THE TUESDAY MINUTE

IT'S TIME TO FEEL GOOD AGAIN

THIS WEEK'S TOPIC

Breast Cancer Screening

"Early breast cancer detection is possible using blood chemistry based on the tendency of cancer cells to accumulate iron."

I'd like to share some new indicators for the early screening for breast cancer. This information comes to us compliments of Dr. Harry Eidenier who is the grandfather of functional blood testing using optimal values to determine health and predict disease. He has accumulated over 10,000 blood tests between 1980 and the present, using what has been called the blood biopsy.

It was Dr. Eidenier who alerted me to an early breast cancer detection possibility using blood chemistry based on the tendency of cancer cells to accumulate iron, which can increase the energetics of a tumor. You see, cancer cells, including breast cancer cells, have more transferrin receptors on their membranes and higher levels of ferritin inside the cell membrane. Estrogen in breast cancer cells significantly increase transferrin production in order to obtain more iron for the cancer cells to feed on.

Another interesting piece to the puzzle is the fact that breast cancer patients absorb more iron from food than non-breast cancer patients, even when both eat the same type and amount of food. This would make sense as cancer cells try to sequester more iron for their growth by mutating normal iron absorption pathways to increase iron levels and creating more transferrin to grab increased serum iron.

And finally, research supports the correlation in cancer patients that they have low zinc levels. Increased levels of zinc have been correlated with low levels of iron. They have a push pull effect similar to zinc and copper or calcium and phosphorous. If levels of zinc are depleted, the opposing mineral iron naturally accumulates. B6 is necessary for zinc absorption, so a B6 deficiency must be ruled out when a zinc deficiency is detected. Zinc is a mineral necessary to make alkaline phosphatase, so if alkaline phosphatase is below the mid-line level of the normal laboratory range, consider a zinc deficiency and do a zinc taste test to confirm deficiency.

So, the standard pattern to detect excess iron is threefold:

1. Increased serum iron
2. Increased % transferrin saturation
3. Normal or Decreased TIBC (total iron binding capacity)

Here, decreased TIBC reflects high serum iron levels and several factors should be ruled out:

1. Iron overload
2. B6 deficiency since B6 is essential for zinc absorption (50% of patients have this deficiency)
3. Lead toxicity
4. Hemochromatosis

But a new pattern is now being recognized as a potential screen for cancer, especially breast cancer. Notice, here we see increased levels in all 3 indicators:

1. Increased serum iron
2. Increased % transferrin saturation
3. Increased TIBC (total iron binding capacity)

It seems incongruent to have increased total iron binding capacity with elevated serum iron. That's not normal. So, if you should see an elevated iron, an increased % transferrin saturation with an increased total iron binding capacity, pay attention to this red flag.

This seemingly incongruent finding is based on Dr. Eidenier's earlier comment: breast cancer cells have more transferrin receptors on their membranes and higher levels of ferritin inside the cell membrane. Basically, the cancer cells are accumulating iron for energy and are over-riding normal markers. That's one reason cancer patients are so tired. Normal mitochondrial sites are compromised due to depleted intracellular iron levels, but the cancer cells are rerouting iron to feed the pathology.

If you are not familiar with these markers, you may have to read the transcript a few times, but the key point to this discussion is high serum iron levels should be investigated whether the TIBC is increased or decreased. Iron overload and hemochromatosis are silent killers.

Thanks for reading this week’s Tuesday Minute edition. I'll see you next Tuesday.