



EPISODE 819

The Dark Side of Fillers, Botox, and Anesthesia and How Beauty Controls Our Perception

With Guest Dr. Cameron Chesnut

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SHAWN STEVENSON: Welcome to the Model Health Show. This is fitness and nutrition expert Sean Stevenson, and I'm so grateful for you tuning in with me today. Now, this is a topic I never thought that I would be talking about, but as plastic surgery is becoming increasingly more popular, so too are the rates of plastic surgery related diseases and dysfunction. In fact, plastic surgery related diseases result in billions of dollars in healthcare expenses every single year from a higher incidence of cancer and cardiovascular disease to cognitive decline and even dementia. The question is how? How is this happening? What's going on? What are some of the things being utilized in the field that can be resulting in these issues?

And today I have on one of the world's leading experts, one of the most renowned plastic surgeons in the world to specifically talk about what's going on in the industry and what he's doing to radically improve not just survivability, but thriving in results for his patients that need to be widespread and educated in all of medicine, not just in the domain of plastic surgery, but having him here. We also get to crack open the conversation on why humans are so invested in beauty in the first place. What's going on with us psychologically and even a lot of this is unconscious in how we're perceiving and addressing and associating with the appearance of ourselves and other people. And so this is mind blowing stuff. We're gonna be talking about some things regarding anesthesia that's gonna blow your mind. You need to know this information. And again, there's nobody better to educate us on this subject matter than our special guest, Dr. Cameron Chestnut.

Dr. Cameron Chestnut is a facial plastic surgeon for the world's highest performers, his renowned force, progressive use of regenerative medicine and postoperative recovery techniques, as well as his dedicated personal preparation for personal readiness. He's educating the world on the overuse and inappropriate use of fillers and Botox, as well as educating the public at large on the science of beauty and how to look and feel our best. Let's dive into this conversation with the amazing Dr. Cameron Chestnut. I just looked at some stats. Apparently like 5 million Americans have gotten filler injections within a recent year.

DR. CAMERON CHESNUT: Going right to it, huh? Right to it.

SHAWN STEVENSON: This is something that is increasingly more popular, as you well know. This is your industry and. Although it's being used and utilized a great deal. There are some concerns that most people don't know about. And you're speaking out about these things. It's helping people to get educated.

DR. CAMERON CHESNUT: Right.

SHAWN STEVENSON: Not to demonize any particular protocol, but people need to know this stuff. So let's talk about some of the concerns, some of the things you've been highlighting about utilizing filler. And first of all, what is it?

DR. CAMERON CHESNUT: Yeah, this is a great kickoff because this is where, you know, in my world as a facial plastic surgeon, this is where a lot of people enter into that world. And it's changed a lot over the last 20 years, especially over the last 10 years. A meteoric rise in use, you know, like the statistics that you're talking about. And it's readily available, it's commoditized. Where we're sitting right now, there's probably in a one mile radius, 10 to 20 places we could go get it. Right. It's everywhere. And filler is a gel made out of hyaluronic acid that people put in their faces to add volume. Sounds pretty straightforward, pretty simple. Hyaluronic acid exists in every species that we know about. It's the sort of like a preserved version of this hyaluronic acid, you know, molecule.

And then to make it into a filler, they cross-link it together to make it a gel with structural properties. So you'll often hear people say, oh, it's hyaluronic acid exists in our bodies. It's very normal. Well, not, it doesn't exist as a cross-link gel. So, you know, we kind of get right off the get go, like, maybe this isn't the best thing to be putting inside of us. So if we flash forward over its history, it goes in and adds a little bit of volume. So you have a wrinkle here you don't like, you fill it up with this gel. Fantastic. You know, like it looks good. It does a good job. And 10 years ago, that's where everybody was at. 20 years ago, that's where everybody was at. Just putting it in these kind of focal areas. And then as it took off, it turned into sort of the single solution to fill our entire faces to change and target our anti-aging. So somebody has early signs of aging. They're not exactly sure what to do. They start looking around. They see this very seemingly simple solution.

It's not overly expensive. We're talking about hundreds to maybe thousands of dollars to do, which is less expensive than surgeries and things like that. And it, it seems so simple. We're also told that it's reversible. You can just, if you don't like it, there's an enzyme that can break down the hyaluronic acid, which is partially true, not as simple as it sounds. And this is the big one. This is like the biggest kicker is that when we were, even 10 years ago, I believed this, that we'd put it in and it lasted a year or two. If it was a long acting one, it lasted two years and then it went away. It was all gone. And you'd kind of see this phenomenon 'cause you'd put it in somebody and then you'd notice that it, the effects of it dissipated over time.

And you're like, oh, the filler's gone away. Well, what we didn't really realize, and what I've, you know, took me some time to understand is that the filler's moving, once it's put in, it's not just going away, it's actually just, migrating is the wrong word, but moving away from where it's placed, which is why it looks like it's gone away. And that's not a huge issue altogether. If we understand that we, the filler actually lasts decades instead of years, which is a whole like order of magnitude, different type of thing, right? And, but the issue became that the thought paradigm with treating it was you treat it, now you repeat it in six months, and six months, and six months or in a year, and a year, and a year.

You just kind of keep doing it because the filler goes away. But this is created what we all see now in the world of a lot of really funny looking faces walking around because we're just adding to this reservoir of continued filler from before that's moved around that's not in the same place. Some of it's broken down, some of it's new, some of it's been tried to, you know, maybe be dissolved 'cause the person didn't like it.

And it creates a really, really funny. Volumetric abnormal looking call like this uncanny valley of people's faces that we've all seen, and whether we know it or not, whether we could in our frontal cortex, put a finger on this is what happened. We all knew that something was funny in that face that we saw, which is a very primal core neuro anatomical interpretation of people's faces that we have. That looks wrong. I'm not even sure what happened. And this is the basics. That's the basic of these hyaluronic acid gel fillers. There's other types that we'd call biostimulators and things, but when we talk about fillers. That's what we're talking about, these gels that get injected into your face.

SHAWN STEVENSON: Holy moly.

DR. CAMERON CHESNUT: So that was a big kickoff. That's a, and I'm very much swimming upstream in my field with that. There's other, mostly you would find surgeons who really understand these products well because we see them inside of the face, basically, and muscles and fat pads on bone and things like that. You know, we use ultrasound to try to find 'em too, but it's different when you see it in place. Sometimes I see filler that has a capsule around it, like a breast implant, would it? We cause a little inflammatory reaction and our body walls it off. You know, the proof is in the pudding basically, that it causes some inflammation. That's why it gets walled off. Sometimes that's not there.

Sometimes it's not where it was put. Sometimes it's moved from a deep layer to a superficial layer, maybe from the bone to the skin surface. And so you, again, swimming upstream overall, I get a lot of heat about this and I'm not anti filler actually at all. I'm just more, we should understand we, being the royal we, should understand the products that we're using, know how long they actually last. The duration is really the kicker I think here in understanding. And we know this from looking at MRIs, we know from biopsies under the microscope and we know from seeing it inside of skin. Like I did a surgery a couple of days ago on somebody who had filler eight years ago one time, and I found filler so very direct evidence that it's not gone in a year or two.

And so once we understand that, I think it changes the paradigm a little bit, but it's a difficult thing to change 'cause you're fighting an industry and a financial model for people that sort of survive on that type of a, you know, treatment paradigm.

SHAWN STEVENSON: Yeah, yeah. Yeah. It's a lot of conditions that are stacked against.

DR. CAMERON CHESNUT: Yeah.

SHAWN STEVENSON: Just, you know, maybe making some adjustments.

DR. CAMERON CHESNUT: Yeah, exactly.

SHAWN STEVENSON: So, okay. So you got filler? What about Botox?

DR. CAMERON CHESNUT: Yeah. Botox and filler are very different and they get lumped together and I understand why that is. Filler goes into this category of adding volume. We can just leave it at that. Basically we put it in a fat pad or skin and it just is sitting there. Botox, which is actually a botulinum toxin, there's a few different brands. Botox is a brand name. But it's the same one we all think of. It's a toxin that comes from a bacteria, and when it goes inside of a muscle belly, it stops the nerve from communicating with the muscle and the muscle can't contract, so it paralyzes the muscle.

And I get a lot of heat about this too because it doesn't fully paralyze it. It just weakens it, depending on how much you put in, you can definitely fully paralyze it or you can weaken it. There can be a spectrum of how Botox works. We put it in facial muscles because as our face ages we get this, I, I call this kind of tug of war that's happening between our muscles pulling on our skin, which is a very normal, actually an incredibly human thing that we have that allows us to non-verbally communicate. I can literally twitch a little muscle in my face and you will get a signal. Again, whether you comprehend it or not, you'll get a signal as to my emotional state or what I'm thinking, or if I'm nervous, whatever it may be, right? And back to those like trustworthiness and likable, or reading a lot in people's faces there.

