



Dr. David Hanscom

The Lack of Evidence to Support Spine Surgery to Relieve Pain

An interview with Ian Harris, M.D.
on Back in Control Radio with Dr. David Hanscom

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- Tom: Hello everybody, and welcome to another episode of Back in Control Radio with Dr. David Hanscom. We are returning with the second part of our interview with Dr. Ian Harris from Sydney, Australia. Hi, David.
- Dr. Hanscom: Hey, Tom. Thanks for hosting the show. We have a very special guest today, Dr. Ian Harris from Sydney, Australia. He's an orthopedic surgeon who authored a book called ***Surgery, The Ultimate Placebo***. I would highly recommend the book if you're a consumer. Dr. Harris systematically goes through many procedures, in orthopedic surgery and other fields including cardiac surgery and headache surgery, and does an incredible job pointing out the things that actually do and don't work.
- Dr. Hanscom: So, Dr. Harris, welcome back to our show. Could you just spend just a minute reviewing your background for us?
- Dr. Harris: I'm an orthopedic surgeon, and I've been in practice for nearly 25 years. Even though I'm still practicing, my clinical practice has kind of given way to a more academic research practice, and now I do *trials of surgery, and reviews, and other kinds of research into surgical outcomes and the effectiveness of surgery.*
- Dr. Hanscom: On the last podcast, we spent some time discussing how there are so many procedures done that simply are not effective when looked at on a *scientific* basis. *You also pointed out that doctors don't think very scientifically.* They see patients and evaluate for treatment, and if surgery is done, some patients return and report that they are doing better, *but we don't know if patients would have done better anyway without the procedure*, whether it is knee arthroscopy, cardiac surgery, or spine surgery. Before we got on the air, you pointed out, though, that spine surgery is different than, say, knee arthroscopy or cardiac surgery. *What's different about spine surgery, in your mind?*
- Dr. Harris: I criticize a lot of aspects of surgery. But, apart from spine surgery, a lot of the criticism goes to procedures that are probably effective in the *right* patients, but perhaps they're being *overused*—they're being used on too many people, or people for whom it's not effective. *Spine surgery is a little different because the whole concept of treating somebody with low back pain by fusing or replacing their spine may not be a matter of, "Oh, well it does work for a lot of people, but we're just doing it too much." It may be a matter of, "This just doesn't work. This is just the wrong approach to be taking to someone with back pain."*
- So it's not about a *great* operation that's used too much, it's about a *bad* operation that's used too much.
- Dr. Hanscom: Do you think you can compare it to even *frontal lobotomies*? I honestly don't think it's that far off, but we could talk about that for a while. Obviously, there is a zealot... Who is the doctor, by the way, do you remember the doctor who was so zealous about frontal laboratories for a while?

- Dr. Harris: No. I've forgotten the name. But yeah, he would travel around the country, showing people how to do these lobotomies through the roof of the eye.
- Dr. Hanscom: Yes—they would actually lift up the eyelid, take an ice pick, put it up into the skull, twist it around, and actually do it right there in the office. It's unbelievable. *They finally showed it was ineffective.* But, to me, spine surgery is not too far off of that example of a popular, but ultimately ineffective, medical procedure.
- First of all, we do know that disc degeneration is normal. We actually know that disc degeneration is not the source of pain. The only paper that hints that back surgery might be effective was done in 2001 by Dr. Fritzell in Scandinavia. His success rate was not very good, but he said it was better than non-operative care.
- Dr. Hanscom: Well, if you look at the non-operative care, they did nothing. I mean, it was really effective compared to non-care, but the results were dismal. They were terrible results. Then, I'm not aware of any research paper since 2001 that has any hint that spine surgery is effective, that a spine fusion for back pain is an effective procedure. Are you aware of any papers that show otherwise?
- Dr. Harris: No. If spine fusion for back pain was a drug that was trying to get approved in Australia or anywhere else, or trying to get insurance coverage for it, or whatever—if that was a drug, it wouldn't get approved. I mean, it's ridiculous. There's no high-quality evidence supporting it whatsoever. Surgeons don't appear to be very keen to generate that evidence because they are happy *assuming* that it works, instead of *proving* that it works.
- Dr. Hanscom: Well, in the United States alone, spine surgery in general is about \$14 billion a year industry. I don't know what percent of that is for fusion procedures for low back pain, but I suspect at least a third, maybe more. I know around four or five years ago there were something like 300,000-400,000 done a year for back pain. The problem is that with a back fusion you can damage the spine, right?
- Dr. Harris: It's a big deal. Yeah. It's not a minor thing. See, I also argue about knee arthroscopy, for example, and about how it's ineffective and it shouldn't be done for a lot of conditions. But the risks of knee arthroscopy, compared to the risks of a major multi-level spine fusion, are incomparable. *Spine fusion is a much more dangerous surgery.*
- Dr. Hanscom: With the one-level or two-level spine fusions for back pain, the data showed that there's about a 15-20% chance of taking somebody back to the operating room within a year for some complication, whether it's infection, screw malplacement, whatever it is. They found out that the actual success rate, to your follow-up for a spine fusion for back pain is around 20-30%. One surgeon who came out of my fellowship aggressively doing spine fusions helped boost our rate of spine fusions to nine times per capita of any place in the entire country. When I came out of my training, I was one of those people.

