Introduction and Guest Background

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Number one, we know and we understand that as a human species, we are being exposed to more environmental toxins today. than at any other point in our history.

And we know there is a very good body of literature now demonstrating the impact to reproduction and the impact of fertility. that many of these toxins have.

We actually don't know the extent of all of it. And number two, we also know that women who have a defined reproductive lifespan, and I'll talk about that in a little bit, we know that women are waiting longer and longer before starting their families than at any other point in their history.

This is Doctor Talks, real talk from real doctors on the issues that matter to you most. Hello, everybody. Welcome back to one more episode of Double Down with Dr.

D. I'm Dr. Daleman, triple board certified physician and your host. And today I'm joined by someone who shares the same vision and the same perspective of medicine, Dr.

Carolina Sueldo. She's a double board. Hello, hello. Hi, thank you so much for having me. So many certificates and so much knowledge. She's a double board certified endocrinologist specializing in fertility and she can tell you more.

Now she's the owner of her own boutique. It's a fertility clinic called Sable Fertility. I appreciate the intro, Paola. So yes, so for patients to know or for the audience to know, so I'm double board certified.

I did my OB-GYN residency first, so board certified in that. And then I did three more years in reproductive endocrinology and infertility. So my specialty and what I'm boarded in is really that world of hormones and fertility.

Fantastic. Furthermore, because she really believes in the power of education and any other evidence-based strategies that we can give to women for women's health, she's also a key speaker in many places internationally.

So she lives by her word and that's what is in her heart and I totally believe it. So the same lens that I put on my practice on lifestyle medicine and metabolic health, Carolina uses through the lens of fertility.

So Carolina, let's start with a basic question to you to explain to our audience what really Fertility is what is considered an infertility. At one point we write to the diagnosis of infertility with the foundation of what's a normal versus an abnormal menstrual cycle.

Absolutely. So these are really foundational concepts that many, many, many women, even in the most highest educated echelons of society, most of us are actually uninformed about what's normal or not normal about our own bodies when it comes to our reproductive health.

And so I really always like to start with talking about what's normal when we talk about the menstrual cycle. Many people would agree that the menstrual cycle is actually another sign of general health.

And so a regular, normally functioning menstrual cycle many times is called the fifth vital sign, along with number of respirations, your blood pressure, etc.

And so I love talking about what's normal because then patients can sort of take that and say, okay, what I'm experiencing, this is not normal. And there's really three key things that I focus on.

The first one is talking about frequency. So how regular are those menses? Are they happening once a month? Are they happening in a consistent fashion?

Am I able to monitor and track? So if I have every 28 day cycles, I can pretty much anticipate when my menses is going to come. Or are they quite erratic?

Normal Menstrual Cycles and When to Seek Help

Because even in the setting of somebody having a monthly menses, if one month it's 21 days, the next month it's 32 days, the next month it's 24, et cetera, then yes, they're monthly, but they're really not regular.

So we're really looking for the frequency and the consistency. And certainly if you're skipping two, three months, you're not having regular menses, absolutely that needs to be evaluated.

The second thing that I talk about is the amount of flow. And historically, this has been really hard to track because how do you make that objective from woman to woman?

So there will be some variation, but the NIH put together a really nice scorecard looking at the number of pads, the number of tampons, and the presence or absence of clots on a patient's heaviest day.

And so doing a 24-hour inventory, you tally up your points And if those points are more than a hundred, then the flow is considered heavy. Now, by definition, especially for those women who now use the menstrual cup, greater than 80 milliliters or 80 CCs of flow on your heaviest day would be considered quote unquote too heavy and would warrant evaluation.

I think the only sort of factor that I would add to that. would be if there's been a change for you. So if you normally had periods and then they became lighter or they became heavier and it was a noticeable change for you as a female patient, then absolutely I would not wait and I would get evaluated.

And then the third is pain. And this is where an area where There's really still so much work to do. I think in society in general, it's quite accepted that menses is associated with pain and you sort of have to just tough it out and, you know, be a woman about it.

And what we now know is that pain can actually be a really clear indicator for underlying disease. And so what I will counsel my patients is that if the pain is so bad that over-the-counter medication isn't helping, Tylenol, ibuprofen, things like that, or if you're calling out of work or school, it's impacting your daily activities.

You can't do your normal, you know, things around the house or run your normal errands. That is definitely not normal. And I absolutely would recommend that you become, that you get evaluated and really explore.

One of the things that I talk about a lot is self-advocacy and being an advocate for your own health. And so if you understand what's normal around menstrual cycle regularity, around menstrual cycle flow, and around menstrual cycle pain, then you can have a better sense of what's not normal and when to seek out care.

As it relates to fertility, a lot of times we sort of zero in on the timeframe. So a patient has been having unprotected intercourse for a year. That's sort of the blanket statement that we give everyone.

But it's really not quite that simple. So yes, that is true if the patient is under 35 years old, if she's having regular predictable monthly menses that are not too heavy and not too painful.

