal canal, without being able to draw it for you, maybe the next time we talk, I can share a screen with some images for you.

Dr. Joseph Mercola:

Yeah, yeah, yeah. We could do that. Sure.

Dr. Eric Pinnar:

Because that really, I think a picture is worth a thousand words in general.

Dr. Joseph Mercola:

Well, you can give us, just send us the illustration. We can integrate it into the video. So, let's just assume the illustration is here.

Dr. Eric Pinnar:

Yeah. So, in general, a picture is worth a thousand words as they say, but in surgery, I think it's worth a couple of hundred thousand words, especially for somebody, most patients don't have a framework on which to understand something. And that's why I spend all of this time, everything I'm telling you now, I tell every patient, so I'm glad I'm telling you this so that maybe we can use it at some point, as you said, to educate patients, and then maybe I won't have to say it all. But back in the day when I first learned how to do hernia repairs, we weren't using mesh. And the best way to describe it without showing it to you is you really need to narrow the inguinal canal because at the top of that inguinal canal is that hole that's gotten bigger. And somehow, you have to make this hole smaller so that stuff doesn't go through it.

And the only real way, you can't close the hole again because this spermatic cord goes through there. And if you were to just put some stitches, and believe me, it's been tried, to put some stitches in there and just narrow the hole, but it comes apart. But really what you're doing is you're narrowing the entire inguinal canal with some of those tendons that we talked about earlier, that I talked about earlier, the tendons of the abdominal wall muscles where they attach to the pelvis. As I told you, there are multiple layers there, and you've cut through the top one, which is the external oblique, and that's the external oblique tendon or fascia, which is what we call it. Again, you would call it gristle, but now you're looking into that inguinal canal. And to narrow it, you're basically sewing almost the walls of both sides together.

And it's hard to understand without a cross-sectional picture. It's hard for surgeons to understand honestly. It took, as I said, it's one of the first surgeries you learn as a resident, but I don't think you completely understand the anatomy probably until your second year, maybe after you've done a hundred of them before you really understand the anatomy. And even then I can tell you, I didn't completely understand the anatomy until many years later. And really to get a complete comprehension of that anatomy, you have to know it from the other side. And the way to learn that is doing it laparoscopically.

So doing it laparoscopically has really taught all of us a lot about that anatomy. In fact, we're seeing anatomy now, especially when we're doing things robotically because our visual

resolution is so good and our eyeballs are so close because you're using a scope to look into, and we'll talk about this, I suppose, to look into the pelvis. I mean, your eyeball is this close to the tissue you're working on. So, you're seeing it in high resolution, really close to it. And now we're seeing anatomy we actually didn't even know existed. So there are many certain-

Dr. Joseph Mercola:

With really good light.

Dr. Eric Pinnar:

Yeah, we're starting to describe structures or relationships to structures that we didn't have before. We just didn't understand that before. But all that's to say is it takes a long time to learn that anatomy, even though the surgery is relatively simple. To understand it is difficult.

Dr. Joseph Mercola:

Well, this is the point I'd like to interject too, just to give some perspective for someone who has this issue and challenge and is seeking to identify a surgeon consultant to choose. So, nothing bad to say about people, everyone has to start somewhere, but you'd want a few hundred of these under your belt, at least.

Dr. Eric Pinnar:

No, they want thousands.

Dr. Joseph Mercola:

At least a few hundred. I wouldn't consider someone who didn't have that as a minimum. But then at the other end of the spectrum, you can have the chairman of the department who's taught maybe a hundred thousand of these things, and the person's 75, 80 years old. Now, there are energies, biological energies that have incredible benefits in health days, but those are few and far between, and they really are rare birds. But the average person at that age is probably someone you're not going to want to pick. So, there's that sweet spot. You're right in the middle of that sweet spot because at some point, you start to decline. Like athletes, you don't see a 75-year-old basketball player. You just don't. So, it is a physical skill, and there's knowledge that has to be acquired. So you really want to shoot for the sweet spot.

Dr. Eric Pinnar:

So, two things. There's a lot of surgeons that are resistant to change. They've been doing it this way. They'll say, "I've been doing this for 20 years. I've always done it this way. It works fine." When I was a resident, as I said, we really weren't using mesh until my chief year. So, in my fifth year of surgery, we had a young surgeon come who was probably in his mid to late thirties, probably, probably late thirties, maybe around 40, who was a laparoscopically or minimally invasive trained surgeon, did a fellowship. And at the time, there were two fellowships in the country, but he was willing to try new things. So that's when we started using mesh, at least at my program, started using mesh a little bit, but he was the only one. There were a lot of surgeons. I remember saying, "We're not using mesh. We don't want a foreign body," going back to your question a little bit ago. "We don't want a foreign body. We don't want an increased risk of infection. We don't want any of that. We're not changing," but very close-minded.