The data came out in 1993 from the state of Washington showing that *the return to work rate one year after a spinal fusion for back pain was 15%*. At two years, it was 22%, so I just stopped because I thought it was 90%. I felt really good about this. It was the right thing to do. Then the data came out showing very clearly that bone spurs, arthritis, disc bulges, and disc degeneration, are actually not the cause of back pain, but I don't see any ongoing, recent studies saying that we should not be doing spine surgery.

Ian, are you aware of any efforts to actually look at this in a more careful way?

Dr. Harris: Certainly, there were a lot of people saying we shouldn't do this kind of spine surgery, and we're probably two of those people. But there isn't the high-level research. It's really ironic, I guess, I don't know. It's funny that in orthopedics, now, we are starting to do some of these high-level studies in shoulder surgery. Recently, there have been three placebo studies. There have been some in knee surgery. We're starting to find out that a lot of orthopedic procedures are not effective because we're generating this high-level evidence.

Now, we're not doing it in spine, and they're not doing it much in other areas of surgery. It's kind of funny because the other surgeons are looking at us going, "Well, you guys are doing yourself out of business." But I'm kind of saying to them, "Well, at least we know what works and what doesn't."

Dr. Hanscom: Right. How much pushback are you getting from your colleagues when you give your data around the country? Do you travel a lot out of Australia, or is it mostly in Australia that you're presenting your data?

Dr. Harris: No. I present all over. I presented at the Aussie Osteoarthritis Research Group in the States last year. I presented in Europe and certainly all over Australia, regularly. I don't get much pushback. I don't get as much pushback as I should.

Dr. Hanscom: Okay.

Dr. Harris: I think it's because largely I kind of preach to the converted.

Dr. Hanscom: Right.

Dr. Harris: I think, the kind people that ask me along know what I'm going to say, and they want to hear it. Occasionally, I do get asked to meetings deliberately to provide an opposing view. So I will get asked to spine surgeon meetings, for example.

Dr. Hanscom: Right.

Dr. Harris: A lot of spine surgeons agree with me. They come to me afterwards and they say, "Yes, it's terrible how everybody is doing all these spine operations." Sometimes I'm kind of like, "*Where are all these surgeons?*"

Dr. Hanscom: Right.

Dr. Harris: If it's not you, who is it?

Dr. Hanscom: So you and I both strongly agree that spine surgery not only is ineffective, but it's not been compared to careful and non-operative care. We also know that you've actually damaged the spine. You've turned these beautiful layers of muscles, fascia, and ligaments into massive scar tissue, and bone, and rods, which makes no sense. Then, the spine breaks down above and below it. *The downside is a higher complication rate and the results, many times, are just catastrophic.*

I had one guy start out with a one level alpha phi fusion 30 years ago. Over the next 20 years he had 29 surgeries, and now he's fused from his neck to his pelvis. That was his entire life—surgeries, and it started with a one level fusion—great guy who got his life completely destroyed by spine surgery. We see this all time.

My question is what do you think it'll take to actually change this? Because you and I agree there's not really one paper that says spine surgery is effective for back pain, right? The surgeons keep doing what they do, and what's going to change this? How is this going to change?

Dr. Harris: Fantastic question. So we can look elsewhere, and we can see whether what has happened in other areas is applicable in the field of spine surgery. So for example, I can tell you that in the state in Australia where I live, which has a population of about seven or eight million people, we have decreased the rate of knee arthroscopy for degenerative conditions by roughly 50%.

Dr. Hanscom: Okay. That's a lot.

Dr. Harris: *In 2017, practice has changed because of the generation of high-level evidence, the propagation of that evidence, and that discussion amongst surgeons about whether this thing really works. So the science has cut through.*

Dr. Hanscom: Okay.

Dr. Harris: Is that applicable in spine surgery? Spine surgery, where you don't have this high level of evidence, you're unlikely to generate it because the surgeons aren't interested in generating this level of evidence, although that may change in the future, and you *have probably the strongest financial incentives of any part of surgery in spine surgery.* It may take something else, so I've always been an advocate of *change from within*, of getting surgeons to realize what the real evidence is, and to change the practice themselves, not imposing practice from without. But, it may take that.

It may take something like a funder, or a large government funder, or a private funder to say, *"We're not paying for this anymore."* Whenever you do that, it's

difficult. It creates a counter-reaction, a reaction from the surgeons and it becomes very bitter and difficult to do.

