

#### **44 - Dementia And Alzheimer's Disease**

BioBalance Podcast — Dr. Kathy Maupin and [Brett Newcomb](#)

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Dr. Kathy Maupin: This is episode 44 of the BioBalance Healthcast. I'm Dr. Kathy Maupin.

Brett Newcomb: And I'm Brett Newcomb. And today we're talking about dementia and Alzheimer's related issues. Worldwide it is estimated that 35.6 million people suffer from dementia in some form at a worldwide cost of more than 60.4 billion dollars, which is greater than the gross national product of all but about 17 countries.

KM: It's hard to think about that number, it's so huge.

BN: It's huge. And it's a serious concern and it's a concern that many of us become aware of when we go through andropause or menopause and we start to hit that place where we experience memory loss. Short term memory loss we think, or we hope that's what it is. But we're afraid of the consequences of that.

KM: Short term means you can't remember something just having been said. I mean a sentence that was just said, but it's not short term in terms of, you mean temporary.

BN: Just duration.

KM: I'm thinking about what you can remember. And that's what we're talking about. When patients come into my office, they do the questionnaire and when they come in they don't expect for me to talk to them about their memory. But that's one of the key things that I've found as I've been doing BioBalance Health. We've been giving people hormones, estrogen and testosterone and their memory comes back. And a lot of women now talk to their friends because their memory is so bad and they come in and say "I need to have my memory back, I can't work anymore I've quit my job."

BN: But it's more than an anecdotal awareness. It's more than just somebody saying "oh by the way since I've started taking this, I feel better in terms of my recall or my memory lapse." There's data that supports it.

KM: Oh I mean it's drastic. You mean It's not just something I've just observed. That's right, but no there's a lot of data but it's not in the OB/GYN literature where the hormones are usually looked at for women. It's not in the endocrine literature in general. But they don't deal with neurologic function. It's in the neurology literature and I have to say I don't usually read neurology literature. But I went and looked for it and found it.

BN: You showed me an article that said there's data out there now that says 29% reduction of risk for dementia among women who take estrogen. And that's a scientific fact that corroborates what people come in and say anecdotally. You know, "I've been taking it, and I'm better."

KM: That's right. But that's a long term study. What I'm talking about at this point, and we'll talk about dementia later, is that this is just memory, memory that you need. It's like your RAM you need to have it going all of the time. You need to recall people's names, drug names, referral names. When I had my ovaries out, I noticed immediately that I couldn't remember anything. And that's vital for my job and that's one of the reasons why I thought I was going to have to stop practice. Because I just couldn't remember anything. And that for your doctor is really bad. So until I got my memory back, which was about 6 months after my oophorectomy, it came back immediately, because it was such a drastic change. It was almost as if my brain had been starving for hormones to help build the neurotransmitters. And that's exactly how it works. Hormones stimulate neurotransmitters and those are the chemicals that communicate between axons of your neurons. The little end point. There's a little, the chemical is really like, we call it electrical it's really chemical communication, And that decreases without estrogen and testosterone. So when we give that back all of sudden the connections are all being made. And our memory comes right back. And we have a finite time to do that. We have 10 years after we lose our testosterone. And then 10 years after we lose our estrogen to actually replace it and not have permanent loss of our neurons. Because those neurons will die if we don't use them and if we don't replace the food they need. They need estrogen and they need testosterone.

BN: Right, what Kathy's talking about is something that for the scientist among you would recognize the synaptic cleft. Where the nerve endings end there's a pool of neurotransmitters and the messengers leave one end of a nerve and cross that pool and go the other. And the hormones are what make that pool alive. And if you don't have the hormones, it starts to turn into sludge and then things can't get across the gap.

KM: Or it doesn't even have any communication. It actually doesn't even produce the liquid. What you're talking about is as communicative fluid. It just doesn't make it.

BN: Right so there's a ten year window to recover and restore that.

KM: Right without that 10 years after menopause because that's a much more obvious change. 10 years after menopause we don't build those neurons back. We don't regain those neurologic functions. So I have a much harder time if I have a patient whose 10 years past menopause and I replace both their estrogen and their testosterone. They may not get every bit of their memory back and their workings of the brain like organizational skills and instant recall of names. They may not have that back so there is a finite time you have to replace these and it's very important to do it at this time, because if you don't you may lose it.

BN: Well it's interesting that you say organizational skills and rapidity of thought. There's a third dimension that you talk about a lot in terms of women especially, and that's that multi-tasking component. And you argue scientifically that's there a distinction that can be made between men and women in their capacity to multi-task that's due to what.

KM: Well it's been confirmed by many studies behaviorally but it's all that there's a part of our brain that's larger than yours and it's the Corpus callosum. And the Corpus callosum helps both sides of the brain. The logical side, which is the left hand side. And the artistic side, or the creative side or the multi-tasking side which is our left hand right brain. Those two have to work together to multi task. That's what we needed, God gave it to us specifically to take care of multiple children, cook, do all of the things that women were intended to do in the very beginning. Because, if we didn't survive that, we weren't going to survive to be technologically independent, and be able to have jobs outside of the home. We had to live through that. That was a very good adaptation that he gave us so that both sides of our brain would work together.

BN: So the Corpus callosum is like a tube that goes horizontally between the two hemispheres of the brain. And in women it is larger, there are more connective neurons so the data flow back and forth is more fluid. And they're able to switch, they have a more rapid switching system for multi tasking. That's your contention?

KM: That's right. Absolutely.

BN: It's more than your contention. It's the science of it.

