The Tuesday Minute

Nutritional information.... one byte at a time

This Week's Topic

Don't Forget About This With Your Senior Patients

This week let's focus on your senior patients more specifically, those patients who have been on acid blockers or those who have been chronically ill.

On previous Tuesday Minutes we've heard about HCL deficiencies and how to fix them. One of the things that goes hand in hand with HCL deficiencies are low mineral levels and B₁₂ deficiencies.

We've also discussed that as we age, the incidence of HCL deficiency increases because it takes so much cellular energy to make HCL. So B_{12} deficiencies should be a big consideration for your elderly clients.

Here's an interesting study. On a college campus baseline levels of HCL were taken from "healthy" college students, but before the experimental part of the trial could begin, the flu broke out on campus. This adds a twist to any HCL experiments as sickness will diminish HCL production.

Well, in an effort to salvage their time and data the researchers decided to see how long it would take for the subjects to return to their baseline levels of HCL after the flu abated. Interestingly enough it took up to 6 months for 2 of the subjects. This should serve as a re-

minder for all of us that chronically ill patients who are battling trauma or disease have a good chance there's a digestive component as part of the clinical picture.

For anyone who is low in HCL or has been on acid blocking medication for a prolonged period of time, the chances are pretty good they're low in B_{12} . B_{12} works with folic acid in the synthesis of the building blocks for DNA and RNA. B_{12} is essential for the integrity of the nervous system as well as energy production. To mention all the conditions that a B_{12} deficiency is associated with would take quite awhile, so I'll focus on some of the neurological effects of B_{12} deficiencies; and I'll give you some tighter lab ranges to help you identify deficiencies when looking at a CBC.

B₁₂ deficiency affects the peripheral nerves and in later stages the spinal cord. So we can see tingling and numbness in the extremities, loss of vibratory and position sensation, abnormalities of gait, age related hearing loss, muscle spasticity, irritability, depression, loss of concentration, memory loss, and dementia. Doesn't this sound like many of your elderly patients?

Remember that plant sources of B_{12} do not have the same biological activity for humans;

and as a result, most vegetarians are also low in B₁₂ and should supplement. There are 2 different indicators I look at to evaluate B₁₂ /folate status. If the Mean Corpuscular Volume or MCV is above 89.9, that's a good indication there's a deficiency. The other indicator I look at is the Mean Corpuscular Hemoglobin. If the value is above 31.9 it also indicates a B₁₂/folate need. If either one of these indicators is high--suspect a deficiency, but if they are BOTH high; you can be confident of a B₁₂ or Folic acid deficiency.

If we detect a need for B₁₂ and folic acid via elevated MCV and MCH there's a strong chance that homocysteine is elevated as well and should be assumed to be high unless proven otherwise by testing. As you know, homocysteine is a major indicator of heart disease, as well as other inflammatory conditions. Fortunately, the remedy for elevated homocysteine, elevated MCV and MCH is the same, namely B₁₂, folic acid and B₆.

My favorite product is a cherry flavored lozenge from Biotics called B_{12} -2000 Lozenges. It has 2,000 mcg of B_{12} , 800 mcg of folic acid, and 2 mg of the p-5-p form of B_6 per tablet. B_{12} is not always well absorbed via the stomach and as such should be supplemented with a product that will yield good oral absorption. This tablet is so tasty that the tendency is to chew it like candy. Even the kids like it. The key to this therapy, however, is to allow the tablet to dissolve slowly in the mouth.

Research shows that for most people oral supplementation can be effective, especially if you are already supplementing with HCL. There are some people that may need B_{12} injections, so follow up monitoring with laboratory testing to make sure the values come down.

There are many forms of B₁₂ lozenges on the market. The problem with oral methylated forms is that they chelate heavy metals that may be used as dental fillings, you don't want that! For this reason Biotics uses a cyanocobalimin form of B₁₂. Expect to start seeing changes in 30 days and lab tests should reflect changes in values in about 90 days.

In summary, don't forget B₁₂ when treating any elderly patient, those on acid blockers or anyone who's had a chronic health challenge that can rob them of their HCL capacity.

Abraham Lincoln said "...in the end, it's not the years in your life that count. It's the life in your years." So remember, enhancing the quality of life for your senior patients is a great gift. Thanks for reading this week and we'll be in contact with you next Tuesday.