But if she's over 35 that year, it actually gets shortened to six months. And if the cycles are irregular, the flow is heavy or the pain is severe, then that timeframe goes out the window.

We want that patient to be seen sooner than that. You know, I really think starting with the foundational concepts are important so that you can understand when you need to see your doc.

And I would say that the blanket statement that I would give a patient is if something doesn't feel right to you, right? Because no woman, I mean, sorry, no doctor is going to know your body better than you as a woman.

And so if you feel like something's wrong, if you feel like this is not normal for you, this is a change for you, then I would absolutely encourage you to advocate for yourself and seek out care.

Well, that was very clear, very enlightening. Obviously, I totally understand that we come from your puberty and we teach the teenagers. And please correct me if I'm wrong, just because I did adolescent medicine and I had to do a dysmenorrhea clinic and first education.

So we were teaching the teenagers how the cycles happen. That also creates a connection with their intuition as well with their body, which is super important and so early.

And it's the same hormones that are going to be through their years to make them fertile for them to pinpoint if there is a problem in the hormonal imbalance all the way when we arrive to our perimenopause and menopause, which we are creating a lot of awareness and education on it.

But we go back to the same book, which is our hormonal balance between estrogen and progesterone and testosterone and so on. So, but one of the things that I tell the teenagers, and correct me if I'm wrong, is that the first two years after the first menses are okay to be irregular since they might not be cycles that are ovulating.

I always was telling them to be careful with the pain. More the irregularity was okay, right, because many of them will say, say, I got my period three months ago, I never got it again.

Of course, the first thing is like, wait one second, I just wanted to make sure that you are not getting sex or being exposed or intercourse. But if not, it is possible that what is happening is that your ovaries are starting just to start the engine to produce.

So I tell them that they should not be painful. And then the pain, like you were saying, right? The threshold of pain is different for everybody. So I find that my teenagers at the beginning, when they start having ovulatory cycles, which they can almost pinpoint because thanks to technology, I made them download the app and they follow their period so they can know their number.

I always tell them, get your number. So they know their number because if their number is 27, they might going to have it twice in the same month, but at least it is regular.

But then the next is the amount of pain. There is a discomfort is obvious. We do have receptors in our uterus at the time that the endometrium is about just to come out.

It is normal that it has to be a little bit of a discomfort. but discomfort has to be divided in is this functional discomfort or is making your life miserable and you cannot function.

So that's I just want to just to clarify that on the teenager side and then the whole part of once these teenagers are going to write to those fertile years and this is when I come to my next question so those fertile years are so important because despite that you know nature made us to being fertile, then get pregnant.

We are now in a modern medicine when we can almost plan ahead to have that perfect environment for these new humans to come inside us and to grow inside us because we are the sole responsible of that human's metabolism.

So this is when lifestyle medicine totally creates an eclipse environment to fertility, and this is next, and it's fertility and lifestyle medicine. And we can expand to the very common diagnosis of BCOS and I think is one of the number one causes of infertility on today's women.

But I know that you know a lot about lifestyle medicine and our environmental exposures that are creating certain factors and causes for women not to be fertile.

So please, Dr. Carolina, just go ahead. I can just listen to you all day. It's great, it's beautiful. So yeah, what I would say is there are certain external factors and then there are certain internal factors.

Some are in our control, some are not in our control. And so when we talk about external factors, this is where the lifestyle medicine piece comes into a really important play.

Number one, we know and we understand that as a human species, We are being exposed to more environmental toxins today than at any other point in our history.

And we know there is a very good body of literature now demonstrating the impact to reproduction and the impact of fertility. that many of these toxins have.

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And so those are two really key factors when we talk about fertility in the modern world.

Fertility Timing, Age, and Lifestyle Factors

When we talk about environmental toxins, when we talk about age and fertility, it's really important we understand what are we talking about when we talk about impact.

And so typically, we would say that the ovary is the one that is producing the eggs. The ovary is the one that is directly impacted. And when we talk about ovarian aging, there are two really key breakpoints.

One is at age 35, and the second is at age 40. And we see that until about age 35, both the number of eggs that we are working with and the quality of those eggs tends to remain fairly stable.

Now there are caveats to that. You mentioned PCOS. We're going to talk about that in a little while. Another disease would be endometriosis. There are a few others, but by and away in a sort of average healthy female patient, we know that egg quantity and egg quality remain fairly stable until about age 35. And then between age 35 and 40, we begin to see this sort of slow progressive decline down.

And so year over year, there is this impact where we begin to see a decline in the number of eggs and the quality or health of the eggs that we're working with.

And the second break point happens at age 40, where the line then becomes much more vertical. So between 40 to 41, 41 to 42, the changes are much more dramatic.

And so even in a fertile, healthy female who works out three times a week, sleeps eight hours and hydrates well, we see that drop and we see that impact to both quantity.

And now from a modern medicine perspective, egg quantity is something that we can measure. We can measure it both in blood work and on pelvic imaging.