So putting these neuromodulators like Botox, again, stopping a muscle from contracting takes away the pull of our muscle on the skin and that. If we have this idea of a tug of war happening, it weakens one end of the tug of war and in this case, it weakens the muscle end. So the skin is an under as much tensile force, which helps the skin not age as quickly 'cause it's not getting wrinkled. You know, we, we frown and we get wrinkles. So if you take the muscular force off, the skin isn't getting as many wrinkles basically. We can think of that paradigm also from just strengthening the skin instead of weakening the muscles. And this is sort of where I kind of challenge people a little bit.

Like, well, do we want to take away something that makes us very, very human and something that's very important to our nonverbal communication, probably more than we really comprehend. So that's a, just a consideration to have. Especially when we can, if we

think of this balance, what if we just kind of strengthen the other end instead of weakening one side, strengthen the other. So a lot of what I do is really focused on that, like a structural strengthening of the skin and the fat pads that are moving so that we can still allow some normal muscle contraction. So I'm definitely not anti Botox and all of the similar things. I'm not anti those. I just wanna be thoughtful about their use as well as to what are we doing, how much are we using, what are the consequences?

How is it affecting your interpersonal communication with your. Kids, your spouse, your world, you know, if you're like what we're doing right here, you, you want your, I want to read you, I want to know what you're thinking. And so it's nice to have a full facial expression to do that. So totally different things in this like Botox and filler world, but it's very confusing.

SHAWN STEVENSON: Right.

DR. CAMERON CHESNUT: And I understand this for everybody, that a Botox is filler fillers, Botox, and it boils much out of outside of there too. 'cause we've all heard, oh, that person had too much Botox. Which is interestingly interesting 'cause that's usually actually the person that had too much filler actually. Or in my world now, very commonly, if we think back 10, 15 years ago, we could spot bad plastic surgery. You could just see it walking around. Right? It's everywhere. And now, most of the time when I have somebody cite or bring up a person, like I don't wanna look like so and so, or I don't wanna look like this, and they have these examples, much more commonly now it's filler, not surgery that made the person look funny. And we're all the world, the royal wee is attributing that to surgery when it's really something very simple, like too much filler.

SHAWN STEVENSON: Fascinating.

DR. CAMERON CHESNUT: Yeah, it's very interesting. And our brain adapts to that too. When you get filler, it's these little microscopic changes. Let's say we think about that every six month treatment paradigm, let's say, let's just say something simple like your lips, right? So you get some filler in your lips and your lips get bigger. And at first when your looking at yourself in the mirror, it's like, oh my gosh, my lips look bigger. This is, you know. Over about

six months or a year, you normalize that becomes your new true north. We quite literally adjust our brain to like, this is our new perception of self.

And then you get more filler and you get that little phenomenon again. And then it, you go to, this is your true north again. And if you repeat that over and over, it's this phenomenon called perception drift with act. Actually one of my fellows has published about this to how our brain follows that you just, your true north shifts. But then at some point, hopefully, you or a friend or somebody says, Hey like, where are you? What, where are you at? What's going on with you right now? Look at where you were X number of years ago and look at where you're at now, and you can see this big shift that's like, oh my gosh, I wouldn't even recognize that anymore because it happened so gradually over time.

SHAWN STEVENSON: Yeah. Oh my gosh. Right. That's, we talked about this before the show, but you know, just start off with Michael Jackson being

DR. CAMERON CHESNUT: Right.

SHAWN STEVENSON: A young black boy, right. To, you know, when he passed away, he was Peter Pan.

DR. CAMERON CHESNUT: Right. Well, and it's interesting because you can take someone like Michael Jackson and you can look through his progression over time and almost sort of spot what was happening. If you really break it down over the years, you can kind of see that slow perception drift happening to, you know, you, oh, I remember kind of, I remember this Michael Jackson at this phase in time. But then if you look at the before and the after decades apart. It's unreal, literally unrecognizable.

SHAWN STEVENSON: Yeah, right. Fascinating stuff. So what, there's truly, obviously there's an art and science in the work that you do. What drove you or inspired you to get into this particular field?

DR. CAMERON CHESNUT: Yeah, well there is very much an art and science and you know, when you go into medicine, you aren't really sure, maybe, what you're gonna do

You just know that you sort of like taking care of people. And I was very artistic as a kid and I gravitated towards three dimensional spatial types of things like sculpture, types of, you know, art. Then you get into medicine and you go and you do all the things, you jump through all the hoops you have to jump through. And I was an athlete and so I was hyperfocused on my sports and how that was driving. And so I honestly kinda lost art for a little bit. It just became almost like part of my identity as a kid that just went away a little bit because it was replaced by other things. And then when I was getting into medicine and deciding what I really wanted to do, I really gravitated towards these three dimensional spatial types of specialties.

Even something like orthopedics, working on the bones is very three dimensional and spatial, but it's a lot more like carpentry, like very algorithmic follow this recipe. What I'm in is much more creative and you know, I only work on faces. I don't do any sort of body types of procedures and the face is very complex and intricate, which certainly plays into some of my internal drive and my history as an athlete and very precision based things. You know, we were talking about golf or place kicking. These are very precision types of things where you have to be at peak performance to do your best at those things. There's no minor mistakes. Everything has to be very kind of very as good as you can make it at that time. Yeah.

SHAWN STEVENSON: Amazing.

DR. CAMERON CHESNUT: Which carries into my specialty now.

SHAWN STEVENSON: Have you noticed that a lot of skincare products are now adding green tea extract to their ingredients and for good reason? A review of 20 studies published in the Journal Skin Med revealed that green tea is effective in reducing acne dermatitis, warts, keloids, rosacea, and many other skin issues. This is incredible. But the biggest benefits were seen when green tea is consumed versus being utilized topically. And the very best source of green tea is matcha green tea. Now matcha is out here heavy in the streets. People are becoming matcha, girly, matcha boys. Alright? But the traditional matcha is being distorted a little bit.

It's being Frankenstein up a little bit, but the traditional matcha is absolutely overflowing with unique benefits, including benefits for our skin health. Now here's the rub. There's a ton of different pseudo matcha out there, low quality matcha. And for myself personally, there's only one matcha that I drink and is quadruple toxin screened for purity and is 35% higher in L-theanine, which is clinically proven to help to reduce. Stress induced skin irritation, absolutely amazing. The only matcha that I drink is the Sun Goddess Matcha from Pique Life. Head over to piquelife.com/model and you're going to receive up to 20% off their phenomenal Sun Goddess Matcha plus all their other award-winning teas. And in addition to up to 20% off, you're also gonna get access to a free starter kit that includes an electric frother.

Now I'm about that froth life. I use my frother every single day. And to top it all off, you get to try Pique Tees risk free with their 90 day money back guarantee. So again, head over there, check them out, piquelife.com/model. That's P-I-Q-U-E-L-I-F e.com/model for up to 20% off. Plus some other amazing bonuses. This is the real matcha. This is what matcha was always meant to be. Nothing added, no preservatives, no funky sugars, no artificial sweeteners, just the very best matcha green tea in the world. Head over there, check 'em out. Piquelife.com/model for up to 20% off. And now back to the show.

SHAWN STEVENSON: Just the fact that you in college were golfing and kicker, right, on the football team is remarkable in and of itself. You know, just, it just really speaks to, again, there's a drive there for performance and for competition as well.

DR. CAMERON CHESNUT: Right.

SHAWN STEVENSON: And also just being somebody who is aware of your desire to create and to create art as well. And also you're very people centric. And that's what I'm seeing about you too, that really stands out for me and why I really was so excited to have you here is like your educating people. You have your particular gift and talent and you're sharing some of the pieces. I mean, a lot of the pieces that most people are just not educated about, they're not thinking about, and the field is not open about. And so just to create to, to basically, you know, pull back the veil and to talk about some of these things that also they

cross over far beyond plastic surgery, right into medicine overall. And one of those things that you've been educating people about is anesthesia, right?

DR. CAMERON CHESNUT: Right.

SHAWN STEVENSON: And so if you could, can you talk about your perspective on anesthesia and also just some things that people need to be aware of? Because again, as of this recording, there have been thousands of people knocked out here in our surrounding area for different procedures.

DR. CAMERON CHESNUT: Absolutely.

SHAWN STEVENSON: So let's talk about that a little bit.