And then the other thing before I forget it is there are surgeons, you can ask a surgeon, so if you go and see a surgeon, to your point, you go and see a surgeon, ask them how they fix it. Ask them what their preferred method is to fix a hernia, ask them if they fix, most surgeons will do an open hernia or a laparoscopic hernia. Most will do both. There are some surgeons only do laparoscopic. There are some compelling reasons to do an open surgery in certain cases, compelling reasons to do it open. So most of them will do it occasionally, but ask them what their open repair is and why they choose that.

Because I've probably fixed a hernia every which way there is to fix one, because I wanted to try them all and see what I think makes sense to me. But most surgeons will have a comfort level with a particular repair, and it's good in their hands. They know how to do it. Most of the time it's however they were trained. This is how I learned to do it, it's the way I've always done it, and I'm going to continue to do it this way because it works.

And now you're splitting hairs in terms of different ways to repair it. So, let's see. Let's just jump a little bit into, so you talked about a Shouldice repair. Well, there are many different open repairs. And this goes to the techniques that we were talking about. And they're all named after a person who described them. So, there's, in terms of just tissue repairs, there's a Bassini repair, there's a McVay repair, there's a Desarda repair, there's a Nyhus repair, many different techniques to do it, but they're all variations of the same thing. And there have been many studies and many multi-center studies, multi-database studies looking at thousands of hernia repairs. And the overwhelming majority, except for Shouldice's own data that shows that there's no one better repair to do it open. Shouldice says theirs is superior to every other one. But there've been many studies to show that's not the case.

And I think it goes back to a little bit of what you said. So, the, just to give some background, so a Shouldice repair is a four-layered repair, an open repair of closing all those layers I was talking about. They're actually making couple of layers and using a couple of layers that are there to close four different layers, but you're actually making I think, more of a defect to just close it. But all of them are a way to close what I started to say, to narrow that canal. So, you're taking tissues that want to be like this, and you're wrenching them together to be like that. And so, this does two bad things, as I tell patients. It violates one of the cardinal rules of surgery, one of the principles of surgery is don't put anything together under tension. Don't put skin together under tension. Don't put intestine under tension, because you're wrenching it together to be like this, but it still wants to be like that. You're just making it be like this.

And so, when you do an intestinal resection, a colon resection, you got to free up, as I said, the colon's relatively fixed, but you take out a big segment of it, you got to free up this side and you got to free up this side enough so that they come together. And ideally, the way we sort of learn is you lay them next to each other and you leave it alone and see if they stay next to each other. If they pull apart, you got to free up more to bring it together because you don't want to put intestine together for sure under tension because it'll pull apart and then it'll leak, and then people get very sick and they can die. So, this tissue, it's all you have if you don't use mesh. So, you're

forced to do that. We don't want to do that, but you're forced to do it, so you're wrenching that tissue together, but it still wants to be like this.

So why do hernia repairs fail? Why do primary hernia repairs fail? So, this is called a primary repair or a tissue repair. When you sew something together, it's a primary repair. And it's really what causes them to fail. And when we say fail, mean recur. So, it comes back. And you're putting this together with little threads. They're little tiny threads, sutures. And I think, and most of us that focus on hernia repairs think that the reason that most hernias recur is suture failure, is the sutures don't hold for one reason or another. And what can happen is, especially under tension, when something's pulling, is those sutures can cut through the tissue. So, they're in the tissue, but they cut through like this. And so, it comes apart. The sutures won't break. The sutures are strong, you can't break them, but they can cut through the tissue like wire, and we call it cheese wiring.

If you've ever seen one of those cheese boards that's got a little wire that cuts through cheese, same thing. It cuts through the tissue, and then this that you've sewn together is now like that again. So, the idea is you want to bring this together and you want to keep it there. So that's the first bad thing it does, is it wants to be apart. The second thing is it causes a lot of pain. So, you're putting sutures through this whole area here is muscle, and you're putting sutures through that muscle and through the tendon. And skin and fat doesn't really hurt, but muscle does. So when you're wrenching that muscle together and the tendons together, it hurts. And so, when I used to see patients, I see all my patients for follow up two weeks after surgery. And when I used to see patients back in the day when I fixed them this way, two weeks after surgery, they come into the office and they're all hunched over like a 90-year-old guy.

