71 - Hyperandrogenism
BioBalance Podcast — Dr. Kathy Maupin and Brett Newcomb
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Dr. Kathy Maupin: Welcome to the BioBalance Healthcast. I'm Dr. Kathy Maupin.

Brett Newcomb: And I'm Brett Newcomb. And today we're going to be talking about a recent article in the Journal of Gender Specific Medicine.

KM: My favorite journal, by the way.

BN: Why? Tell me about that. That's an interesting story.

KM: Gender Specific Medicine examines diseases of both genders but they acknowledge that diseases are gender specific. And that there are differences in illness that happen in men and women.

BN: The same illness?

KM: The same illness.

BN: But women experience it differently than men experience it.

KM: And drugs we experience different; we metabolize our drugs differently than men do, or I do, women do.

BN: And this journal was originated by whom?

KM: It was originated by the female doctors in the Harvard Medical School program. They wanted to have this gender specific medicine, and they went to the powers that be at Harvard and they could not get any funding for a women's journal. They were all women who wanted this. So they then sent out a request to everybody, the surgeons; I was in the American Academy of Surgery in terms of just being somebody who gets their journal. So I got their journal, I got a request for money from them, from the American College of OBGYN doctors, I got a request through that, for money so I sent them $300 or something like that and all the other women in the United States did too and they started this journal. So they went from that journal to now there's a conference every year, it's in Europe too, gender specific medicine conference. So they've now expanded to people who do research that is gender specific.

BN: So they went to the men that dominated the system and asked for the money for a journal and were told no so they just created their own playground.

KM: Right, they just got donations. And we got a new journal that's awesome. I get lots of articles every month out of that Journal.

BN: Kind of like women asking to be on the panel at Daryl Isis subcommittee meeting on contraception last month.

KM: They weren't invited.

BN: Because they don't know anything about contraception.

KM: Right they can't possibly understand it.

BN: And that's another conversation for another day.

KM: And there were no doctors.

BN: No doctors, but a lot of religious people.

KM: Yeah. that's right.

BN: So today we're going to talk about a specific article in Gender Specific Medicine about hypoandrogenism and that's a big mouth full of words that actually is an older term for a term that Kathy has originated in her work that will be coming out and discussed in her forthcoming book called TDS.

KM: Testosterone Deprivation Syndrome. And basically that is an inevitable syndrome for both women and men but it is something that happens in women after 40 where we are making too little testosterone from our ovaries to actually feel good and be healthy, so we hit a wall. Everybody's wall is a little different, but we all will hit that wall. The age that we get it is a little different. If your ovaries are removed you hit that wall immediately no matter what age you are. So we need to have testosterone just like men do. And interestingly enough, women have three times as much testosterone in their bodies when they're young as they do estrogen. But they still don't call testosterone our hormones. It's always just your hormones.

BN: It's always a male hormone.

KM: Right, a male hormone. So even though really we need it just like men, it has many effects of preserving our brains and our bones and our bodies.

BN: Well that's important to say. When you say testosterone, people tend to think one of two things. They tend to think of these no neck monstrosities that lift weights and bulk up, and they tend to think of sex. We'll talk about later today they sex related aspects of replacing testosterone. Pros and cons. Before that, there are issues for replacing testosterone. And as you said everybody will lose their testosterone. It's part of the decline of aging that leads to complications like quickness of thought, general satisfaction of mood, the sense of well being that people have.

KM: Motivation is even a testosterone dependent emotion.

BN: Absolutely.

KM: So people who aren't motivated anymore because they're 45 or 47 (in females), it's a lack of testosterone.

BN: And it's fascinating to me, and I know this is anecdotal and not scientific. But if you watch television there are lots and lots of ads out now for super tea of one kind or another for men and they show men at work who don't have any energy and who are just kind of "flat". It's not focused on the sex it's focused on coming alive, having the energy, being alert, being functional, and being yourself. And they say well there's this one guy at a party he's like a shadow, a waif, just floating around. And he takes a pill and everyone's going like "Hi Bill!" And they don't show any of that for women.