DR. CAMERON CHESNUT: Yeah. And this, this is a really, this is another year, like right into the, you know, the, the hot topics, I would say. My practice is very unique as it is. You know, I, I have a very destination based practice of all of my, a hundred percent of my patients travel to me. It's a very retreat, like intimate setting where, you know, people travel in, we have these beautiful homes for them to stay in on the water. It's very wellness focused. It's like a wellness retreat. And I just say that background becomes that, that becomes very important to the overall landscape of what we're talking about here. My mom was a nutritionist growing up, I've always been very sort of driven towards health and wellness. It wasn't until sports that I really gravitated towards that because I saw a delta, I saw a difference in my performance.

The needle moved when I was paying attention to. Basically the things my mom was teaching me and I'm like, oh, there's, this is real. Right? So then that carries over into my whole practice now, understanding how being metabolically, physiologically optimized and flexible and how these things can improve every aspect of our surgery. Starting before surgery, during surgery, like anesthesia, like we'll talk about, and then very much in the postoperative period, how those kinds of tools that we're using all the time really, can be just magnified as to how they can improve. You know, surgery is a big metabolic stress. It's an event and anesthesia falls into this because anesthesia's near, I mean near universal.

Most of the people listening to this will have had or will have surgery at some point in the future. Electively or not, it's gonna happen for most, we think of anesthesia as what most people we'd call general anesthesia in medicine. That is like, you go to sleep, you're put under metaphorically pushed to the bottom of the ocean. You've got a breathing tube in you that's breathing for you, kind of keeping you alive, very layman's terms, but in that sense, you're paralyzed, you're unconscious, and all of those vital functions are being done for you. That is a massive metabolic hit to our brain to have that happen for an extended period of time.

And so with something like general anesthesia, we are very careful about how long somebody is under. We're measuring the anesthesia time because we know that that's a cumulative adding up metabolic insult to their brain. That's what most anesthesia is, and that's what most people think of. And that is, if we were to 30,000 foot view, zoom out a miracle that we can do that and do these incredible procedures on people. Right. If we zoom back into real life, okay. That's a great tool. What do we need it for and what are we using it for? Because as a surgeon, it's really easy to have your patient under general anesthesia. They're just under to the bottom of the ocean and you can do whatever you want. But for what I do, it's completely unnecessary.

I do not need that. It's actually, it's a detriment to that person. It makes my life easier and makes their life worse, basically. And that's where we get into other types of anesthesia that're becoming more familiar, that people know about. This is what people would call like twilight anesthesia, maybe. People have heard that term. And that's sort of like where you're sleepy, kind of awake, but not really, and you don't really know what's happening. And then the procedure's over and we're done. That would be, think of like a colonoscopy, you know, looking in your colon for cancer, just screening things that would be like those twilight anesthetics.

Those are usually done via iv. You don't have a breathing tube. They're very quick procedures. They're over and it's done. Those are progressing. People know more about those. And the world that I live in, that is just on the face, like I was saying, I try to take this hybrid approach to that. I don't use general anesthesia, just I can, I don't love absolutes, but I can say I just never use general anesthesia. I don't need it. So I'm using a type of a hybrid with these

twilight types of anesthesia, and I'm taking it to another level there. Generally a twilight anesthesia would be an opioid medication and a benzodiazepine. So these, I'm not trying to throw too many medical words out, but these are things that people have heard of.

Like a Valium is a benzodiazepine. We call them diazepam, lorazepam. Those are the, you know, generic names for them, but they're really hard on your brain. This is illustrated over and over again. If we were to take a more vulnerable population, like an elderly population, we know the benzodiazepines push them into delirium and dementia and things that some of them never recover from opioids, we don't need to say too much about those. We all know, you know, there's a crisis of them. They're addictive. They're not great for our brain. They're really wild, great at controlling pain, but it's not necessarily what we need them to do. But that combo is the most frequent pair used an opioid and a benzodiazepine. So I don't use any of those particular medications.

And I choose other things that are very progressive, that are aimed at controlling our consciousness and sort of the comfort of the procedure to a very specific level. So instead of the metaphor pushing you to the bottom of the ocean, I'm pushing you just underwater, just to the point we need you to be. Then we're very carefully titrating to keep you there. So you're breathing for yourself, you're doing all, all your vital functions are very protected. Nobody's better breathing for you than you are. And we're, this is a big one, that's really under talked about. We're also protecting your sleep architecture, after the procedure, which is huge. And that's a whole another conversation we could and should have. But doing the anesthesia this way really requires me to be very good with my gen, with my local anesthesia. This is like lidocaine, what people would think of when they go to the dentist or something like that. I do very precise nerve blocks or on the face so that you're not feeling anything. There's no stimulus happening in the first place. And then we have your controlled consciousness just below the water. So it's a very overall gentle anesthesia profile and very safe, very simple, very comfortable. And there's less pain after the procedure 'cause you never had any during the procedure.

It's stopped at the source. And this is the biggest part of this. So when it really boils down, if I were to just nutshell it is after surgeries of all types or anesthesia, let's say there's this

phenomenon called postoperative cognitive dysfunction. POCD. We all know what this is. This is the fog that people have after surgery that can't sleep very well. I just didn't feel like myself. And that would be if you and I had it and we're healthy metabolically and young, and that's great. If we're 85 and we get that, that could push us to a point that we never recover from. And I think a lot of people have heard that story too. Like grandpa or grandma had surgery and they were never the same afterwards.

Well, we're all taking the same hit to our brain, this postoperative cognitive dysfunction, and you and I have the reservoir capacity to recover, but that doesn't mean we didn't eat into some of that reservoir, which is kind of scary to think about. So if you need it to survive, if you have a life-saving surgery or whatever, like yes, use it, do your thing. You know, use your general anesthesia. But for what I'm doing, which is completely elective and cosmetic. It's not that this is me projecting my values, I guess a little bit in, in real life, but I don't want to do that to somebody. I don't want to compromise their long-term cognition over something that's very, very elective.

So I choose to do what I would want if I were having surgery, and that is this idea of a opioid free, benzodiazepine free, very gentle neuroprotective anesthesia that prevents postoperative cognitive dysfunction, which is really driven by neuroinflammation, inflammation inside of our brain. So that's what we're minimizing. Yeah.

SHAWN STEVENSON: Oh my gosh.

DR. CAMERON CHESNUT: That's a lot to that. That was very much a lot in there.

SHAWN STEVENSON: Please just, yeah. Do not hold back at all.

DR. CAMERON CHESNUT: Okay. Yeah. Yeah.

SHAWN STEVENSON: This is fascinating. You know, I don't really think we think about this.

DR. CAMERON CHESNUT: No.

SHAWN STEVENSON: Which is, you know, especially in the condition where, again, a grandparent or somebody undergoes surgery, we tend to attribute it. If there's a problem, they're never the same. The issue that they had the surgery for versus the potential of the surgery itself.

DR. CAMERON CHESNUT: Right.

SHAWN STEVENSON: And just the incredible burden that it puts on our body, in particular, our brain. And not being educated or aware of that. And also just we have a, you know, a certain standard of care the way that things are done. And fortunately again, voices like yours, conversations like this, it's helping to get this education out there, changing the paradigm.

DR. CAMERON CHESNUT: Right.

SHAWN STEVENSON: And, you know, we see it's, again, like the data's there with anesthesia. And the more, that you're, you know, the longer that you're quote under, the more times that you have this, and we see this degradation related to Alzheimer's, dementia, cardiovascular issues. The list goes on and on and on. This isn't just like you, you just get put to sleep. And that's the end of the story.

DR. CAMERON CHESNUT: All is well. Yeah.

SHAWN STEVENSON: What, what's so fascinating about it is I don't think we exactly know how it works. We know that it works, but it's different from quote, being put to sleep. Because when we're asleep, we can be waken, we can be woken up by pain.

DR. CAMERON CHESNUT: Yes. Correct. Yes.

SHAWN STEVENSON: Right?

DR. CAMERON CHESNUT: Yeah.

SHAWN STEVENSON: We become, we're not only are we unconscious, but we're insensitive to pain. Like this is a whole different, you said. Push to the bottom of the ocean is such a great analogy. I started seeing images of get out.

DR. CAMERON CHESNUT: Yeah.

SHAWN STEVENSON: By the way, I don't like it.

DR. CAMERON CHESNUT: No. Yeah.

SHAWN STEVENSON: It's fascinating.