So by, by a vaginal ultrasound and we can know where that woman stands for her age. Egg quality, currently, there is no way for us to assess it. And so we infer egg quality or we have to assume egg quality based on maternal age and based on the likelihood of other underlying diseases like PCOS or endometriosis.

So when we talk to patients who have maybe been trying for a year or two, they come to see me and we start talking about the different treatment options, maternal age is typically listed as the number one predictor for the

likelihood of success, both in spontaneous pregnancy, but even more so within the fertility space in the world of fertility treatment.

And so really understanding that optimizing your lifestyle is critical because if we're already battling age and on top of age, now we have to start talking about maybe the patient smokes or vapes.

Vaping is something that's very popular these days and I see it in many patients. which socially is considered extremely acceptable. Many of us view alcohol as sort of very normal and a normative part of our social interactions.

But these toxins, particularly on a regular basis, even in an otherwise healthy patient, when there are other issues like age or underlying disease, will absolutely have an impact.

So from a fertility standpoint, I think ovarian aging is really important to understand. That aging is impacted, yes, by maternal age, but also by lifestyle.

And usually patients don't start with a fertility specialist, right? Usually patients will start trying on their own for a period of time. Then they'll either see their primary care provider or they'll see their OBGYN.

Maybe they're with them for some time. And then eventually they get to a fertility specialist. I hope to change that conversation, but that's the typical paradigm now.

And so when a patient comes to me, they've typically been at it for at least a year to sometimes longer. And so we really, I don't want to be two years in.

And now we're talking about your vaping habit, or now we're talking about your weight health habit. If patients would start those changes at the very beginning of their journey, then we know that by the time that they get to me, they're now optimized.

And so we can focus on what other ways we can medically improve their chances of success. Wow, that's very interesting that you bring up that you're the last one in the chain of specialists.

It will come to me as a first line specialist thinking I wouldn't go and knock on your door until we try, like almost at the last resource, right? But on the other side, now I'm seeing that you are seeing everything with the lifestyle medicine.

lens and you should be one of the first players in this in the game of let's make this happen in the most optimal conditions and this is not for me to start criticizing other specialists but not all the specialists are like you so I don't think every fertility doctor will be thinking about Come to me early, come to me early, especially before those 35 year old, just simply because that's one hour cut off.

As part of the algorithm is the standard where we decide that this is what we consider over an age start. Let's say that, for example, so everybody who already is getting into close to 35 and say, okay, now I'm ready to be a mother should be indeed have you as a first line.

as one of the principal coaches to take care of their objective in life, which is giving life to someone else. So I love this piece of information that we can give to our audience, that you are not a specialist to be referred as a last resource.

You are a specialist that you can be involved right from the beginning, especially that you understand the importance of toxic substances, of nutrition, for example, right?

So now we can talk a little bit about PCOS, which is so much in my life as sound medicine, obviously all the conferences and everything. We always talk about those chronic diseases that can be reversed or can be avoided thanks to the choices that we make every day.

Yeah. And I want to just wrap up that prior thought around that is an issue that I'm extremely passionate about, both because of sort of my own lived experience, but also because every single day in my office is a patient who tells me, I wish someone would have talked to me about this earlier.

I wish I would have known that I had these options five years ago or six years ago. And so really the mission around educating and empowerment, it's such a huge, and I know it sounds cheesy, but it is such a huge mission of SABO because I would rather you know, make an informed decision and have a choice than come to me at 39 or 41 and say, well, I wish I would have known at 34 what I know now, right?

And so I just wanted to wrap up that thought. And I do think it's so important and so powerful. And I do think as a fertility specialist, I am uniquely equipped to have that conversation in the same way that you are uniquely equipped to have other conversations.

And so I agree, I think both areas and frankly, even the OB GYNs, like, they are also first line of defense in that realm. And, you know, ideally they would feel as comfortable having those discussions as well.

So shifting gears that, you know, moving on to PCOS, this is. well within my wheelhouse, my bread and butter. I see this, I wouldn't say every day, but almost every day in my office.

And what is PCOS? So PCOS stands for polycystic ovarian syndrome. It is the most common reproductive hormonal issue in reproductive age women here in the US, affecting somewhere around the 13% of the population.

And when you Google PCOS, you typically have a patient presenting with certain characteristics. They typically will have irregular cycles. That is usually the most common complaint.

So they skip two, three months, then maybe they go six months, maybe longer without amensies. They have no way of predicting ovulation. And they typically have, you know, two timeframes where they're presenting to their health care provider.

So usually as an adolescent, with irregular cycles, the parent is concerned or they come to me later in life unable to conceive or unable to time intercourse and wanting assistance with achieving a pregnancy.

So irregular cycles tends to be one of the most common presenting complaints. The second would be what we call clinical or laboratory signs of elevated testosterone.

So the technical term for that is hyperandrogenism and that can present either in the patient's physical appearance Think of things like head hair balding, acne, hair growth in a male distribution pattern, chin, chest or back.