Dr. Hanscom: Right.

Dr. Harris: The other thing that could change is, if there was something like a legal backlash—I'm always half-jokingly saying to people that, "*All we need is for a famous person to die or have a terrible complication from a knee arthroscopy and sue their surgeon, and then everyone will stop doing it.*"

Dr. Hanscom: Right.

Dr. Harris: There's going to be a tipping point where people think, "*Hang on a minute, this is no longer worth it.*"

Dr. Hanscom: I did take a different tack, which I think actually worked. I don't know how effective it is nationwide, but when I was a consultant for Premera, which is Blue Cross of Washington, for eight years, we just said, "*No fusions for back pain,*" and guess what? They quit paying for it. *Again, I want to say to the audience that there's no data to support doing a fusion for back pain, none.*

I know I'm just guessing here, but do you have any gut feeling about, in the world of spine surgery, what percent probably could be avoided? *I used to say, "I think over half of spine surgery is probably unnecessary." Now, I estimate that probably 70% of spine surgery is probably not needed.*

Dr. Harris: You know, I think that those numbers are probably pretty close. I could never say with any great precision, but from what I see of spine surgery that is being done, I would say most of the spine surgery that I see done is not necessary.

Dr. Hanscom: The other problem is, and I know you've seen this in Australia but I think if you were here in the United States right now, you would *just be shocked*. As you know, instead of doing one and two level fusions for back pain, we're now doing eight-level up to 13-level fusions for pain. The complication rate with a major spine fusion like that is about 60%, with half of those being major and these are really, really major complications. *Not only do people not do well, they're in way worse shape than you could ever imagine after those operations are done.*

I just feel like I'm in this *twilight zone*. I mean, the fairy tale of the *Emperor Has No Clothes* keeps jumping into my mind. It's that we're literally pretending to offer a solution for back pain that doesn't exist.

Dr. Harris: Yes. That's exactly right. Yes, I agree.

Dr. Hanscom: Well, I appreciate your insights. Sometimes I think I'm losing my mind because I'm looking around and thinking, "Disc degeneration doesn't cause pain. It's the most common reason for doing the operation." Then, when the documented

procedures that are effective, like better sleep, working on behavioral modification, physical therapy, and medication management *are not being delivered*, patients and doctors jump into an operation that's actually been shown not to work.

The biggest problem that I think you pointed out very succinctly is that maybe some procedures are being overused. This is an operation that probably shouldn't even exist, as far as how it's being applied. I agree, that's a very interesting point, which I haven't really thought of in that way before.

I'd like to, again emphasize, taking a look at Dr. Harris' book called ***Surgery, The Ultimate Placebo***. It's very readable for the layperson, and it does give you an extremely interesting *feel* about the history of some medical procedures of the past that now seem ridiculous. I think maybe 20-50 years from now, people will look back on this era of spine surgery and just think, "This is insane." Do you think that's a possibility, Ian?

Dr. Harris: Yes, I think it really is. I think that in 20 or 30 years, we could look back and just think, "*What were these surgeons thinking?*"

Dr. Hanscom: Right.

Dr. Harris: "*Causing harm, walking away with money, and just basically harming people for no gain.*" It's terrible.

Dr. Hanscom: Well, my effort, personally, I think your effort is really phenomenal. I've always had more people, yourself, that just systematically go through literature, come out with really nice data. My role is a little bit different, and so I'm just going to the public with what is. My book is called ***Do You Really Need Spine Surgery, A Spine Surgeon's Advice***. It will be published this fall, and it offers a four part approach to help you determine whether you have a structural problem or not. In other words, is surgery even possible? It also takes into account whether your nervous system is fired up or not, which is a big factor in outcomes.

The idea is to educate the public. Dr. Harris's book will educate BOTH physicians and the public, which I think is really commendable. ***Surgery, The Ultimate Placebo***, by Dr. Ian Harris is an excellent book. I strongly recommend you take a look at it because, again, these decisions are critical. People think it's like taking a car into the shop to get fixed. But as Dr. Harris points out, spine surgery, in general, *maybe should never been done for back pain*. The other problem, again, is that we're causing damage to that patient when we perform an operation that isn't needed.

Ian, thank you very much for your time. This is a wonderful conversation, and I look forward to staying in touch.

Dr. Harris: My pleasure.

Tom:

Well, Ian and David, again, thank you for a very enlightening podcast. Again, I invite our listeners to return next week for another episode of Back in Control Radio with Dr. David Hanscom. Please remember to visit the website at www.backincontrol.com.

* 2001 Volvo Award Winner in Clinical Studies: Lumbar Fusion Versus Nonsurgical Treatment for Chronic Low Back Pain - A Multicenter Randomized Controlled Trial from the Swedish Lumbar Spine Study Group

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Note: The original transcript of this episode of Back in Control Radio with Dr. David Hanscom has been edited for readability