DR. CAMERON CHESNUT: Yeah. And what you said is nailed very, I don't want to scare people about anesthesia because it's incredible. Like I said, and it's changed the way that, you know, our health or whole health system runs. It's very safe overall. I'm talking about what I would see as the next like low hanging fruit to go after. And there's progressive providers who are doing that. It's challenging in our health system in the United States where it's very insurance driven because the type of anesthesia that I described as very high touch, it's more expensive, takes more care, it takes a higher trained staff. There's a bunch of things to do that.

And, I'm operating in a situation that I get to control everything. This is my private operating room and my private, you know, building. Then with my practice with the people that I chose. In a hospital setting, it might be that you're the surgeon and you don't even know who your anesthesiologist is gonna be that day. It's just whoever gets assigned to you. So there's not even necessarily a match there quite as well. Which is, I would say, a take home message an actionable item is ask your surgeon about this before your surgery, not the day of, because there's a low likelihood you'll get much time with your surgeon the day of your surgery.

And then same with your anesthesiologist. Let them know that you care about this, and at the very least, you raise awareness and let this person know that like, oh, okay, you're gonna be paying attention to this afterwards. This is one of your metrics of success for the procedure, is what do you like afterwards?

The other thing you mentioned that I think is really insightful is. The sleep part of it, which I kind of hinted at, but it's, we say sleep in a term that has nothing to do with regular sleep. There is no normal sleep architecture when you're under this type of a general anesthesia. That does segue into one of the agents that I choose is very specific because it really mimics non REM sleep if like delta wave type of sleep.

If we were to look at what happens when you're under this particular type of anesthesia, so it protects your sleep architecture a little bit. All anesthesia is very difficult on your sleep architecture and sleep recovery. This one is, let's call it a n neutral to neutral. It's not really, maybe a positive, but it's definitely not a negative to your sleep architecture afterwards, which we get into all the, you know, mechanics of sleep. Probably the best thing we can do to recover from our surgical procedure too is like, have that re you know, restructuring and that regeneration that happens during sleep. So that's something that I think about during my procedures restoring sleep architecture.

I start preparing my patients for restoring their sleep architecture before the procedure as well. Uh, whether that's with melatonin or using some specific types of magnesium and things like that to get them even IV magnesium during the procedure to say, okay, we're done with surgery, now let's get you back to a normal sleep pattern. So we're not, and my patients are traveling so I have time zones to think about and things like that. So there's a lot inside of that. But, you people will get really disturbed sleep. It is not actual sleep after a normal type of anesthesia. It's usually disrupted for days to weeks afterwards.

SHAWN STEVENSON: Yeah. Thank you for this because we can do better. This is the thing, you know, the way that things are structured, as you just mentioned, you're probably not gonna get much time with your surgeon.

DR. CAMERON CHESNUT: Right.

SHAWN STEVENSON: So it's unfortunately, it's more of a conveyor belt system for the majority of procedures today. And we can do better, which is having more awareness, education, resources, access to the post op procedures and also prehab stuff too, right? Yeah.

This is why you have people come out, right? And they have this environment and this experience because not only are the outcomes gonna be better for whatever surgical procedure we're looking at here, but you're going to feel better. You're going to be, you're gonna recover faster. All these different things with certain things being implemented. So what are some of those things that you're doing with your patients that are helping with this process?

DR. CAMERON CHESNUT: Yeah, so this, I have a pre, we kind of just talked about the what happens during surgery. I could go very deep into all the other fun, love things I like to do during surgery. But from my patient standpoint, they'll notice a pre and a postoperative regimen that I have them doing. The postoperative one is the very in depth one that has sort of the most fun, unique things in it. And you sort of mentioned healing faster, which is definitely part of it. And if I were to flash back 10 years into something like hyperbaric oxygen, which is a staple of my postoperative recovery, that's mostly what it was cited for.

It makes people heal faster. And that's very, very, very true. Like to a noticeable, statistically significant degree. But interestingly, where my real passion in this lies, is that I want everybody to get better faster, but the things that I do also make our results a little bit better. And when you're, you know, at, at when you're already achieving very, very good results and things, I'm looking for every degree, literally one degree of improvement that I can get. I'll take anything, what, whatever it is. And so that's the real truth to a lot of these, like hyperbaric oxygen back to that. It doesn't just make you heal faster from your surgery, it makes the quality of your healing better. So if I take fat from like, instead of filler, this is a nice, you know, segue into that early or, you know, pulling in the early part of our conversation.

An alternative to using filler in your face gel would be to borrow some of your own fat from around your belly button or your flanks and move it to your face. So now we're taking lost facial fat and replacing it with your own fat. Which is incredible, like for like, but it's also highly regenerative. Our fat is a very rich source of a certain type of stem cell called the mesenchymal stem cell, which are incredible for so many reasons, but they help regenerate the structure of our facial fat pads. And when you put them in the fat, they do a really great

job doing that, but they do a better job if they're exposed to hyperbaric oxygen right afterwards.

So a prime example of that fat does a better job, heals better, looks better if you have this hyperbaric. So just as a, to get into it, like I really want people to heal fast, but I also looking at better, I want things to be better. And after surgery I'll have them do hyperbaric oxygen that starts right away. They're usually doing that before surgery as well. Hyperbaric oxygen from an evidence standpoint. And medicine is wildly well backed to help things heal better. Whether that is a chronic wound on a diabetic person's leg, or whether it's a surgery that's struggling to heal, or in my case, a surgery that's not struggling to heal we're just early on. Hyperbaric oxygen is like the most evidence backed, that's the staple of what it should look like. And, just so everybody knows, that's just a chamber. You get in, it's a, looks like a big tube with a giant glass wall on it, and it pressurizes down. So we call it a dive because historically this is used for divers who get something called the bends.

When they go too deep and then come up too fast, they get little bubbles in their blood. So you push 'em back down to depth to then bring them up more slowly. But you do it in a hyperbaric chamber, so it pressurizes and then you breathe in oxygen. And when you breathe in, you and I, right now, walking around our red blood cells that carry oxygen are saturated to 98%. You know, they're just, they're doing all they can do basically when we get in a hyperbaric chamber. We don't need just red blood cells anymore because we can directly put the oxygen into the plasma of our blood. Just like a soda gets carbonated with pressure that goes in there. And when you open the soda, it all comes out.

Same thing, we can push oxygen into the serum of our blood and it goes to healing tissue and helps it heal faster. So hyperbarics very, that's a nutshell of how it works. It's very fascinating. It's good for longevity, good for exercise recovery, great for surgical recovery. Other things that I would mix in would be something like pulse, electromagnetic fields, and this is like a little, we all think, hear about EMFs all the time.

This is a very specific type that we use that's a frequency for healing specifically. This also has really strong data behind it. Has an FDA, which is a American Food and Drug Association

indication, help healing of bones that don't heal after surgery or breaks, things like that. Super simple like we could be sitting on it doing our PEMF treatments right now, and I get to use that after surgery on my patients and help them heal faster and better from their surgery. It's a little bit of a different mechanism than hyperbaric oxygen too. So now we're stacking things that are doing different things. Light therapy, this is a huge one. And I know you love this and different wavelengths do different things. Really strong data behind light therapy for wound healing very well backed for that. But when we use it in a post-surgical setting, we have a bunch of things going on. We have a wound, oftentimes for me, I'm using a laser as part of my Facial Sur procedure, which is non-surgical, but it's just sort of like icing on the cake. You know, we, I'm treating somebody who's, you know, doing a little bit of anti-aging and I'm gonna help their skin with this laser as well.

So they quite literally have a skin surface injury that we're healing. They have the actual surgery itself, but then they have just the whole metabolic cascade of healing as well. So something like red light therapy near infrared light plays a wild role in helping all those physiologic functions happen better, helps the direct injury heal, helps the surgical healing better, and helps the overall metabolic profile. Like everything meets in the mitochondria there a little bit, you know. And then we can get as much of these as we want. But I use a very specific IV nutrition protocol. So if you're coming to me and I have your laboratory work, like your genetic work, any metabolic profiles I have, I can custom tailor your IV nutrition afterwards to, you know, what you need to heal.

Like let's say how you methylate this, or what your micronutrient deficiencies are, et cetera, et cetera. I can make these very customized IVs. I like to use peptides in my postoperative and preoperative healing protocol. A lot of nutrition based things and then some supplemental things, enzymes, things like that to help heal. And there's a lot to it. I don't wanna talk about this for too long, but there's a lot that goes into it.

SHAWN STEVENSON: Yeah. And the thing is, again, just having a couple of these things start to stack conditions. And better outcomes and better recoveries. And so again, hopefully, again, we can have a vision of the future where these modalities are utilized in conventional medicine.

DR. CAMERON CHESNUT: Right.