They may not have that. And then you check blood work and their testosterone is elevated. So there's a little bit of variation in how that may present.

And then thirdly would be polycystic ovaries on ultrasound. And this is somewhat of a misnomer. Patients tend to believe, oh, I have cysts on my ovaries, so I have PCOS.

That's not actually true. PCOS is really an egg excess disease. And so when we talk about polycystic ovaries on ultrasound, they typically appear enlarged.

The visual I give is, you know, think of a golf ball, that would be a normal-sized ovary, and a grapefruit. So that would be sort of a PCO or polycystic appearing ovary.

PCOS: Symptoms, Diagnosis, and Metabolic Impact

So an enlarged ovary with a lot, a lot of follicular tissue, so excess amount of eggs. And that excess amount of eggs or follicles are making two hormones, the estrogen and testosterone that you were mentioning earlier.

Now, there is a fourth component that's not part of the diagnostic criteria, but is important to understand that PCOS patients have reproductive symptoms.

So the ones that we just described, if they're not ovulating, that can make fertility harder, but they also have general health issues that present in a metabolic way.

So that's where the lifestyle component can be so critical. So these patients may present with weight health issues. They're gaining weight very easily.

They're having a very tough time getting shedding it. High cholesterol, even in young patients in their late teens and early twenties, seeing abnormal cholesterol panels.

They also may present with sleep apnea of more or less severe condition, even in the setting of a normal BMI. So this was a really interesting study that I read.

So PCOS patients have a higher risk of sleep apnea, irrespective of BMI. development of diabetes and pre-diabetes. So we know that about half of PCOS patients will develop diabetes by age 40, again, irrespective of BMI, and then long-term health risks like heart disease.

They also have increased risk for mental health issues like anxiety and depression that are less well understood, but we think it has something to do with the impact of estrogen and testosterone on the neurotransmitters.

So it's really important to understand both the reproductive health implications, but also these general health implications because that's where lifestyle medicine can have such a critical role.

And I don't know if you want to touch a little bit on that, but I definitely think that's really important for patients to understand. Yes, absolutely.

Touching the little point about it, it goes more to question for you about PCOS, which is very interesting. And I don't know if there is an answer, but I wonder what it goes first, right?

You already have a metabolic disray that puts your risk of PCOS, or is the PCOS per se that is intrinsic, that it will trigger all these metabolic tendencies?

Yeah, and I think it's a chicken or the egg problem. I don't think we know the answer. We also know that PCOS is multifactorial, right? So we know there's a genetic component.

We know there's an environmental component. We know there's a lifestyle component. And so we really have not teased out the exact why, but we do know that we can optimize it.

We do know that being a chronic disease, there are things that we can do to mitigate some of those risk factors. And we also know that PCOS is a syndrome, right?

Polycystic ovarian syndrome. And I think that's really important for patients to understand from a diagnostic perspective. So when a patient comes in, they put the blood pressure cuff on, the blood pressure is elevated with certain numbers, you're diagnosed with high blood pressure.

You go get a blood draw, they check your blood sugar, it's over a certain number, you have diabetes. These are very black and white, very concrete thresholds.

With PCOS, we actually don't have that. We look at the constellation of signs and symptoms and we say, does this patient Meet enough criteria to make a diagnosis of so when we look at the international guidelines published in 2023, we see that they talk about some of the things that we mentioned earlier doing an ultrasound and assessing the ovarian volume.

And the number of eggs or follicles present. They talk about blood work and looking at the reproductive hormones like AMH or anti-mullerian hormones, first time it was included as part of the diagnostic criteria, looking at the androgen panel, including total testosterone and its cousins, I like to say, the testosterone family.

So it's important to understand that there's not one singular thing that will diagnose you with PCOS. It is looking at the constellation of the clinical presentation, both on physical appearance as well as an evaluation on blood work and ultrasound, does the patient have enough things to meet that criteria.

Correct. Yeah. The concept of syndrome is very important. That applies as well to metabolic syndrome. And because it could be little factors, but once we put it together, it's almost like, this is not a coincidence.

Maybe this has one specific name. And on the same chapter, can you please elaborate a little bit more about endometriosis? Oh, sure. So, you know, shifting gears, I think endometriosis, we study extensively.

There's a great, you know, there's a great amount of studies out there now. I think there is also still, it's a little elusive, it's a little undetermined on what the exact cause of why some women get endometriosis and some don't.

Endometriosis Essentially, the concept is that the lining that is shed every month with a period in some women, a portion of that lining backflows through the fallopian tubes and implants within the pelvis.

So it is the abnormal location of normal tissue. The pelvis is highly innervated. So when the patient has her menses and bleeds, those implants bleed, that blood is extremely irritating to the pelvis.

And so that typically tends to be the pain symptoms that are presenting. Now, eventually those, those implants, they coagulate and form what we call gunpowder burn lesions.

That's the classic test question we're all asked. And then eventually it forms scar tissue. So the scar tissue, think of sticky bubble gum on a sidewalk, right?