They still can't stand up straight. And the reason is whenever they stand up, it pulls on those stitches and it hurts. So, they walk all hunched over for it can be a couple, three weeks before they can gently stand back up again. So those are the two bad things it does, is it has a tendency to come apart and it causes pain, a lot more pain. So, recovery is a lot longer. So, what is the risk that it comes apart? What's the recurrence rate after an open repair? And this is where it's a little bit tricky because there are all these different open repairs and there's all these different patients. So, what are the factors that go into recurrence?

Well, it's the type of hernia, the type of how progressed it is, how big the hole is, and this is for all hernias. The patient, the age of the patient, the health status of the patient, malnutrition, whether they take steroids, whether they're a chronic smoker or diabetes, someone who's got a chronic cough. These are all things that go towards, that cause things to recur. But on average, if you look at all the different studies that have been done, one of the pivotal studies that was published, it was actually published in the British Journal of Surgery in 2002, they looked at 300, this is one of the ones where they actually had a pretty controlled group. They look at 300 patients and they followed them out to at least three years.

And so, it was roughly 150 patients or so per mesh repair and non-mesh repair. And what they saw was at three years, there were nine recurrences in the mesh group. And there was one

recurrence, I mean, nine recurrences in the non-mesh group, in the primary group. And there was one recurrence in the mesh group. And it turned out that it was in a patient that accidentally had an absorbable mesh put in. So really, there were zero recurrences at three years in the mesh group. But if you look at all the studies around non-mesh repair, the recurrence rate is anywhere from 5% up to 15 or 20%. You're just looking. But I would say, I would quote a patient somewhere around 5%, five or 6%.

Dr. Joseph Mercola:

If you have metabolic complications, it could be quadrupled.

Dr. Eric Pinnar:

Yeah. All over the place. And then for a mesh repair, the recurrence rate is significantly less than 1%. So, on average, if you look at all of the studies that have been done, and we've had a lot in the last 10 to 20 years, the recurrence rate after a non-mesh repair is about 50% higher without mesh. So, in a mesh repair, it decreases the recurrence by 50%.

Dr. Joseph Mercola:

Yeah. So let me just summarize this for a moment just to condense it. It seems rational that they're, we don't really have a lot of choices here. You can do the open or closed. Yes, there are certain circumstances where open is warranted and justified because of specifics, but those are unusual. So, you're really looking for a closed procedure and that requires a mesh. And even if you, just not even factoring in the recurrence rate, the fact, most people don't like pain. It is not comfortable crouching over like you're a 90-year-old guy because you cannot stand erect without enormous pain that will, it shoots through your entire body. So, who would want to endure that? And that's really a high complication of these open mesh-less repairs.

Dr. Eric Pinnar:

Right. And so getting back to your original question-

Dr. Joseph Mercola:

Your pain level is going to go through the roof.

Dr. Eric Pinnar:

... which is why I use mesh. So, the original mesh repair, the reason we used meshes, and the surgeons called it a tension-free repair. So, as I said, the tension causes the recurrence rate, the tension causes the pain. So, they were trying to come up with a way to form a tension-less surgery. And so, the only way to fix a hole without putting tension on it is to bridge it. And so, you would put some piece of tissue, whether it's a natural tissue or whether it's a fabric in there, to bridge the gap that you were trying to close. And then that does two things. One is there's no tension. The second thing is you got a piece of fabric or mesh or patch, whatever you want to call it. You got a piece of mesh that bridges the gap. And so that's your initial strength of the repair is that mesh. And that mesh won't break.

If I gave you a piece of mesh, you can't tear it. It won't come apart. And we can get to what you were talking about before in terms of different types of mesh, but for all types of mesh, it's bridging that gap. And then the idea of the mesh, besides forming that initial repair, is that you'll grow tissue into whatever you put there. So, it acts like a scaffold or a latticework on which you can deposit fibrin and collagen to form scar tissue. So, in the plastic version that you were talking about, which is polypropylene, which is an extruded plastic, it looks very much like fishing line, very fine fishing line that's woven. So, it looks kind of like, most people would think of it as like window screen. So, it looks like window screen. And it is a foreign body, and it does set up a foreign body response and an inflammatory response, which causes the deposition of scar tissue. That inflammation causes the deposition of scar tissue.

So that scar tissue, you'll lay down tissue through all those little holes in it, and you'll cement it in place like rebar and cement. Now you can argue, and I know you will, the downside of the actual ingredients, if you will, the makeup of that particular mess. So, the most common mesh repair open done today was described by Irv Lichtenstein a long time ago, I think in the eighties and nineties, which was putting a piece of Marlex mesh, which is a polypropylene mesh, in there to do this repair.