KM: No. They don't even acknowledge really the general medical community, except for works like this and books like this, that testosterone is something we need or that it was a prevalent hormone before menopause or before andropause really.

BN: And that brings me back to the point. I usually start at the back on these articles because that's where they write their summaries and scientific articles are usually tedious to get through so I just want to get to the point. And at the end of the article there are some conclusions that they make and I'd like to reference one of them, it's the point that you just made. It says "the emphasis must be made that no specific testosterone product is approved for use in women in most countries yet historically it has been and continues to be in wide spread usage for women.

KM: Because women have a way of getting what we want.

BN: I can attest to that.

KM: We do. I mean if we can't go through the door, then we're going to go through the window in things that are really important to us. And this is important to us. We want to be as well as men want to be. And we spend much more time trying to be well, going to the doctor every year. Usually women do.

BN: Women do and men don't.

KM: Yea and men don't. And women are trying to keep their families well in addition to keeping themselves well. So we spend a lot of time with healthcare. And we read all of this stuff, like what we are doing today. We read, we listen, we talk to our friends. And when we find something that really works for them and they feel better and they have the data behind it. They usually come in and go here are the articles that my other doctor gave me. Which is great.

BN: Yeah, I used to laugh doing therapy over a 30 year period with families because men would come in and I would try to get a history of what's been going on in your life. And men classically don't know what illnesses they've had, what medicines they take, when or how they were sick, and their wives will have all that information.

KM: I always ask to bring wives with them.

BN: They'll say oh no, you had measles when you were 12 and you had this and you're allergic to that, and the men are looking them like "I didn't know that".

KM: Because we're taking care of you.

BN: So if there's a divorce or a death and the woman is gone, and the dad doesn't have a daughter to come in and take on that responsibility, he's really in trouble.

KM: And that's not every guy. Because I take care of men as well, and God love them, they come in and some of them are very compulsive and they have everything written down and some of them come in and I start asking them, I look at their handwriting and it looks really feminine. And usually I say "did you fill out this form of your symptoms?" And they say "no, my wife did." So they don't even know they're tired, their wife thought they were tired, their wife thought they had a bad sex drive. So their wife filled it all out and they're coming in and handing me the paper and so I have to go back and say "okay, let's see, these are your symptoms lets go back over these."

BN: Women think about it and they're aware of it, and they concentrate on it. And so when it's not available to them in the classic delivery systems you go find a away to get it.

KM: Right and it's not like we're getting something like anabolic steroids, we're getting Rx's that are from pharmaceutical pharmacies that are making it up or we go to our doctors and ask for what we need. Like testosterone.

BN: Right, it's an off label use of an FDA approved medicine. And as a physician it's within your legitimate, legal, medical prerogative to use an FDA approved drug in an off label way.

KM: Right, we've talked about this in the past. There are many drugs, in fact every doctor uses some drug off label for some reason because there are many reason that the FDA won't approve a drug for certain use. Sometimes a drug doesn't have a patent so no one's going to spend the money to make sure

BN: To get it approved.

KM: To do the study to prove that it works for a certain thing. And sometime they've approved it for one thing and they figure we're going to sell it off label anyway so why should we have to go back and spend another million dollars to prove that it works for the second use. So testosterone is an FDA approved hormone when it's in a pure form, when it's compounded by an FDA regulated pharmacy, which is what we all use, then we can write the prescription, the pharmacy can fill it.

BN: Right.

KM: So that's under our licensure. We can do that. That's how medicine changes. That's how we get these

BN: That's how information base grows. Hey this works.

KM: If women weren't in medicine I don't think we'd see testosterone for women for a long time, because this is huge. Women want to have this for ourselves as well.