You step on it, it's going to stretch and stick with you. And so, so endometriosis implants eventually end up a scar tissue in the pelvis. and can distort the normal anatomy.

It can impinge nerves, causing pain, etc. Endometriosis is staged surgically, one to four. It is still considered to this day a surgical diagnosis, and so we really have to look inside the belly looking for those implants.

And what we're looking for is that staging is the extent of disease. And so stage one would be the mildest form, just a few implants. And stage four would be the most advanced stage of disease.

We sometimes call that a frozen pelvis where there's just so much scar tissue, everything is sort of frozen together. Now on ultrasound, if we see persistent cysts of endometriosis on the ovary, these are also known as endometriomas, those can also be an inference or an indication of stage 3-4 endometriosis.

So advanced stage endometriosis can be visualized sometimes on ultrasound by the cysts on the ovaries of endometriomas, but the milder stages may be present and may not be able to be visualized on ultrasound.

Endometriosis absolutely impacts fertility. And there's two big ways that it does that. The first is that the endometrial implants, they release inflammatory substances to the pelvis.

And so they impact the quality of the egg that's being produced in that month. So from the IVF data, we see that embryos that are not from endometriosis patients have a higher implantation or a higher success rate than embryos coming from women with endometriosis.

And so the egg quality is impacted by those inflammatory markers. And then in the most advanced stages of endometriosis, the second way that endo implicates fertility is that it can actually block fallopian tubes, it can distort them with the scar tissue, and it can overtake the ovary with the endometrioma impacting the egg reserve.

So those would be the two ways, molecular or on a biomarker level affecting egg quality, and then on an actual structural level, potentially affecting the fallopian tubes and the ovaries themselves.

Okay. It's a complex disease because we don't know that much. Is there any connection with any lifestyle medicine factors, any lifestyle factors, something that we can do from the preventive point of view?

Great question. So both endometriosis and PCOS, when I'm counseling, they're very, very different, but they are thought to both be multifactorial in origin.

So they are both thought to have a familial or hereditary component, an environmental component, and a lifestyle component. And they are both considered chronic diseases.

When I say that, what I mean is we don't cure PCOS. We don't cure endometriosis. We simply try to optimize the patient's symptoms. with different medical and lifestyle management.

So from a preventative source, there's really no way to know who's going to get PCOS or who's going to get endometriosis. Certainly if there's a family history, immediately our radar is up and we're sort of looking for that in the patient.

there's really not a good way to predict who's going to get it. Certainly, when we look at the symptomatology of the diseases, once they've presented, lifestyle medicine impacts both in a significant fashion.

So speaking specifically to endometriosis, we know that And I always talk about the anti-inflammatory diet because that's currently trending online.

Endometriosis and Its Effect on Fertility

But really the anti-inflammatory diet, like what is that really? That's really just eating whole foods, unpackaged, unprocessed. And so really focusing on this anti-inflammatory diet, some would also call the Mediterranean diet, right?

But it's really just eating, and you would know this better than me, unpackaged, unprocessed foods. We also talk about anti-inflammatory supplements. So things that could potentially reduce the inflammation from the endometriosis, green tea extract being one of them, CoQ10 as an antioxidant, baby aspirin is another one.

So there's different things that your provider may talk to you about. The studies on those are certainly varied, but those would be some things to mention from a lifestyle perspective.

Weight health is another one. So we know that both PCOS and endometriosis are estrogen responsive diseases. We know that the fatty tissue has an enzyme that makes estrogen.

It's called the aromatase enzyme. And so the more fatty tissue the patient has, the more of that estrogen is being produced. and the more impact and the potential flaring of symptoms that is occurring.

So it's always important to understand the lifestyle piece in the management of these diseases, not necessarily in the prevention of disease. It's fascinating because everything goes back into the same bowl of inflammation.

And that's where everything just correlates and is how can we not disappear because inflammation is there for a survival mechanism is there actually to defend our body.

about chronic inflammation. And of course, we spoke about food. Absolutely. And now we can have another episode on how exercise or movement, how stress management will absolutely make an impact on cortisol and put down your inflammation.

So this is when lifestyle factors play a very important role when you can bring it in into your life. and create as much

as possible an anti-inflammatory state under your control.

So that's very important. I would like to talk a little bit about a healthy pregnancy preparation. So someone comes to me early enough that whatever, she's 28 and said, I just got married and I would love to start preparing myself.

I'm thinking to have a baby anytime in the next one year, but hi, I'm just happy at whatever happens. How can you help me? And I'm like, of course we're going to make your life as anti-inflammatory as possible.

And I want you to go and see my friend, Dr. Carolina Sueldo, which is going to have a lot of insights. Yeah. So I think there are, um, and, and this is, you know, I think this is a great topic for discussion because I do think more and more women in particular are really wanting to try and get out in front of the issues.