SHAWN STEVENSON: Just to help people to feel better and to get better results. Like it just, it's kind of captain obvious. You know that we should, but again, there's complexity here. This isn't like readily available, but it can be because we're talking about. Conventional medicine.

DR. CAMERON CHESNUT: Right.

SHAWN STEVENSON: He like, there's endless possibilities of what can be done, but there's so much money that's wasted in the system right now as well.

DR. CAMERON CHESNUT: And it's interesting 'cause as you said this, haven't really talked about this or thought about it, but what you just said, you know, kind of made me think that, well we do use them in medicine like HYPERBARICS or PMF, for example. But we use them when things have gone bad. When it's too late, basically when it's things are outta control, then we call 'em in. But yeah, what, you know, what's the threshold to be kind of be using them in a normal situation or maybe somebody's at risk, but it hasn't gone bad yet.

SHAWN STEVENSON: Yeah, yeah. What a concept.

DR. CAMERON CHESNUT: Yeah. Right.

SHAWN STEVENSON: Proactive.

DR. CAMERON CHESNUT: Proactive.

SHAWN STEVENSON: You know, it's fascinating to me as well that, you know, you mentioned one of your, one of your great tools that you utilize is lasers. Right? And just to think of the power of light to be able to do all these remarkable things with our biology, right? Whether this is like sculpting or, you know, creating some, some molding. Matter of fact, I wanna ask you about the name plastic surgery itself.

DR. CAMERON CHESNUT: Yeah.

SHAWN STEVENSON: Right? So when, when I was a kid. I would hear plastic surgery and I would think like they're, and of course some of the results that I would see as well with, with people on television is like, oh, they're getting plastic in their body.

DR. CAMERON CHESNUT: Yeah, totally. And sometimes that's not far from the truth. Right.

SHAWN STEVENSON: So where does this, where does what, what does plastic surgery mean?

DR. CAMERON CHESNUT: Yeah.

SHAWN STEVENSON: And let's just go there first.

DR. CAMERON CHESNUT: Yeah. So plastikos is like the Greek, or the root word that leads to it. And, plastikos just means that something can be easily shaped, molded formed, and hence why we have plastics. They can be so easily shaped, molded, and formed. And that's where the plastic and plastic surgery comes from, is that you're changing form, changing shape, remolding things. So pretty simple root word there. But I think the irony is that it really kind of gives that idea of yeah, silicone or whatever kind of goes into to change shapes that we may perceive as not being, or not being as good as it was before. The ultimate intent is to restore form and function. That's how plastic surgery started.

SHAWN STEVENSON: Yeah.

DR. CAMERON CHESNUT: It started in wartime, basically to restore form and function to soldiers.

SHAWN STEVENSON: Mm. Yeah. Well, ironically as well, let's talk about actual plastics in plastic surgery today.

DR. CAMERON CHESNUT: Yeah. Okay.

SHAWN STEVENSON: Just, you know, obviously there's a lot of education about this now, just in our environment and our personal care products and whatnot.

DR. CAMERON CHESNUT: Totally. Yeah.

SHAWN STEVENSON: But let's talk about microplastics. Nanoplastics in relationship to plastic surgery.

DR. CAMERON CHESNUT: Yeah, so, this has been a very deep rabbit hole of mine. I don't really know any other colleagues who have quite done this yet. I think that we will see more of this, 'cause all the things we've talked about. I mean, if I were to just kinda say like, of the scope of surgery or plastic surgery, what we are just talking about here is now we're about to get into a narrow rabbit hole of microplastics. You know, your audience is gonna be much more familiar with them than everybody else walking around in the world. Just from, you know, being a little bit more tuned in. In medicine in general, if I go back to thinking about medical school and my first times in the operating room. I remember this day, you know, you're a medical student, you scrub in and you just like, don't touch anything. You're so nervous, you know, I don't wanna touch anything.

I don't wanna mess anything up. And by the end of the surgery, I remember being three giant full garbage cans, full of plastic, just dumped everything, everything's disposable. And at the time, that was probably more eyeopening from a waste standpoint, which, you know, isn't really the point of the topic here. But I remember even then thinking like, wow, we're using a lot of stuff, a lot of plastic that's disposable to do this. Flash forward years, and now this is even just within the last year with full transparency in my own practice, when I was kind of thinking about like, again, I think in these like, what can I do to make things 1% better all the time?

And I was just thinking and looking at microplastics in general because there's been a lot of small studies coming out on how they're affecting our bodies, where we're finding them, where they're coming from sources. And just had my wheels turning in the wellness world a little bit, as I was looking into these and thinking like. I am using a lot of plastic in my world outta necessity, just like using anesthesia as a necessity. But in my world I'm thinking, okay, how can I, what do I need to look at and how can I get into this? So I started looking at some

very specific plastics or plasticizers, phthalates to be very specific if we really wanna get into it and what their places are in medicine and what.

In a nutshell, these particular types of plasticizers make plastic, soft, and moldable like an IV bag, which I use all the time, or like the tubing for the iv, which I use all the time. So I started digging into, well, what's in these? Is this something I'd wanna be putting in my body? And I found not so much one of the very specific, plasticizers has been known for a long time to, let's just say, not be great for us. And when kids get it over, and over, and over again, we would see issues with them, with their development, just like anesthesia and kids. As a side note, when kids get repeated bouts of general anesthesia, we know that they, those kids don't have as high of IQs as they grow up back to that topic. So in kids, we know that in vulnerable populations, these very specific plasticizers were not great for them, but for you and I in normal life, probably not as big of a deal. You know, not as detectable. Maybe these same things in Europe are not available, not used. So a side note. So I started going, okay, are these in my products? Basically? So I started kind of going back and I did a very deep dive.

Again, I own the operating rooms, own the system, own the everything. So I can do this. If I were at a hospital, this would not be possible. But I rallied my, I did my own deep research, I rallied my staff and I was like, okay, let's go look at every plastic product that we use and here's what we're looking for and here's what's okay 'cause there are some plastics that are okay that don't, you know, do this as much. And we had a very, very deep dive and discovered, yeah, that we did have some of these in our protocols. It's been very well shown now that with things like IVs, that some sources even suggest that you like run a third of the IV through the tubing before you start putting it in somebody because of the microplastics and anaplastics that are in it.

So we totally purged all those out of our operating room. It was a very expensive endeavor, and I love my staff for this because they're very much on board. But this would've been something that like, you know, the nurse of the hospital's, like, I quit. I'm not doing this. You know, my staff's like, oh, we can make this better. Let's do it. And so, you know, very happy to say that we have a operating room that has. We still use plastics, but plastics that I would use on myself now. And, it's a, I think we'll hear more about that topic. There's, again, there's so

many other things. This might be a little bit of a higher hanging fruit, but in my patient population who is very well researched and very aware, this is something that they value, I value for sure, and they value as well. So I, and I think the thing we didn't talk about that's really important is, well, okay, microplastics, so what, at a cellular level, this is what piqued me in the first place, if I go back to the beginning of the story. At a cellular level, they're causing a burden, an inflammatory burden, a mitochondrial burden.

And we can't heal as well if those things are present in us, especially if they're very acute and there's a high load of them. So this all boiled down to healing for me too. It's like if I'm inhibiting their healing even a little bit in that postoperative period, I don't wanna be using it, and that's where the plastics come.

SHAWN STEVENSON: Yeah, wow.

What I found to be my personal favorite when it comes to red light therapy, and I actually keep this device right on the arm of my couch at all times. It's a portable device and it's designed by an incredible physician and inventor, Dr. Vivian Chen, and it's registered with the FDA and it provides both red light therapy and near infrared light therapy in one device without the damaging UV rays. The wavelengths and radiance have been verified in third party labs, and it meets the IEC safety standards for electrical and EMF safety. It's literally the Swiss Army knife of red light devices. It's lightweight, it's portable. I actually have mine right here, and again, it's portable. This is always on the arm of my couch, and I travel with this as well.

It's great for post-workout recovery. For my son who plays AAU basketball host game, so we got a lot of uses for it when we're traveling as well. But again, it's great for skin health and so many other applications that we've already covered. Again, if we're talking about an aspect of the human body and a certain treatment that we want to undertake, we gotta understand. Certain things can be just a few minutes, a couple times a week. Certain other things can take months of consistent use to see notable difference. But truly, there is nothing else like the Lume Box. The Lume Box is the very best red light therapy device. Again, it's like a Swiss Army knife. Super easy to use.