We've come a long way in terms of mesh technology, sort of jumping to what you were talking about. A couple of things is there's been the development of what we call lighter weight meshes. So, we still use polypropylene. We've been using polypropylene, like I said, we were using mesh for abdominal hernia repairs 40 years ago, maybe longer, but we still use that polypropylene mesh today. It's probably the most used mesh. And mesh is the most common surgery. A Lichtenstein repair is the most common surgery worldwide. And so now there's been the introduction of what we call macropore mesh. So instead of it looking more like window screen, the holes now in the mesh are bigger. So, when it first came out, we were calling it the macropore mesh. So, there was a lot of arguments going on and a lot of discussion going on about macropore versus micropore and what pore size is ideal, because you can make the holes in between the strands as big or as little as you want.

So, there was all this study being done about what's the ideal size of the hole for tissue deposition and strength. But nowadays, we tend to refer to it as lightweight mesh and heavyweight mesh. So that's been a huge advancement. And so when I use the polypropylene, which I probably use more than anything, I use the lightweight mesh with the idea of it's strong enough, it's much more flexible, much more flimsy, but it's strong enough for the repair and it's a lot less mesh. So, if you're going to argue about whether mesh is good or bad, I'll put as little mesh as I can into a patient to accomplish the result, which is a durable repair. That's what we all want is a durable repair with the least amount of complications or issues for the patient long-term for a patient.

And there's been countless studies looking at mesh versus no mesh, looking at polypropylene repairs, so Liechtenstein repairs or any of the other versions of mesh repairs versus non-mesh repairs. And there's been shown to be no difference in quality of life from one to the other, from mesh to non-mesh, but the recurrence rate is significantly less, typically by half, to decrease the recurrence rate by 50%.

Dr. Joseph Mercola:

Yeah. So yeah, let's talk about the specifics of the mesh, and I really appreciate your passion about using the least amount of mesh, because there's no question that is the best strategy, pretty much whatever mesh it is, especially if it's a synthetic and a plastic one. And the concern that many people have, and certainly me, may be not shared by the vast majority of the medical profession, because they don't understand that plastics have a complication, that they're embedded with other materials like phthalates and bisphenols, and so then make them flexible. And these are actually endocrine-disrupting chemicals, EDCs for short, and they have strong estrogenic activation. So, the concern is, why would I put plastic in my body? I'm already eating a plastic, credit card worth of plastic a week. Why do I want to sew in a few of them all at once, right? Now, realistically, you could make a logical justification. If I'm eating one, that's what the average person is eating a week, a credit card worth of plastic a week. Now, how many credit cards do you think your lightweight mesh would consume? Is it 2, 3, 4 credit cards?

Dr. Eric Pinnar:

You mean the amount of plastic?

Dr. Joseph Mercola:

Yes.

Dr. Eric Pinnar:

Oh, not even close.

Dr. Joseph Mercola:

Okay. One or two.

Dr. Eric Pinnar:

Yeah, not even close.

Dr. Joseph Mercola:

Okay. So, folks, in real time, I basically gave an argument to use this plastic because the pragmatic reality is you're already doing it once a week. So, what does it matter if you put one more credit card into your belly? You're already putting 50 in a year, and this is only a one-time deal and it's going to save you so much grief. So, you can make a good classification. But I'm an obsessive-compulsive, and the last thing I want to do is put anything extra because I don't put a credit card of plastic in my body. I don't think so. There really is unfortunately no good measuring technology. We have to make that determination. We will in the future, we don't have it now. We can do indirect tests to measure that, but if you're a purist like I am, I wanted to have the least amount of potential damage to my systems. That's why I chose the non-one. But I didn't realize, and just until you described it, that is a very good justification because in the scope of things, it really doesn't matter the perspective. And then-

Dr. Joseph Mercola:

... scope of things, it really doesn't matter, the perspective. And then you can maybe comment on your personal experience with these earlier meshes, which had much more volume of plastic and rigidity and lack of flexibility and all the complications you've seen from that. And obviously, you're one person, but how many thousands of hernia repairs have you done? Thousands.

Dr. Eric Pinnar:

No, I have no idea.

Dr. Joseph Mercola:

Many thousands.

Dr. Eric Pinnar:

Every week for 25 years. Actually more because counting residency, every week for 30 plus years.

Dr. Joseph Mercola:

Yeah, so that adds up. But still, even though that's a lot, it's a long time. It's a relatively small amount compared to the scope of these surgeries being done. So, you certainly haven't seen all the complications, but maybe you can just highlight the number of complications you've seen and what are the most egregious or most significant?