So I more and more, I'm seeing newly engaged or newly married couples who are not quite ready for kids, but who want to have that conversation. So first and foremost, I'm going to ask them about age.

because if the patient is 25 versus 35 versus 45, the conversation is going to be very different, right? And in a younger patient, the focus is going to be more on optimization of lifestyle, supplements, you know, appropriately tracking menses and timing intercourse once they are ready.

So the focus is going to be more sort of a long-term plan. If the patient is over 35 or borderline 35, one of the pieces that we will introduce is do we wanna talk about fertility preservation?

So making eggs or freezing eggs or making embryos to freeze so that, God forbid, you guys do have difficulty in a year or two when you are ready, at least you have these eggs or you have these embryos from when your eggs were in their most optimal quality.

So I think that's a key important thing. So maternal age will always be the number one driver of that discussion. Let's assume that there's no risk factors.

Let's assume it's an otherwise healthy couple with no known issues. The focus is going to really be around lifestyle. So talk to me about your nutrition.

And really, I would probably send them to you first. Like talk to Paola about your nutrition and what's your hydration? What's your exercise routine? What is your sleep?

Right. So I have another friend who says sleep is the forgotten pillar of health. And like, are you really having good sleep habits, good sleep hygiene?

And then what are your typical stress levels? Right? Are you getting on a plane every week to go travel somewhere and that's potentially going to have an issue or not?

Are you a night shift worker? Right? Which there's really great data on that. So what is your typical stress level? And really focusing on sort of just taking that inventory.

We also talk about just a standard daily prenatal vitamin. with at least 400 micrograms of folic acid to make sure that folic acid store is replenished for when you are ready to get pregnant.

The other thing would be things like vitamin D, a blood count. Are you anemic? You know, many women today, I'm finding are vitamin D deficient and anemic.

And so we want to make sure those stores are replenished before pregnancy. And then the conversation around when would testing be appropriate? And so this is a myth that I would love to dispel is that if you see a fertility specialist, you're committed to testing and you're committed to IVF.

And really nothing could be further from the truth. And so testing is really about having the information and

empowering yourself with that information.

For some patients, they're like, you know what? I don't even want to go down that road. As long as everything's looking good, I'll come to you in a year.

Some patients are really anxious, you know, maybe they've been trying for two or three months. It's not happening. Everyone around them is pregnant or having babies and they're really getting anxious about it.

And so for that patient or that couple, it may make sense. Like, let's do a human analysis. That's relatively non-invasive. Maybe we talk about doing a blood test, right?

Maybe plus minus, we check your uterus and fallopian tubes just to see and make sure. And then you say, okay, everything's normal.

Preconception Planning and Fertility Preservation

We're going to go back to trying and then we'll come back to you in six months or whatever it is. So it's really about. Empowering the patient and empowering the couple and understanding that data or the data points you obtain from testing doesn't necessarily say, okay, I went to Dr solo.

Now I have to do IVF. No, I went to Dr. I got all this information. We were actually timing intercourse wrong. So maybe we don't do testing. Maybe we actually time intercourse right for a few months.

and then maybe we do testing, and then maybe we keep trying. So I think the plan should really be tailored to each couple's needs. And some of that is gonna be driven by age.

Some of that is gonna be driven by underlying risk factors. Have they had surgery before? Maybe they had an STD in the past, so there's a risk factor for tubal disease.

So every patient's case is gonna vary. But I do think, again, I'm a firm believer in this concept of self-advocacy and empowerment, because I do think it will equip you to make the most informed choices.

Correct. Fantastic. I agree with you with that preventive new generation. I'm seeing it too. It's incredible because I'm very passionate about women's health.

So I encounter a lot of women with perimenopause and menopause. I became menopause society certified because I wanted to know every little detail. I wanted to do it right.

And it is a world on it. It's not just the replacement of hormones because At the end, we know it's a physiological stage, but it's just to understand how we can balance the hormones and how every individual needs different stages, right?

So now the next is, because you mentioned at the beginning, how women on this generation are having babies older, right? 35 plus, 40 plus, after that ovarian aging is starting to happen.

And there might be some overlapping symptoms of perimenopause. So I can see how it must be like a big paradigm for you of, okay, let me put together these hormones.

Some things are happening in a physiological way, but I need that to stay in the fertility reproductive way for me to arrive to the objective of this woman have the perfect environment to have a baby.

So how would you approach a case like that? Yeah, so again, I think it comes back to understanding and educating. And so we know that the average age of menopause here in the United States is 51 years old.

But we also know that this perimenopausal transition can last anywhere from 7 to 10 years. So as early as 40, 41,

42, Patients may start to experience symptoms.

And typically, what we will see is that a patient is having regular menstrual cycles, no symptoms, and we start to see the hormone levels are declining.

So the egg reserve is starting to go down. At some point in that transition, we will see that the levels continue to decline, and now the cycles are starting to become more erratic.

ovulation is becoming less predictable, there's more dysfunction in the menstrual cycle until eventually the egg supply is completely depleted. We have complete cessation of menses and the hormone levels are consistent with menopause.