And Dr. Vivian Chen, the inventor and incredible physician as well. She's also one of the most intelligent, most insightful, and also most generous people that I've ever met. She's absolutely amazing, and she shared with me that for my family, my friends and my community, she's going to be giving. \$260 off of the loom box. So you can grab your own lume box right now by going to thelumebox.com/model. That's T-H-E-L-U-M-E-B-O-x.com/model. And you're going to automatically receive the Shawn model code that will get you \$260 off. It's an incredible opportunity, again, to own your very own science backed red light therapy device. Head over to thelumebox.com/model.

SHAWN STEVENSON: This is, again, this is going above and beyond. Yeah, it's not, not remotely normal. No, for sure. And, it's just, it's very admirable to be just even considering and try to figure things out. Yeah, I mean, we'll put a couple of studies up for everybody to see. Like one of them it is just obviously with our exposure today, you can't escape this. You can't escape microplastics, nanoplastics. But you know, pretty much everywhere that they're looking in the human body, they're accumulating in our tissues. Right? And so one of the studies we'll put up for everybody found the accumulation with our cardiovascular system. And it's one thing to have it there, but does that, is the, does it mean anything? Well, they actually found it correlated with higher incidents of cardiovascular issues. Right. So heart attacks, strokes, and then of course the famous study with studying 11 testicles.

DR. CAMERON CHESNUT: Yes.

SHAWN STEVENSON: I don't know what, what, where the other pair went, but every testicle they analyzed had microplastics accumulating in it, you know, and again, everywhere that we're looking in the brain, just. And so we are living in a very plastic world. And it's one of those things that we can start to be aware of and just mitigate the effects because. The human body is incredibly resilient. And one of the things that I'm hearing again, like we're like, whether it's, you know, fillers for example, and we're then we're got this huge plastic burden, like we're just filling our tissues with all this stuff that's at its essence creating inflammation. Yeah. And damaging the potential of our mitochondria. Right. And so that's one of the things as well that you noted is surgery as a mitochondrial stress test.

DR. CAMERON CHESNUT: Yes, absolutely.

SHAWN STEVENSON: Right. Talk a little bit about that.

DR. CAMERON CHESNUT: Yeah, so I mean, this happens in every facet, and again, I think all of those modalities that I mentioned sort of meet in the mitochondria because that's what's fueling our entire recovery. It's a big recovery response. It is. We talk about regenerative medicine, which is essentially what a lot of my practice boils down to, utilizing regenerative medicine as part of my surgical or procedural processes. We have to regenerate, we have to gen, we have to make something that's the generation part of it, and that takes a lot of energy. And when a lot of that's happening at the same time, we have to have very efficient systems for that. And you know, we talked about red light, we talked about, you know, supporting our metabolic health, which starts before surgery for me, whether it's some very specific fasting regimens that I'll have people doing or creatine before surgery.

All of these are aimed at metabolic flexibility, fuel usage, how ketosis versus glucose versus, even creatine is a fuel source. I want people to have all these options available to them. I want them to have great carbon dioxide tolerance before their procedure. I want them to be in good shape 'cause they're gonna heal better afterwards. Their mitochondria are gonna be more efficient in these stressful environments. It is the ultimate stress test to do something like this.

SHAWN STEVENSON: This speaks back to, again, light being used as medicine. Whether it's the lasers, the red light therapy in particular, the impact on the mitochondria. Just helping everything to work a little bit better.

DR. CAMERON CHESNUT: Yeah. Lasers fitting into this, like photobiomodulation thing is really interesting because lasers have been around for a long time. One of my mentors was a father of like the old lasers in medicine in, you know, like the seventies and it wasn't talked about in the same way. And I think it's really that the availability to, to us at home or you know, something like red light therapy that is like, has a incredible safety profile and very little to no risk with it, has really brought this into the world.

That light has a very potent interaction with our body, but when we really look back at it in the old school, I'm like, these guys were, you know. A laser is by definition a single wavelength of light, one wavelength. And they were figuring out what that wavelength did in our body, basically what it hit, and how that energy affected that target that it had. It's called a chromophore, a fun word. So a specific wavelength of light hits a very specific chromophore and that there's an interaction that happens. And so some of the chromophores are red blood cells and that shuts down a blood vessel if it gets heated. Some of them are collagen, some of them are pigment.

If we wanna get rid of, you know, sun damage or moles or whatever it may be, things that have like melanin in them. So if we go, these guys were very old school, you know, pioneers, basically figuring out like what wavelength of light did exactly what in our skin, and then applying them in incredibly life-changing ways. It's pretty cool. But just like the OG photobiomodulation basically, and now it's so popular and, you know, red light has a different effect. Red light's targeting our mitochondria largely, you know, cytochrome c oxidase. And so it's really cool to see the evolution come and have it sort of be for who we're talking with, sort of a household, you know, idea.

SHAWN STEVENSON: Yeah. So cool. Yeah, so cool. Light and sound and medicine as well. Just really interesting stuff. So, you know, you mentioned earlier about the performance and recovery of patients and utilizing, you know, very intentionally proven modalities. But also I was thinking about in terms of your per perform performance and the performance of your team.

DR. CAMERON CHESNUT: Yeah.

SHAWN STEVENSON: You know, and doing very complex procedures, and again, thousands since people put push play on this just in our surrounding area right here of people are undergoing surgery as we speak. Right. And, you know, we don't have conversation or awareness of the conditions of our surgeons. And so, you know, I've been talking about this for years, you know, going back to in my first book, I mentioned a study published in The

Lancet that looked at medical doctors doing a procedure, had 'em come in, checked all their metrics, and then sleep depriving them.

DR. CAMERON CHESNUT: Oh yeah.

SHAWN STEVENSON: Okay. So just 24 hours, which is not abnormal. And then had them to repeat the same procedure. Here's what happened. They made 20% more mistakes doing the exact same thing. And it took them 14% longer to do the exact same thing. Right. And a lot of times we're sacrificing that efficiency, right. We're just working and working and working, thinking we're getting more stuff done, but we're losing efficiency. We're making mistakes that we gotta go back and fix.

DR. CAMERON CHESNUT: Absolutely.

SHAWN STEVENSON: Right. And so, I've been talking about this for quite some time because as you know, just the field of medicine, the training in medicine is like, it's like a badge of honor to mess yourself up.

DR. CAMERON CHESNUT: Absolutely.

SHAWN STEVENSON: You know, to just run yourself to the ground. And, you know, I get it for those situations where you need to overcome extreme amount of stress.

DR. CAMERON CHESNUT: Mm-hmm.

SHAWN STEVENSON: But in general, we can have a society and a culture to where our physicians are on top of their game. And they're feeling their best and they're locked in and they're not making in as many mistakes because. They have the performance element as well. Not just for them patients, for their patients, but for themselves.

DR. CAMERON CHESNUT: Absolutely. Yeah. You nailed a lot of things. Their culture is a big part of it. The culture of sleep deprivation, working too hard, and there are mistakes that get made. It's funny 'cause when we think about this, we know, we think about LeBron or Jordan,

like, oh, we can remember games that Jordan was sick and had, you know, like still performed in that particular game. But when it comes to surgeons, we just don't think about this at all, which is crazy. You know, nobody's asking their surgeon, how'd you sleep last night? Did you drink alcohol last night? Even though we know objectively and evidence back that that's gonna affect their performance on your procedure that you're having, you just assume that they're gonna do it.

But if we 30,000 foot view, look at the, I guess look at the world of surgeons, you know, when we think about people that we want at peak performance and. By nature are probably really, really high peak performers, that gets beat out of them a little bit or beat out of you. And you see people who are not healthy, who are not at their top, the top of their game in any aspect of life, overweight and metabolically unhealthy, and that's the person operating on you. I think it's a little naive to think that person's actually at peak performance, you know? So, and you could argue with that a little bit, but it just boils down to a, this is the culture of my team and myself is one of peak performance. We wanna be at our best. And this was really driven. I would, it's driven by athletics.

For me, that's where I got this from this mindset around. And we know this with athletes, but I just carried it over. And so my, I would say my life largely revolves around being a peak performance for surgeries. So I know in my head when my next surgery is, and I know. How much I wanna break myself down so I can rebuild in time. It's like I'm hitting a trajectory of peak performance. And it's a, it's an up and a down, right? We get strong, we break down, we get stronger, we break down, it goes back and forth. And that's not just physical, that is emotional, it's cognitive, like how I'm breaking myself down, how I'm stressing myself, what I'm eating, how I'm exercising.

Thankfully, I can pay attention to how I feel, but I also have tools like biometrics to pay attention to. I'm paying attention to my heart rate, my heart rate recovery, my heart rate variability in a workout, how am I feeling? What's happening? And then I'm using tools to improve those so that I can be at those peak performances, at those right very specific times. I'm not drinking alcohol. I'm, you know, often fasting, leading into the day before surgery so that I get into ketosis and then I stay in ketosis through my procedures because I feel sharper

that way, no question about it. And so there's a lot that goes into that. And then my actual day of surgery is one of my favorite times.