KM: It's the science of it. But really I haven't done any biopsy of the brain lately. But I'm reading the articles by the physicians and the researches who do. And that's just a fact.

BN: So all of this begins to become problematic in menopause or what you call for men, andropause.

KM: And what I call for women, testosterone deficit.

BN: And that's where I wanted to go. So talk about the hormones involved, the testosterone and the estrogen.

KM: Testosterone generally in women decreases about 38 on up depending on your genetics. So when your testosterone starts dropping when it gets to a critical level, (it comes from your ovaries), when it gets to a critical level, then that's when symptoms begin and it seems that as testosterone drops different symptoms appear. And one of these symptoms is memory loss or short term memory loss, or the ability to multiple tasks at once. Basically when the testosterone goes down that is one hormone that affects the axons, the neurons, everything that we were describing before. And then women have a second change which is menopause. That happens later after

andropause, sometimes 10 years after. That's a second hormone, that's estrodial. And when that decreases then we lose more memory.

BN: And is that a second 10 year window or do they overlap?

KM: It's a second 10 year window. 10 years after testosterone, 10 years after estrogen.

BN: So it's a 10 year window for each set hormone. In previous episodes we've talked about the glandular system and how they are involved in responding to cues that are hormone cues. Can you talk about the pituitary system and how that works? Because you've said that the ovaries and the pituitary are involved in sending the right signals that effect memory capacity.

KM: The pituitary controls the ovaries. It stimulates the ovaries. And when the ovaries do not respond, when they age, and the pituitary starts increasing its stimulation of the ovaries that's when we get hot flashes, FSH goes up, LSH goes up. Those are the two hormones from the pituitary. The ovaries not responding. When that happens, the ovaries stop making testosterone first and later estrogen, when those two things cycle through the brain they go into your circulation and they go to your brain, crossing the blood brain barrier, which is a barrier that's kind of like sieve or a cheese cloth, something that keeps out the bad stuff, the bacteria and stuff. But hormones, when they're in their free state not bound to a big protein go right through and then bathe your brain in hormones. Without that your brain is hungry for hormones a. And stops functioning as well. It's like you didn't put oil in the car.

BN: Yes, and you know this is interesting to some people who are interested in the details and the specifics. But what you face most of the time are people who come in and say "I'm really losing my sense of self. I don't work the way that I use to work, I don't work the way that I'm supposed to work, I'm terrified of what that means, can you help me?" And part of what we're trying to say here is that there is help. And that doesn't have to be the fear that you live with or the way that you function. And there are scientific explanations that are available that explain the nuts and bolts of how it works. But at the end of the day the message is with hormone replacement therapy, especially with bio-identical pellets, what happens is your short term memory improves, your basic sense of self and capacity improves, your multi-tasking responses improve, and you will that experientially whether you know the science about it or not.

KM: Yes, you don't have to understand it to get better. And so many people are relived who come back to see me after their first dose, one of the things there so relieved about is that they can think again.

BN: Well I have a lot of patients coming to me and they say "I'm coming because my world is falling apart. Because I think suddenly, is there such a thing as adult onset Attention Deficit Disorder?" And I think you have the same experience. Form what you

said people come in who haven't been diagnosed with that, haven't thought of themselves as having that. But suddenly they're too scattered, they can't focus, they can't recall the facts. They drop the ball from the multi-tasking cascade. And they say "I'm going crazy. You know, can you help me with that."

KM: Or they can't just, 'I can't function, what am I going to do'? So what I do is I replace their hormones. And sometimes I do find people that do have ADD or ADHD and they weren't diagnosed because they're in our age group when as children we just were they just told us to sit down and shut up and stop moving around. And stop fidgeting. Fidgeting is ADD. I replace the hormones, the patient gets better in many ways but they still say I'm scattered I can't quite organize myself. And then I ask them if they have piles all over the house. Piles of unfinished things they start and don't finish.

BN: Lists of lists they make?

KM: Right, well I do that too. But truly ADD is something that should be treated with proper drugs and not just hormones.

BN: It's a real legitimate independent issue.

KM: Absolutely. So sometimes I have to send them for a consultation for that because that's not my general practice. But in general they are so relieved and they can do their jobs and they get their jobs back. Many women who come to me have lost their jobs or given up their jobs because they can't think. I had a teacher last week who couldn't think in the classroom. The kids were overwhelming them because they couldn't think on their feet. And she was like a deer in the head lights because she was miserable.

BN: Those are so pervasively real concerns for almost everybody as they get older. But there are more serious issues that are not risk factors for most people. Alzheimer's and dementia. Just very quickly can you draw a distinction among those?

KM: Dementia is a permanent loss of both brain matter and ability to think, but it comes from multiple different sources. You can have strokes that cause it, many strokes, they call those vascular. You can have multiple genetic disorders like Alzheimer's that actually coat the neurons so they can't work anymore. They have goo all over them and they can't communicate, and then the brain shrinks.

BN: Ok, so that's not hormonal. That's genetic and it's biological artifact like a stroke, which may have a hormonal contributor.

KM: Right because if you use hormones, bio-identical hormones, estrogen as well as testosterone, if you use both of those then you delay the onset of many of these things.

BN: So you can buy time.

KM: You can buy time.

BN: If you have questions about this podcast or comments about it, you can email us at [podcast@biobalancehealth.com](mailto:podcast@biobalancehealth.com). You can read my blog at [brettnewcomb.com](http://brettnewcomb.com).

KM: And if you'd like to know more about BioBalance Health or bio-identical hormones visit our website at [BioBalanceHealth.com](http://BioBalanceHealth.com) or call 314.993.0963.

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