Now, it depends on the female's objective of what we're trying to accomplish, the treatment approach that we're going to have. So if it is a patient that is symptomatic, even if she's still menstruating, even if her hormones are normal or normal-ish for her age, I'm still sending her to a menopause certified provider like yourself.

for treatment and management because that patient deserves and benefits, right? We now have mortality studies on this that the benefits that come with hormone therapy are vital for the patient's longevity and lifetime and lifespan.

And so really making sure early intervention is, is happening is critical. So if, if pregnancy is not desired, patient comes to me, she's like, look, My doctor's saying my hormones are appropriate for my age, but I'm still menstruating, so there's really nothing that they can do.

That is actually not true. And there's a lot that can be done, both from a integrative or lifestyle standpoint, as well as from a medical management standpoint.

And so finding that provider to work with would be really critical. Now, if the patient is seeking pregnancy, that's a completely different conversation.

Why? Because in the current paradigm of medicine, as a fertility specialist, I'm only able to work with The eggs that a patient has or the eggs that a patient produces.

I am not able currently anyway, there's a ton of research out there and that's an episode for another podcast day for another day. But there is so much bench research out there now that's trying to change that paradigm.

How do we slow the ovarian aging process? How do we reverse the ovarian aging process? But none of it that is considered currently is the standard of care.

So currently the egg loss is unidirectional. So if a patient has one egg, if she has five eggs, if she has 10 eggs per month, that is what I can work with as a fertility specialist.

I don't have a way of increasing that number. Okay. And so really depending on maternal age and depending on the egg quantity, right, because those two things are going to reflect quantity and quality, that's going to allow me to then counsel the patient on the best approach because Yes, IVF is super successful.

The technology has advanced dramatically, and we are now able to offer very reasonable pregnancy rates that we were not able to offer even 20 years ago, but it's still not 100%. And it's still impacted by maternal age and the quality of the eggs that we're working with.

So. Again, another myth buster would be, you know, I'll just do IVF and I'll just get pregnant. So I'm going to try all of these things for the next year.

And if none of it works, then I'll just do IVF and it'll just work. And in best case scenarios, IVF can offer a 50 to 60% pregnancy rate. There's still a 40 to 50% of the time.

that it is not successful. And so patients need to be aware of that and need to understand the limitations of the treatment options that are available to them.

So do I do IVF? Yes, I do a lot of it. It is very successful. It is the most successful technique that we have available at our disposal today, but it is absolutely going to be predicated on the patient's age and on her egg reserve because I can only work with what the patient has.

And so really making sure the patient understands that and understands the viability around the likelihood of success. So then she may choose, okay, yes, I want to try with my own eggs or maybe I don't.

Maybe I want to consider a third party option with an egg donor or a donor embryo, or maybe I'm not doing IVF at all. Maybe I'm going to explore adoption.

So counseling, and again, this comes back to the self-advocacy and empowerment keeps coming up in our conversation because When it comes to fertility, and I'm sure the same is true in lifestyle medicine, finding the right provider for you, and I'm not saying I'm the right provider for everybody, but finding the right provider for you that is really going to hone in on what makes sense for your case and what is tailored to your particular case and that you feel understood, you feel heard, your questions are properly addressed.

All of those things are going to be very important as you navigate those decision-making processes. right that's a full loop again it's when you have the knowledge we put the ingredients on the table you have all those ingredients but it's your recipe you know exactly what is it that you want to make but i'm going to show you everything that it is available and ultimately you're the one making the decision informed decision this is really the new medicine that we're practicing paternalistic medicine is over and that's very important that self-efficacy that you love word, I love it too, because it is about that.

And almost you have to teach the patient per se that they are the only owner of their own life and health. So they are the only responsible of what happened to their bodies and what the decisions that they make for their good.

but if they don't know how they're going to make decisions, right? And that's when the patients come. And again, this is the whole story about awareness on menopause and pretty menopause and how the case that you just mentioned, that is many women in pretty menopause, I would say 80% of their providers dismiss them because they already have normal hormones and they are still having periods and it's so wrong.

We're trying now to just clean clear the noise and showing the patients that there is evidence there that is not true and they might be some benefits on starting something early.

I just thought about a utopian case of yeah suppose I come to Dr. Sueldo I'm I'm 34 I haven't I haven't yet decided what I want to do with my life, but I maybe I'm considering to be a mother in the future.

So I'm going to say before that, over an aging, I'm going to come to you and I would love to freeze my eggs, right? So someone else told me you have to know this, your best quality are there.

And again, I understand that we are not saying that a 38 year old woman doesn't have good quality, but it's just whatever the standards were decided because we are assuming.

So, and I come and I freeze them. And then it happened that years passed, but I'm now arriving to that stage where my hormones, my estrogen, everything started bleeding and maybe my environment at the next stage, which is creating this nine months home for this new being.

might not be at the perfect optimal stage for four months. So how would you approach that? So I come back and say, okay, I think I'm ready. And I want my eggs and let's just start trying with my own eggs.