Dr. Eric Pinnar:

I never thought about the credit card thing, but I was thinking about if you meshed a credit card. So, when you do skin grafts, you take a piece of skin, and it could be a patch of skin like this. It could be patches of skin, however big you get, but you run it through a mesher, we call it a mesher. And it basically cuts it into like a latticework. And you can take a piece of skin this big and make it this big by introducing all these slits in it. So, it makes slits in it, and then you can accordion it out and you can make a great big...

So, I was trying to think about if you meshed a credit card and made the lines as fine as it is in the mesh. Because in the mesh, I could show you a piece of it, I actually have one across the room, but in the mesh I use, it's almost like, I don't know, it's maybe a little bit thicker than spider web, but it's kind of like, when I look at it, it looks kind of like the thickness of spider web. So, if you made a credit card into spider webs, it would get pretty big, I think. And you're using a piece for an open repair that's this big. It's 7x10.

Dr. Joseph Mercola:

You do open or closed? Or closed?

Dr. Eric Pinnar:

7x15.

Dr. Joseph Mercola:

You said open repair, is that a closed repair?

Dr. Eric Pinnar:

Open repairs, yeah.

Dr. Joseph Mercola:

Really? Okay.

Dr. Eric Pinnar:

Yeah. So, using a strip of mesh this big, and I think if you laced a credit card and meshed a credit card, it would probably be like this big. So, you're using a piece of it this big, which maybe is not even a quarter of it, I don't think.

Dr. Joseph Mercola:

Wow.

Dr. Eric Pinnar:

But anyway.

Dr. Joseph Mercola:

That really blows apart my argument against, my strong recommendation against plastics because it just is such a relatively small amount compared to these you're normally exposed to.

Dr. Eric Pinnar:

Yeah.

Dr. Joseph Mercola:

But have you seen complications from using it in your 30 years of-

Dr. Eric Pinnar:

Yeah, so the quoted complication rates from the use of mesh or synthetic mesh is one to 3%. That's the quoted complication rate. So what complications are there with mesh? Now, there are many who would argue there aren't any complications with mesh because the complications that are attributed to mesh, a lot of people don't think it's the mesh, because we see a lot of those same complications with an open repair.

So, the highest risk I would think is the risk of infection. So, the infection risk overall in a hernia repair is about one to 5%, some type of infection. And I'm talking all hernias, so one to 5%. And that could just be, most of the time it's just an infection at the skin level. Obviously, nowadays we have the patient scrubbed down often the night before and the morning of with an antibacterial soap. I don't know if they did that for you. But a lot of hospitals-

Dr. Joseph Mercola:

Yeah. No, they recommended that, sure.

Dr. Eric Pinnar:

Yeah, so a lot of hospitals will do that. They use a chlorhexidine scrub at night and the morning of. And then we prep the patient in surgery with an antimicrobial or antibiotic scrub or paint. And then we give the patient IV antibiotics. So, we do everything we can to mitigate infection.

But there's lots of reasons people can get an infection. As you know, you can get a transient bacteremia, so you can get bacteria in your blood just from brushing your teeth. One of the few things I remember from microbiology in medical school is people get a transient bacteremia from brushing their teeth.

So, you have a foreign body and a foreign body doesn't have a blood supply. So how do we treat or how do we address infections in our body in nature is we have an immune system. So, we have macrophages, we've got white blood cells, and we use that to gobble up bacteria or viruses or lots of other, mold, anything. But in order to get those cells of your immune system to an area, it has to go on the blood supply. Same thing with antibiotics, travels in the blood supply everywhere. So, in order to treat an infection, you have to get your immune system to that area, through the blood.

Now, a foreign body doesn't have a blood supply. So, if you get an infection in the skin, most of the time, I will tell you, in my experience, if you catch it early enough, most of it's just related to the skin. So, you can treat a superficial skin infection, which is way away from the mesh, with antibiotics, as antibiotics travel through the blood. So as long as whatever tissue's infected has a blood supply, it'll get treated with the antibiotics.

Now, you can get into the esoteric data about or esoteric ideas about how to mitigate infection surgically, other than all those scrubs and how you drape. I'm very particular about how I drape. And I use even a drape that's like a plastic wrap that sticks down to the patient that's antibiotic impregnated. Now, that usually has iodine in it. So we didn't use it in you.

Dr. Joseph Mercola:

No, that's great.

Dr. Eric Pinnar:

Because you-

Dr. Joseph Mercola:

That's actually [inaudible 01:18:34] trick because I've recently learned that iodine excess is the primary reason for autoimmune thyroiditis and the reason most people have problems with thyroid. So, if you do have surgery, please tell the physician that you are allergic to iodine and they will not use iodine on you. So, I have to say, and if they ask you what happens, "I get a skin rash," that's all you need to say.