The morning before every surgery, I have a flow state entry routine that I do. And I wake up early, I get in the hyperbaric chamber myself, the same thing we just talked about for recovery. I get in there myself as sort of a sensory deprivation chamber. I do some very specific visualization of the procedure that I'm doing. So if it's you, I'm visualizing through every little aspect of what we're gonna do that day. Where am I gonna find a problem? What, how am I gonna solve that? Move around, then I have an outcome visualization. This is what I want it to look like at the end, which is heavily based in my love of neuroanatomy.

Here's what I'm trying, the micro changes I'm trying to make. And after the quiet time, I would say in the hyperbaric chamber, I head into a sauna. And in that sauna I am doing a very specific like stimulating balance based workout because I think a lot of people have felt that, you know, I just have like a little bit of a better performance. I'm a little bit more clear if I had a chance to work out in the morning. So it's nothing crazy. I'm not murdering myself, but I'm definitely having a little bit of a metabolic stress in front of the red light in the sauna, and getting ready to kind of then go get in a true flow state in the operating room. It's very interesting.

SHAWN STEVENSON: Wow.

DR. CAMERON CHESNUT: Very fun. Yeah.

SHAWN STEVENSON: Amazing.

DR. CAMERON CHESNUT: Yeah. Then after the procedure and I take a little bit of time to, I call it like watching film like you would do after a basketball game or a football game. You know, you immediately next day usually watch yourself and say, okay, here's what I could do better. Here's what I liked about that. I don't get feedback on my performance for six months maybe till the results are done. So I take very detailed notes to myself different than the medical record. The medical record says here's what we did, right? I'm making notes about

here are the micro decisions I made along the way and here were the branch points and what I considered and why I chose this.

Basically, things that only I could know and I take a very detailed note to myself, things I would never remember basically, and then six months down the road and when I get to see the patient and get to go through videos and photos, I go back to that and I watch my film and I think, okay, here's what I was thinking. Here's what happened. Here's these 1% micro adjustments that I get to make like, okay, this worked really great. I'm gonna, you know, explore that more. A lot of curiosity in that I, this is amazing. It's cool.

SHAWN STEVENSON: This is really amazing.

DR. CAMERON CHESNUT: And you can apply that. I mean, I think that these are applicable to anything. Yeah, right? Like you can do these types of things. You just have to find what works for you. The flow state entry is very unique to find kind of what works for you to get you in that state, it's an incredible mental place to be.

SHAWN STEVENSON: One of the things that really resonated with me about you was your dedication to excellence and performance and to being at your best, which again, I would love to normalize that, right. But, you know, with this being said, you're in a field where there's a lot of complexity.

DR. CAMERON CHESNUT: Mm-hmm.

SHAWN STEVENSON: Both physically, you know, biologically, but also psychologically.

DR. CAMERON CHESNUT: Yeah.

SHAWN STEVENSON: Right. And so there's this emerging field and just even part of why you're here in town, you know, for this conference related to the neuroanatomy of how we look and how we perceive faces. And, you know, I'm curious from your, from your perspective about our healthy desire to look our best. And then how that can. Mutate or evolve into

something where it's an obsession and it's an unhealthy desire. And I know that you have experience in this more than most. So can you talk a little bit about that?

DR. CAMERON CHESNUT: Yeah. There's a lot to this. This is the idea of using neuroanatomy. This is an area for me that I have gotten very academic in. I've done very deep dives publishing on this topic of, with a motivation for me publishing on this topic to just understand that, understand what I'm doing, basically, which is, you know, a very simple way to say, but I wanna know when I make a minor change to an aging face, what that's doing to the interpretation of the person that I'm doing it to when they look in the mirror or when they see a photo of themselves and to what they're putting out into the world.

How the world reacts to that micro change that I've just made. And this is understanding the neuroanatomy of facial recognition, facial beauty, the behaviors that surround it, and how all that goes. And it's a very complex system that has some overlap with facial recognition, emotional recognition language, just regular beauty, and how we interpret art. So in that beauty sense, a lot of decision making and a lot of emotion, positive and negative actually. So when we, I wanna know how these things happen. The eyes and the mouth are really great examples of this, which kind of makes sense because that's our nonverbal communication. So we're very in tune to this, and it's different when I look at you versus when you look at yourself in the mirror.

Different regions of our brains activate and light up, which makes sense because you're not looking as much for how trustworthy you are, which your identity is. You're looking at analytically, how do I look? And so it's very, very different on how these things go in. But I want to understand, and I, this is what I'm teaching about, other, my colleagues in dentistry, orthodontics, facial plastics, injectors, all kinds of, anybody who has anything to do with the face.

I want everybody to understand that when we make these micro changes, what's happening, how are those interpreted? Interpreted for what the core purpose of our face is really, which is to communicate and convey. And, you know, it, I think the, some of the most fascinating highlights of that are that when we look at faces, we make instantaneous judgments,

subconscious. And those are based off of expression, symmetry, things like that. We know how likable the person is, how trustworthy they are. We're not consciously deciding those things. We have a feeling right away. We know when things look really off, when things are grossly asymmetrical or when they're outside of the norm.

For what we have a, as a comfort, a comfortable average. We call this like the uncanny valley a little bit, where it's like. It's kind of humanoid, but doesn't quite look right. It's almost a little off-putting a bit. And so that's like a recognition part of our brain a little bit. But we also have a lot of reward systems linked to this. So when we see a pretty face, the reward areas of our brain light up, this happens in babies who actually have no cultural concept of beauty. They will linger on a beautiful face for longer and they, the regions of their brains that have to do with reward will light up a baby. Right? So, and we have the examples of this even in cross-cultural things, like a lot of the things that make a face beautiful are, you know, cross through.

It doesn't matter what culture or what race you're from, they tend to kind of be pretty uniform. So this argues for a very sort of core network that we have that does this. But when we get into some of the really fun things about it, it's like, okay, well why do we have this in the first place, right? Theoretically, we're trying to choose mates, right? Not only do we wanna protect ourselves, like are you gonna hurt me? Who are you? Things like that. But then the next level of thinking is it's into our emotions and complex social decision making is do I wanna meet with you? What are your genetics look like?

And that gets conveyed in our face. How clear is your skin? How symmetrical are you? Things like that. How old are you? That can all fall into this. And that's one of the theories that we look at genetic, there's probably truth to both of these, but that we're looking at genetic information. The other part of it is that the more average a face, the more average somebody's facial features are. And even if you were to, you know, create this face that just tends to be a more attractive face, universally average lip size, average face dimension, average eye aperture, whatever it may be, people tend to find that face really attractive. So there's this other theory that we tend to find that attractive, 'cause it takes less processing.

It's just like, oh, that's easy. You know, and the truth probably lies in some complex interplay of those things, but. So we have this reward, this emotional reaction to faces, beyond just the reward centers. When we see a beautiful face and when we see an unattractive face, we have strong emotional reactions in an area of our brain called like the amygdala. Something that a lot of people have heard about. And we know that when emotions get tied to things, memories get made too. So when we see an attractive face, we get an emotional response beyond our reward system, beyond whatever. And it, we tend to remember that face more. We get triggered into this more emotional, recognition and memory part of things, which is really fascinating and cool, but we can also be off put by a face we find unattractive and have a similar but different response to a memory with that.

And so it all argues for a very complex, non-linear interaction of how we view somebody's face. And, how we react to it on an internal level. We don't get to the analytical frontal cortex part of things until a little bit further down the road, and that tends to be what we look at when we see ourselves in the mirror. Like I was saying, we look at ourselves, we get a sense of like, oh, how do I look today? Oh, I don't like this thing about myself. But we have to like quite literally understand that that's not what other people are seeing, which sounds a little cliché, but in this neuro anatomic is actually true of how we look.

And then my job is to understand what traits affect that. So for example, resting mouth position can give a lot of information as to somebody's baseline emotional state, how likable they are, how trustworthy they are. Eye shapes, when somebody has hooded outer lids and lifted inner lids. It can kind of give a sense of, you know, kind of looking desperate, or when the middle part of the brow drops, it can look a little bit aggressive. When there's hollowness in the upper eyelids, all of these things trigger core reactions in us. So then, or there's a really interesting one that if we can see the whites under somebody's eye, which is called scleral show, that's the fun word, but the white below the colored portion of the eye, like the lid margin, sits below that.