BN: Yes, another conclusion that this article makes. By the way the article is called the "A Rational for Treating Hypoadrogenism in Women" by Susan R Davis. And it's in the journal of Gender Specific Medicine. But the conclusion says "no woman will die from testosterone deficiency, but if the link between testosterone depletion and depression of well being is established in addition to the effects on libido testosterone therapy will be a therapy to be considered by all women." So her emphasis here ,because there are already known positive outcomes in regard to libido, so her argument is there are other factors that women are concerned about like mood and depression and bone density and breast cancer, that if they get testosterone, and these links are being investigated now and being confirmed, that this testosterone replacement is something every woman out to think about having.

KM: Since medicine has found all these interesting ways to make us live to 100 this is the way to live well to 100 with fewer diseases and fewer medicines. Because if you take testosterone and you eat something with calcium and take vitamin D you make bone. You don't have to take Fosomax or one of those other medicines.

BN: Which have big side effects and cost a lot of money.

KM: And aren't as effective at making really thick strong bone but they make bone that's thicker than you would have had before but it's not as good as testosterone.

BN: Right, more brittle.

KM: More brittle.

BN: So there are some terms that are used in this article, it is a scientific journal and the presumption is that you know these words. So there are a couple of terms that I'd like you to define and make distinctions in. One is free testosterone from bound testosterone. Can you explain the difference there?

KM: Our ovaries make testosterone and put it into the blood stream, and then in the blood stream we make proteins that bind up some of our testosterone. That inactivates it. So bound testosterone is inactive. We have no place to store testosterone except in our blood.

BN: So until it's reabsorbed into the body it just floats in the blood stream.

KM: Right. And it's our backup plan. We have testosterone bound up, it doesn't work, and it can't attach to any cells.

BN: Can you unbind it?

KM: Well, yes you can. But you unbind it by controlling the binding agent which is a protein, sex hormone binding globulin, which is a protein made in the liver. And so that binds it. So we produce something in the liver that binds the testosterone made in our ovary, they join in the blood stream and it's invisible. Your body doesn't see that testosterone. The only testosterone your body sees is unbound or free testosterone. Free of binding is what it means. Free testosterone is active. So when we're looking at testosterone, we look at the total representative number or concentration of testosterone in our body which means the bound up or inactive testosterone and the free which is the active. But then we sort out the free testosterone and that's really a reflection of how you feel, of the testosterone that's working in your body.

BN: This article says that only 1 to 2 percent of the total testosterone in your body is free. The rest of it is bound by this sex hormone binding globulin.

KM: Sex hormone, binding globulin.

BN: SHPG. So that means that all of the good feeling, and libido increase and positive outcomes that come from having enough testosterone are really a result of that one to two percent of free testosterone that's floating in your body.

KM: That's right and rarely do doctors look at free testosterone. They look at total. But I measure it because I just ask for both total and free.

BN: That's right and there's a test that will give you that.

KM: And I know that on every patient. And so I can tell if they have a lot of biding. If they have a lot of binding and they have very little free then they don't feel well. It's as if they don't have any. So the only way really to combat that is to increase their dose so that the pie gets bigger. So that that little slice of the pie gets bigger. So that the pie of total testosterone enlarges so that that piece of pie contains more free testosterone. And that's how we adjust. There's no other good way to adjust. There's no way to unbind testosterone from a doctor's stand point.

BN: OK so you can't unbind it you can just add to the total volume of it.

KM: Right and since the total number really doesn't matter because it's invisible, it's just the free that matters. We have to order them together but really all I want to know is what the free is.

BN: So the free is what you're concerned with?

KM: Yes.

BN: This article goes onto say that the mean circulating level of testosterone, the average level of testosterone circulating in your blood stream, declines gradually within increasing age. There's not a critical event that causes it to drop, like an injury or an illness.

KM: Unless you have your ovaries out.

BN: Unless you have your ovaries out, so we're talking about pre-menopause here. But it says that such levels in women aged 40 are approximately half that of women aged 20. So there is a slow decay rate throughout your lifetime. And if it's not replaced once you hit your 40's and once you go through menopause then you have all these adverse experiential awarenesses of not feeling positive, not feeling energy, not having alertness, not having positive mood.

KM: Feeling depressed.