Dr. Eric Pinnar:

Yep, so we did-

Dr. Joseph Mercola:

Because it's not good for you. It is dangerous, it's toxic to your thyroid. So do not use iodine. The understanding of the toxicity of iodine is not appreciated at all in virtually anyone in the medical profession. So, I told them that I had an iodine, I lied, I said I had an allergy to iodine. In some ways, I do.

Dr. Eric Pinnar:

Yeah. Well, I don't use iodine. The only thing I use is this drape called Ioban, which it has iodine in the plastic. It's a plastic drape. So, we did use a drape, but just a clear one, not one with iodine. So, the iodinated plastic drape looks like plastic wrap or saran wrap that's beige or brown but see-through. But what we used was just a clear plastic drape.

So, to me, that sticks down to the skin and you make an incision through it and into the skin. But any bacteria that's anywhere else is not going to be... You're not going to wipe it in or rub it or anything near the incision. So most people don't use that.

Dr. Joseph Mercola:

The incisions with the laparoscopic surgery, many people who have not had that might be surprised to know it's very tiny. It's like less than an inch. Is it half an inch? Three quarters?

Dr. Eric Pinnar:

If you're doing it laparoscopically, there are five millimeter incisions. If you're doing it robotically, it's eight millimeters because the robotic instruments are eight millimeters-

Dr. Joseph Mercola:

It's a little bit. Okay.

Dr. Eric Pinnar:

... in size, so it's five or eight millimeters. The incision in the belly button, so we didn't talk about laparoscopic surgery, so we can if you want to, but I would finish the thing about the mesh.

Dr. Joseph Mercola:

Sure.

Dr. Eric Pinnar:

So, I can't remember any time in all of my career that I've had one of my own patients that has had an infection that involved the mesh. I just haven't had it. And if I have, I don't remember it because just don't.

Dr. Joseph Mercola:

Okay. So, essentially, it doesn't happen in your experience.

Dr. Eric Pinnar:

Right. It does happen though. So, I have had patients come to me with an infection that involves the mesh, and every once in a while you can treat those patients with antibiotics. Occasionally, you'll get away with it. But if you can't, if the patient's been treated with antibiotics and they still have inflammation, they still have swelling, they still have pain, they have drainage, something, then you got to go in and take the mesh out. That's the treatment, is you go in and you remove the mesh, which is a pain in the ass.

Dr. Joseph Mercola:

Oh gosh, double surgery.

Dr. Eric Pinnar:

Yeah.

Dr. Joseph Mercola:

Double, double.

Dr. Eric Pinnar:

It's double surgery, so it sucks for the patient, but it also is really difficult for the surgeon because the way it works is, I told you, it scars in there.

Dr. Joseph Mercola:

Yeah, yeah, yeah.

Dr. Eric Pinnar:

It is literally like taking rebar out of vent. You have to dissect the tissue away from this mesh. It's well incorporated in there. So, I've had to take mesh out before, but it's not mesh I put in.

Dr. Joseph Mercola:

Okay. That's interesting.

Dr. Eric Pinnar:

So that's basically, to me, that's the biggest problem with the mesh. Now, there's an argument that scar tissue reaction and something you're very interested in is that natural inflammatory response to the mesh can irritate a nerve. So, you have several nerves that run through the inguinal canal, and there are some thoughts by many that a nerve can get trapped in that scar tissue and cause chronic pain.

But I will tell you it happens with non-mesh repairs as well. And I don't think there's any increase in incidence with mesh repairs over non-mesh repairs. However, this is what people are saying because it makes sense that if you have such an intense inflammatory response, that it can

irritate a nerve. So, patients have prolonged pain after surgery, but it eventually goes away once the inflammation goes away. Or you can get a nerve that's trapped in scar tissue and just the movement or the entrapment of it can cause pain.

So, I, again, knock on wood, there is actually a wood desk here, knock on wood, I have not had that experience either. There are many surgeons who will routinely cut the nerve. So, there's probably the main nerve that runs right through where you're operating, it's called the ilioinguinal nerve, and it's a sensory nerve. And it's one of the predominant ones that causes pain. There's also the genital branch of the femoral nerve, and there's the hypogastric nerve that runs through there. But the main one that you come in contact with is the ilioinguinal nerve.

So, we all look for it. We train as medical students in residence to look for this nerve, and I was always taught to preserve it. So, you actually have to dissect it off of the spermatic cord and off to the side to protect it because it literally is right in the way. So, there are many who believe that you traumatize the nerve by doing that, by trying to protect it. You're actually it.

