THE TUESDAY MINUTE

THIS WEEK'S TOPIC

Osteoporosis: What Your Female Patients Should Know

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What do your female patients know about osteoporosis? Is Sally Field the only one talking to them about it? Here are a couple of word pictures we can use to articulate why they should pay attention to the underlying causes of osteoporosis rather than just treating the symptoms.

When explaining bone density there are two major activities taking place simultaneously, osteoblastic and osteoclastic activity. Osteo refers to the bone but when you hear the suffix -"blast" think build. When you hear the suffix "clast" think chew. Old bones should be chewed up. The osteo "clast" activity will make room for new bones to build, namely osteo "blast" activity.

You see, most of the current drugs and Pharma cocktails slow or stop the osteoclastic activity of bone. Due to these drugs, new bone is built on a foundation that should be torn down. Yes, the data is true that bone density is marginally thicker for the first few years because the older weakened bone is still intact. However, that bone will be weaker and women will be more prone to experience spontaneous fractures after 4 or 5 years.

Ask your patients if they would build a weight bearing wall on wood that has been rotten or eaten away by termites? Of course not, yet the TV ads almost make you feel guilty if you are not taking their bone building cocktails. As Wellness clinicians, we can help patients measure their bone loss, put together a program to feed bones as well as muscle, and then monitor the progress with simple urine tests.

Please remember to remind female patients that they lose ½ to 1% of their lean muscle mass each year, after age 20. If we don't have the muscle strength to counter act gravity, our head which weighs as much as a bowling ball will cause the forward slump associated with old age regardless of our bone strength. That is where we step in to recommend and monitor the rehab exercises making sure the

neck and spine can support the 17 plus pounds of a human head.

Here's a suggestion. Patients may not be interested in maintenance care… hmmm, boring. However many of them are interested in how they look or will look in 10 years. They can relate to therapies that increase their activity level and energy capacity. Let's use the language that patients understand and the end results of what they are looking for, rather than the mechanisms and molecules that are so interesting to us.

Now let's look further at the causes of bone loss and ways to monitor bone health. Osteoblast activity is dominant in women until age 30. At that point a shift occurs and osteoclast activity becomes dominant, though both still occur. By age 40, we see bone mineral density beginning to drop.

Stress causes an increase in cortisol which has a catabolic effect. Whether the stress is emotional, the result of a refined, demineralized diet or trauma, cortisol is increased. Increases in cortisol will ultimately further increase osteoclast activity which results in greater bone loss.

In America today inflammation, metabolic syndrome, and diabetes are rampant and each of these conditions is a major predictor of bone loss. Each of these conditions are also associated with a phenomena described as "relative acidity." The pH of the blood is around 7.34; and if the pH goes below that number, the body's compensatory mechanisms go into play and buffers are released.

Many of these buffers are mineral based. Sodium, potassium, calcium, and magnesium as well as other minerals are recruited from storage areas to keep the blood in its delicate balance. Guess where the storage areas are? Exactly, the bones. Can you see how women in other cultures consume less calcium yet have stronger bones? They don't have the "relative acidity" factor that western women experience.

Knowing osteoporosis is such a major issue, when should we begin monitoring and making prudent diet and supplement changes? Should we wait until major bone loss or fractures occur? I believe every woman 40 years and older should be tested on a routine basis much like we test cholesterol for heart conditions. As the bone is chewed up, proteins are given off. By measuring them in the urine, we can see if there is too much or too little osteoclast activity. This way therapies and dietary changes can be monitored easily and inexpensively. The goal is to get a baseline and then adjust diet and therapeutic suggestions based on the how the body responds.

I have provided a link to a webinar by my friend Donna DiMarco. She goes into detail on how to systematically identify and treat all the factors that relate to bone health. I have summarized many of her suggestions on a chart called Osteoporosis Testing Sequence below.

Nothing against Sally Field, but true bone health is more than just calcium and Pharma cocktails. It's about assessing diet, exercise, trace minerals, hormones, digestion, blood sugar, inflammation, and systemic pH.

I encourage you to take time and become an expert in this area. Women may be a large percentage of your primary patient base. Bone loss is a major issue to them. They take it seriously. By becoming an expert we can be there to guide and monitor their therapeutic progress.

Thanks for reading this week's edition. I will see you again next Tuesday.