BN: And not being sexual, feeling depressed. And that those are directly attributable to the amount of free testosterone in your body, not to life circumstances. I mean life circumstances enhance them in one way or the other. But this is a medical result of this absence of testosterone.

KM: It is. No you're not crazy. No you're not crazy, you really have a reason for feeling the way you feel. Because most of the time we're written off as being crazy or hysterical or something.

BN: Well, and there are two critical factors for that that I want to mention that are in the article. There is a lot more in the article than what we're talking about. But one is the replacement of estrogen and testosterone but primarily testosterone directly increases or improves the amount of bone density. So as you age bone density becomes a critical factor.

KM: Yes.

BN: If you have elderly parents or grandparents or friends, one of the greatest issues for them as they get older is the issue of falling. And so for many of them, the trigger event that leads to their death is they fall and break a hip or break a leg. And that has to do with bone density and the structure of the bone. And so if you can prevent the bones from becoming brittle and weak than they're not going to have the balance and fall problems that you associate with getting old.

KM: Well testosterone affects your balance. And I hear that a lot especially from men. Because women feel like they shouldn't have balance anyway but men know they should have balance, because of sports. But women don't usually complain about balance issues, but men do. And when we give them back their testosterone, that affects their balance and their balance comes back. So it's kind of a twofold thing. Testosterone deprivation causes you to lose your balance so that you're going to fall.

Because how many times do you fall. We don't fall very often when we're well and we have our testosterone. But older people do. So no testosterone causes lack of balance, lack of balance causes falling, and then if you're falling on thin bones because you don't have estrodial or testosterone, then you're going to break a hip and that may lead to your death. So those are the things.

BN: Yes, they break their hip, they can get out of bed, they get pneumonia and they die.

KM: And they can't get out of bed because they don't have any muscles.

BN: Right.

KM: And it's related to every stage of this very old age aging process. It's the thing that really makes us unable to live on our own.

BN: And you have people that come in that are in their 70's and even in their 80's that start this regimen then and receive improvement, but it's better if you start it younger.

KM: Yes it is and one of the things we notice and we know is that we stop thinking really well after about 65.

BN: Mine started after puberty.

KM: Well you're a special case; you're in that one percent. But most of us stop thinking well when our testosterone hits a critical level. Well that's just a warning sign. Because if you go without testosterone for 10 years you risk of Alzheimer's goes way up and if women go without estrogen, that's another 10 years, if we take it, that can delay it. So let me sort that out. If we take estrodial and testosterone from the time that we lose it and in that first 10 year window, then we can delay Alzheimer's. Women can delay it 20 years by taking estrodial and testosterone.

BN: And that's if they're genetically predisposed to getting it.

KM: Right, if you were going to get it at 75, or any kind of dementia, if you were going to get it at 75 then you're going to get it at 95. Something else will get you by then maybe, before you get it. So the whole idea with illness is to delay an illness until you die of something else. That's the whole idea of prevention of illness.

BN: Can we talk about sex.

KM: Oh yeah, my favorite subject.

BN: I want to talk about sex with regards to testosterone. Because there is so much interesting information out there in terms of pluses and minuses. Quickly going through, and I won't read all of this. What the article says is that women who replace

their testosterone will want to have sex more frequently, that the blood flow to their vagina and the lubrication of their vagina will improve.

KM: Even without estrogen it improves.

BN: Yes, with just the testosterone. And that orgasms improve in frequency and kind. So there are some experiential benefits from that that a lot of people would say "well that would be a good thing if that could happen."

KM: That's usually the first thing my patients come back and say to me is "oh my gosh! My sex life is amazing!" I mean that's the first thing they say, because it had gone away.

BN: Yes, it had gone away and become nonexistent or mechanical. And now it is vibrant.

KM: Just like it used to be.

BN: And it's a direct result of replacing the testosterone. But some people are concerned about side effects. So let's talk about what those are. The article says the potential masculizing effects of androgen therapy, which means replacing the testosterone, include the development of acne. Hirsutism, which means facial hair, deepening of the voice, and excessive libido. Now I don't know why excessive libido would be a masculine trait.