And that is true. I think you are traumatizing it. But in my experience, what patients have been left with after traumatizing it is maybe a transient numbness of the distribution of that nerve, which is a small patch on the inner thigh and a small patch on the lateral scrotum, the outside of the upper scrotum, which most people don't care about.

And to that point, there are a fair number of surgeons who cut that nerve routinely on purpose. So, they identify the nerve and instead of protecting it, they cut it. And they cut out a chunk of it so it doesn't grow back together because that's one way that surgeons think to prevent chronic pain is you cut the nerve. And the worst thing that happens is they have some numbness but no pain, just numbness.

I'm a firm believer of leaving things the way I found them, and so I try to preserve that nerve. And if I do traumatize it by doing it, occasionally I end up cutting it by accident and trying to dissect it off, you end up cutting it, in which case you've cut it. But most of the time, I can move it off to the side and keep it out of harm's way.

Dr. Joseph Mercola:

This is great. I think we're coming to the end of the time that we had scheduled. And I thought we'd have time to discuss my updates this interview, but we don't. We'll have to discuss that, leave that teaser for next visit or interview. But I've got so much insights that I've learned through this process and things that I can share for your practical information.

But if you or anyone you know has this problem, you're going to want to use the information that Dr. Pinnar shared with you in this interview so that you can identify a surgeon. And if you're interested in consulting with Dr. Pinnar, you can do that. He definitely sees people. And we had not even gone into how his practice differs from other, that is almost other whole hour and a half story, which is somewhat related to his whole domestic missionary model. How he's really doing this to... It's the best of both worlds. We could literally talk for 20 hours, there's so many

different ways we can go into this. Maybe we'll have to have a three or four parter, but there's so much here.

But for now, if someone is interested in seeing you, I think you just have a simple office number and a website and you do do telemedicine, because I never saw you until the morning of the surgery. That was it.

Dr. Eric Pinnar:

Right.

Dr. Joseph Mercola:

We talked to the phone and we certainly had a virtual visit, but that was it. Because I'm an hour and a half away from, well, at least where the hospital was. I've never been to your office.

Dr. Eric Pinnar:

Yeah, it's close. It's three miles maybe.

Dr. Joseph Mercola:

Okay.

Dr. Eric Pinnar:

I will say as a disclaimer that it's not my preferred way.

Dr. Joseph Mercola:

I know, I know. I'd already been seen by another surgeon. Yeah, so I had an advantage. Yeah.

Dr. Eric Pinnar:

But I do have patients from all over the country. The patient I met with last night is in Greenville, South Carolina. But I have people coming from Texas and Utah and all over the state of Florida from as far down as Miami and all the way over to Pensacola.

But those patients, rather than make them come all the way to see me, as long as I feel fairly convinced that they have a hernia or it's been a doctor seeing them, or they have a CT scan, even better, that can prove they have a hernia. If I have any questions or the patient has some questionable medical history, they're older, they have a heart history, something like that, then I don't like to meet them on the day of surgery.

Dr. Joseph Mercola:

That's not your preference. You accommodated my desire for efficiency.

Dr. Eric Pinnar:

Many patients, I will see them, at the very least, I see them the day before to make sure we're doing the right thing before we show up at the hospital to do it. But it's the best way I've found to be able to accommodate people from all over the... People that aren't local, in other words.

But just before we finish, I just want to throw in one extra thing because we sort of alluded to it is we talked about polypropylene mesh, but I want people to know that it's not the only mesh, so-

Dr. Joseph Mercola:

Oh, sure. Yeah, we can finish that discussion up. We have not finished this. There's so many other pieces we have to put together.

Dr. Eric Pinnar:

Right.

Dr. Joseph Mercola:

The next interview's going to be really great. Not that this one wasn't, but because there's so much groundwork you have to get in to understand these different options and possibilities.

Dr. Eric Pinnar:

But I'll just summarize it, and now we have absorbable mesh. There's permanent mesh and there's not permanent mesh. So, I just want people to know that there is an option to have mesh that's not there forever. It goes away.

Dr. Joseph Mercola:

And prior to this discussion, I was a 100% believer in the absorbable, but you presented a very compelling argument that is hard to argue against. I haven't studied it really carefully, but the volume of the plastic is so minimal that it's probably insignificant, especially at the thinness and the flexibility of it, which is completely different than when these meshes first come out. These were almost rigid plastic screens that were thick and inflexible. That is not the case now.