And now I'm 14. Yeah. So yeah, that's a great question. Thank you so much for asking that because when we talk about my ability to get the ovaries to respond and that I'm dependent on the eggs that are present, The same is

actually not true for the uterus.

So the uterus is the inner lining has glandular cells. They are responsive to hormones. So if I give you estrogen, that lining is going to thicken up.

If I give you progesterone, it's going to do something else. If I take estrogen and progesterone away. that lining is going to shed. And then the muscle layer of the uterus is really mechanical, right?

It's really meant to contract and stretch based on whatever the current conditions are. And so even in women who are perimenopausal and menopausal, we can actually get that uterus to prepare properly with the use of external medication.

So even if she's not having her own regular cycles, by giving her external estrogen, most of the time we are able to prepare that uterus properly To receive an egg or an embryo actually better said, and so if that patient froze her eggs at thirty four.

What that would look like is we would then unfreeze the eggs inject them with a sperm. create embryos and then put those embryos back into a uterus that's been prepared with both estrogen and progesterone.

And she would have a 50, 60% chance of pregnancy because the age of the egg is 34. And so really that egg free, and this is something I'm so passionate about.

I actually froze my own eggs and have sort of my own lived experience with it. the ability to quote unquote freeze time. Again, I never want to over promise.

Egg freezing has its own limitations. It has its own pitfalls. So patients shouldn't sort of just do it and forget. But it was really revolutionary and it hasn't been mainstream that long.

ASRM, the American Society of Reproductive Medicine, only withdrew the label of experimental in 2012. So it's really only in the last 12, 13 years that this has become sort of standard of care where we have been able to give women the option to freeze the eggs and suspend them at the time of the freezing.

So 28, 32, 35, 38, whatever it may be. And then go back and use them later in life.

Perimenopause, Egg Freezing, and Final Takeaways

Right. Um, great story of a patient of mine and I'll, I'll, you know, use some data, but basically she froze eggs with me under 35. And I got a message from her many years later.

I mean, I think at that time she was maybe 42, 43. She said, because of you, I was able to have my now two year old son. And she had a little beautiful baby because she had frozen eggs way back when.

And so again, it's not a guarantee. It has its own limitations. You have to be properly informed and you know, all the things that we always talk about with every medical intervention, but it has been truly revolutionary in what we have been able to offer women in terms of delaying their fertility or postponing motherhood.

Yeah. That's modern medicine without doubt, right? Because that's almost like a wish that you have in life that you can just maybe and put it apart and say, maybe I'm not closing the door, right?

And maybe in the future didn't happen, but at least you have the option. You mentioned on and on. Don't come to me when we can not turn back time. Yes.

And, and that's, that's the message from my side. Takeaway point is Dr. Sweldo is there as a preventative fertility doctor. And he doesn't only see couples who was, they've been trying for more than a year.

No, this is about almost women's health and the production. It is part of a woman. It doesn't have to be obligatory at all, but it's something that gift that has been given to us.

And we decided we'd wrap it around rapid, but Don't try to unwrap it in a time that it might be not available to us anymore. That would be my takeaway to my audience about today, especially having such a highly specialized physician like you and so passionate about it.

Thank you. It creates a holistic approach, a holistic approach on this is how we all should be practicing. What would be your takeaway? What is your take-home message to Dr.

Sueldo? So my takeaway message, I mean, I think I like beat to death the concept of self-advocacy. So I think really my takeaway for women, especially for your female audience listeners, but also for your men, it's really important that everybody understand that the concept of the biological clock is real, that no matter how fit, healthy, good sleeper, eat cleaner, all the things that you are doing, that the age component in fertility and reproduction is real and that educating yourself about testing, educating yourself about fertility preservation is really a way for you to empower yourself in your journey to parenthood.

Beautiful. Well said. Well, Dr. Sueldo, we are about to wrap up our podcast. I'm going to invite you in the future if I'm able to take a little bit of your minutes, which this woman is very busy and she was very generous with her time for this podcast.

Thank you. And please tell our audience how they could reach out to you, how they can find you. Yeah, absolutely. So I am currently practicing in Fort Lauderdale, Florida.

Sabo Fertility Center is a boutique fertility clinic, but I'm also licensed in California. So I see patients both in California and Florida. Some fly out to me also internationally.

The best way to find me would be through our website, sabofertilitycenter.com or on social media, Sabo Fertility on Instagram and Facebook. I also have my own Instagram and Facebook, Dr.

Carolina Sueldo, so we can put that, I guess, maybe later in the show notes. But yeah, social media or website would definitely be the best way to contact us.

and what a delight. With this, we end our episode on lifestyle and fertility. Thank you for staying with us and I'll see you on my next episode. Bye. Thank you for tuning into Dr.

Talks. We hope today's episode has enlightened and inspired you on your path to optimal health. Each day is a new opportunity to make choices that empower your well-being.

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