KM: I don't know either.

BN: But for argument's sake, we'll allow that.

KM: Okay.

BN: It says these are cosmetic side effects that are rare if super-physiological hormone levels are avoided. In other words if they don't overdose you to the max and really alter your persona by this influx of chemicals. If they do the regular amounts that you can test for.

KM: If we get the blood levels that are in range.

BN: Right. Then most people don't have these side effects. And the ones that do, the side effect that you hear the most about is facial hair.

KM: Right, and facial hair, we battle facial hair in most patients except the very blond people who never had facial hair so we battle that with testosterone. We tend to make more of our testosterone into a metabolite called DHT which gives us facial hair. So we block that conversion with Spironolactone, which is a diuretic. It blocks the facial hair.

BN: And the women that do have it, do they have like just a hair will grow here and a hair will grow here?

KM: No, it's usually like peach fuzz; I mean it usually looks kind of like fuzz.

BN: Almost like an adolescent male who hasn't started shaving yet?

KM: That's right. And some women that had a lot of facial hair when they were younger get facial hair again because their testosterone back. So if they had to wax or bleach or something they can now wax, bleach, or laser, or we can give them to slow the growth of their facial hair. So that's not a deal breaker, and it shouldn't be, that's a very minor thing compared with all the benefits you get from testosterone.

BN: And it's treatable with the diuretic in most women.

KM: Spironolactone is not a very good diuretic it doesn't really make you urinate a lot but it does stop facial hair in women. They found that out accidentally and we've been using it ever since. It's a very old medication.

BN: The other side effect conclusion this article makes is that if you set aside these cosmetic issue, like acne, deeper voice, higher sex drive, and facial hair, that there is no doubt to support any argument that says there are adverse metabolic effects on the human beings for taking testosterone. So it's not going to lead to any kind of corruption of the system or breakdown of the system. There aren't side effects that are going to hurt you for taking testosterone.

KM: It's simply not dangerous. And I have to say that because of the misuse of anabolic steroids, everyone has the idea overall, even doctors think that testosterone's dangerous. But it really is not. I mean these are researchers, they compiled the study with tons of research and references, and I see it every day, people are healthier, not less healthy with testosterone. But that belief is going to take a long time to get over because anabolic steroids and replacing testosterone in people who don't have it are two separate issues.

BN: Well that's why you're on your crusade to warn people about hormone replacement and especially about replacement for the replacement of the hormone testosterone.

KM: Well somebody better do it, so I guess it's me.

BN: Well I think it is you because you are the one with the research and information to back it.

KM: Well and I want women to feel like they've got some backup for how they feel. And I don't want them to feel crazy when they're not, and I don't want them to feel hopeless when they're not.

BN: Well you have talked about, and I have talked to a number of your patients, and I've talked to my own clientele base. So many women who've gotten to that phase in their lives who have gone to their doctors and said "I'm concerned about this,

especially the loss of the libido" that they're told it's stress, it's in your head, it's part of getting older, get used to it.

KM: Yeah, live with it.

BN: Yes, and the message is you don't have to, you don't have to do that.

KM: Well and then we see the messages on television. Women aren't blind, they see that they're giving testosterone to men and so they say "well why do I have to live with this?"

BN: Right and what's going to happen when men go around hyper-aroused and ready for sex and none of the women are responsive?

KM: Right. I would think that the men would have a secondary gain in getting their wives to have their sex drives back.

BN: If not primary gain.

KM: Yes, primary gain. There should be some interest in men helping their wives recover and in doctors helping their patients recover and not feel like they've lost their minds.

BN: If only they had the information.

KM: That's all they need.

BN: And in order to get this information, please tell all of your friends to watch these podcast because they're out there you can find them any place and anytime on the net. All you have to do is look for:

KM: You have to go to podcast@biobalancehealth or you can go to my website www.BioBalanceHealth.com or you can call my office at 314.993.0963.

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