Dr. Eric Pinnar:

No. No, we've come a long way. In the last 10 to 20 years, really in the last 10 to 15 years, you've just seen a huge advancement. And daily, we're seeing advancements in hernia surgery, not just in mesh technology, which is huge. It's constantly evolving, but also just in our techniques for complex hernias.

Dr. Joseph Mercola:

So, give us your content information if someone's interested in connecting with you.

Dr. Eric Pinnar:

Well, you can call my office, which is (904) 808-5658. (904) 808-5658. Or you can go to my website, which is advancedherniaspecialists.com, so it's specialists plural, advancedherniaspecialists.com. And you can contact us through the website or you can also send us an email at support at or info at, either one, advancedherniaspecialists.com, or you can send me an email at epinnar@advancedherniaspecialists.com

Dr. Joseph Mercola:

Yeah, and we'll go into the compensation models you've evolved into, which I couldn't recommend more strongly because a big part of the challenges of medicine, and I've alluded to in many previous interviews, is the compensation models that just have ruined the practice of medicine and essentially turned physicians into indentured servants that limit their freedom, their flexibility, their ability to make choices that serve not only themselves but their patients. It's been compromised seriously.

And you made a hard choice that I really commend you for doing. And it wasn't an easy choice, but it is working out over time. In the first few years, it was difficult, but... And I'm just so grateful that you made those choices. So we'll talk about what those choices were in our next interview, but-

Dr. Eric Pinnar:

Yes.

Dr. Joseph Mercola:

... thank you so much. This was amazing. And even I learned something and I've been studying this for a while now, and I actually went through the process, but I can't wait to give an update on how I'm doing. I am doing better.

Just there's some things I learned. I made some mistakes. I made some mistakes. Let me just summarize one of them because I got to give you some pearl. That you said walking was okay, but you didn't know I walked 5, 6, 7 miles a day. So, I didn't walk five, six miles. In my mind, when I come back from surgery, I was like, "Oh..." I was going to go out and do a walk. Don't plan on that. You're not going to do that. And I'm thinking, "You don't walk. You can walk to the up and..." Don't walk. You're not walking out of your house. I don't think you walk out of your house for a week or two, probably closer to two weeks. Maybe 2,000 steps, 3,000 steps if you've got a big house.

But boy, the primary reason I've come to the conclusion is that you only have a limited amount of that cellular energy. That's it. And when you have this surgery, and we're going to go into this in great detail, there are so much damage and repair that's done, and not because of the surgeon's inept. You're messing with tissue that was never designed to be messed with that way and your body takes a lot to recover from that. So, you don't want to be wasting your energy walking at all.

Now, obviously, you're not going to lift anything heavier than five, 10 pounds, but walking's going to suck your energy away that you could have diverted to the healing process. So I don't recommend it at all, other than just walking around your house. Do not go out for walks, because I made that mistake. Like day five, I was walking five miles and boy, I would never do that again.

Dr. Eric Pinnar:

Your experience was a little unusual.

Dr. Joseph Mercola:

Yeah, okay, but still.

Dr. Eric Pinnar:

Last recurrence that I know of was a young guy, this is like five or six years ago, was a young guy that I did a laparoscopic repair for a big direct hernia just like yours, but his was a little bit bigger. But he went back to the gym the same week. He went back to the gym and was lifting and getting on the stair stepper and stuff in the same week of surgery.

Dr. Joseph Mercola:

Wow. That's impressive, he had a lot of resiliency. I wouldn't recommend it for someone.

Dr. Eric Pinnar:

But everybody's... But when you told-

Dr. Joseph Mercola:

Everyone's different.

Dr. Eric Pinnar:

When you told me you wanted to take a walk on the beach the next day for two hours, I was like, "Well-

Dr. Joseph Mercola:

Go for it.

Dr. Eric Pinnar:

... it would be a first for my patients, but knock yourself out."

Dr. Joseph Mercola:

Well, I would caution anyone against doing that. I don't think it's a wise strategy. I think you really want to honor your body's innate wisdom and don't do anything that causes pain. And just it's a big intervention, it absolutely is. And it really, it was the only surgery I've had in my life and hopefully it's the last. So, it was a new experience for me and I learned a lot from it, I'm looking to share more details in our next interview.

Dr. Eric Pinnar:

Well, we say as surgeons, the entire world can be divided up into two groups, pre-op and post-op.

Dr. Joseph Mercola:

There we go. All right. Well, we'll see you soon.

Dr. Eric Pinnar:
All right. Sounds [inaudible 01:34:20].

Dr. Joseph Mercola:
All right, thanks a lot.

Dr. Eric Pinnar:
I look forward to it.