We get a negative trigger in our amygdala emotionally that like something is off 'cause it kind of looks like the puppy eyes, like the sad look. And so we tend to have some mirror mirroring to that and we get a sort of a negative emotional response in our amygdala from that. So,

which is very fascinating 'cause these are, these are these little microscopic changes that I'm managing all the time, but trying to understand how important are they, what do I need to do with them? What's normal? What did this person look like 10, 20, 30 years ago? All, there's lots of factors that go in, but you know, knowledge is power when it's acted upon. And this is, you know, very unique chance to do that.

SHAWN STEVENSON: What?

DR. CAMERON CHESNUT: So it gets like, yeah, there's a lot to that.

SHAWN STEVENSON: I'm just thinking about, I just ran through so many phases. Right. Including Ice Cube, by the way. Just right. Yeah. He just, he's a, he's a fun guy. But he looks mean af right. You know, it's just the way his eyes are shaped. You know what .

DR. CAMERON CHESNUT: Exactly.

SHAWN STEVENSON: I mean, and the eyebrows. Holy mo.

DR. CAMERON CHESNUT: And there's some sexual dimorphism to this in humans as well, meaning men look different than women. And so we have different recognitions of those things. Kind of gets into the more recognition side of things. Is this a man or a woman? We know that right away you're not thinking about that consciously happens. And sometimes when it's hard to tell, then we get tuned in. Like I can't really tell what this is. We get very tuned into that. So, part of my job is that too, I wanna make men stay masculine and I want to have women stay feminine and not cross that over at all 'cause we see that far too often.

SHAWN STEVENSON: Yeah.

DR. CAMERON CHESNUT: Especially if men are getting feminized.

SHAWN STEVENSON: Yeah. That's, you know, that's one of the things that you might see in like, popular culture for sure. You know, with, you know, actors having procedures done who are not intending to look more feminine, but just some of the results. That's, that's so

fascinating. This is, man, I just want to keep talking to you and asking questions. This is so fascinating. You know, I think in closing, it would be awesome because obviously, you know, it's a, if number one, if people are not in a position where they're even thinking about.

DR. CAMERON CHESNUT: Sure.

SHAWN STEVENSON: Something like plastic surgery, let alone being able to work with you because you know you're one of the most in demand people in the world. What are some things again, just. With people who want to just look their best and feel their best. Are there any things that you recommend people to do just for their general self care? When it comes to, you know, just being able to look and feel their best.

DR. CAMERON CHESNUT: Yeah, this is a great topic. It's a big one. And I talk about these types of things a lot on my social media, for example, like, here's what I would do in my twenties, in my thirties, I kind of go by the decade or just there's, there's lots to this because it, in reality, I'm thinking about this with my kids already. You know, I'm thinking about their skeletal structure with their orthodontics to their airway and how that's gonna affect their jaw in the long term, which is very functional, but also will affect how they look honestly. So it really is at every level. We really wanna be thoughtful about this. But the best advice I can give, because this spans every decade, even for my kids, honestly, to somebody in their sixties, seventies, eighties, is paying attention to your metabolic health. Very cliché, but let's talk about something like blood glucose levels.

Super simple. We can measure. I'm wearing a continuous glucose monitor right now. I kind of always know what that is. I use it as more of a systemic stress metric for myself to know what my cortisol levels are approximately doing. But when we look at what's happening with our blood glucose levels and we know that as they get high, those things will age you faster. Very simple example of that, right? It's called glycosylation. Attaching a glucose molecule to a protein makes the protein not function well. And this happens in our arteries, happens in our facial tissues. Not great for how things function, especially when they're elastic and meant to flex like our skin or our blood vessels. And we can measure this. A fun fact, people may have heard of this lab test called a hemoglobin A1C. That is measuring exactly what I just talked

about, how much glucose is attached to our blood, red blood cells. And it gives a really reliable example of like, you got a lot of glucose going on and it's attaching to your proteins.

This is not good. But a very simple basic, I think rubber meeting the road example of how our metabolic health affects our aging. Because what we're seeing externally often is reflecting what's happening internally, metaphorically, and quite literally in that situation, if you're having a breakdown of your elastic tissue, of your skin, I'd be highly concerned that that's happening to your arteries as well, which are also very, very elastic. Same processes are happening. So this is systemic inflammation, it's toxicity, its glucose levels. These are all things that we want optimized before surgery, going back to that, but they're gonna help you at every phase of your life moving forward. The challenging part is, and I think that we're gonna see more of this as this gets into the healthspan lifespan discussion a little bit.

We want both of those to go up and be better. But we do see a decoupling, we were talking offline about this a little bit before. The patients that I work with are often very, very high performers, like the best of in their fields, and they are very mod metabolically healthy. They've taken care of themselves. And this is a selection bias of the people that, you know, I gravitate towards and gravitate towards me. But at some point it starts to decouple a little bit. And I was kind of saying, you know, this gets into our neuroanatomy. I was working out with Lad Hamilton this morning, his early sixties, and when you look at him, you maybe don't know exactly how old he is, but you know, he's older than you, but when it comes to the actual performance, he can hang with me easy or better.

And, but when you look at 'em, you get a different judgment of that, right? So if you take that from the athletic world to the business world to whatever, wherever we live there starts to get a bit of a decoupling as to where we're at and what we're capable of and what we look like or what we're putting out into the world. So the space I live in is really erasing that cognitive dissonance and trying to put those things back together just in a nutshell. Making people look how they feel or trying to, and you can protect that gap from opening by starting early, by being metabolically healthy, by being present and aware of who you are, what you look like, what your goals, missions, and values are, which is a, you know, a big mission to do, to figure those things out.

But that all kind of helps kind of things stay cohesive and prevent needs for distorting or altering or doing other things down the road. But at some point, I, you know, this is where I get into it, is like I see that as part of a health metric is, you know, you, this is affecting your performance. It's affecting what you put outta the world. It's affecting how you feel about yourself. There's no question that how we look affects how we feel and our overall health, no question, very well studied. Lots of things that look at that. And so, you know, I get a chance to be part of that health journey for a lot of people that's beyond just what they look like. I want to help them look how they feel, but then I also want to make them more healthy and make them look better for longer. So there's a lot to it, but, very simple. Just kind of like, you know, do the things, do your exercise, you know, that's gonna keep your chronic inflammation down. That's gonna make you age more slowly too. You know, it's gonna make your blood glucose levels better. There's, they're all intertwined with one another.

SHAWN STEVENSON: Yeah. It's very practical.

DR. CAMERON CHESNUT: Yeah, for sure.

SHAWN STEVENSON: Yeah. Wow, this has been amazing. If you could, can you share where people can follow you, get more information, you know, find out about your work and your clinic?

DR. CAMERON CHESNUT: Yeah. I'm most active on Instagram of all the social handles. I think that'll be LinkedIn here. It's my last name, chesnut.md. No t in the middle, as you were teasing me about before. And yeah, that's a great place. Like I said, I go through a lot of education and a lot of kind of what we just talked about, what to do in your twenties, thirties, forties. What to, I mean, what to watch out for and what to look for, um, what to avoid, kind of like traps. And then, you know, a lot of, there's a lot of before and after results and stuff on there too.

SHAWN STEVENSON: Yeah. It's pretty shocking. Yeah. I mean, just Wow, wow. Amazing, amazing stuff. Well, you know, I appreciate you so much because again, you are very vocal

about making, just your industry, let alone medicine overall better. Thank you. And we have the ability to do that, and it's just really inspiring to see. So I really do appreciate you for that.

DR. CAMERON CHESNUT: Appreciate that. Yeah, I, I love that. That's definitely one of my missions goals and values right there. So appreciate that recognition.

SHAWN STEVENSON: Amazing. Well, again, we'll link everything in the show notes for everybody, so make sure to follow Dr. Chestnut. Thank you so much for coming to hang out with us.

DR. CAMERON CHESNUT: Thank you so much for having me. I really enjoyed it.

SHAWN STEVENSON: Amazing. Amazing. The one and only Dr. Cameron Chestnut. Thank you so much for tuning into this episode today. I hope that you got a lot of value out of this. Please share this with your friends and family. You never know who's wanting to get some work done and getting a holistic and hearty education around this subject, not just taking it for granted that things are going to be done, quote the right way. But this is incredibly valuable for any aspect of medicine and having major procedures done, just having better education, asking more questions, and you know, that's what it's really about.

Again, it's just about being empowered and educated, and I'm so grateful again for you taking the time to hang out with me and Dr. Cameron Chestnut today. We've got some amazing things in store, some powerful masterclasses, and some world-class guests coming your way very, very soon. So make sure to stay tuned. Take care, have an amazing day, and I'll talk with you soon.