

And the Patient asked...

“Am I going to have a Heart Attack?”

by Ronald L. Myers, CNC

Statistics tell us that currently one out of three Americans die from heart attacks. With nutrition we have the most powerful tool to prevent our patients from suffering an early death from this cause. I am NOT overstating the case here! In the last year alone I have helped more than one practitioner prevent a heart attack in one of their patients. This issue was prompted by a question by a good friend of mine who is also a health care professional (you know who you are). The question went something like this: “I have a patient with coronary symptoms, but fractionation of CK Isoenzymes does not show any heart fraction. What now?” (I also need to credit my wife Linda with major responsibility for this issue. She felt I should make this information available to more than one practitioner. She feels it is that important. If you agree...well, I’ll leave the rest up to you.)

Let’s take it from the top and cover the markers of impending M.I. available on the Gateway Panel (see page 4). I want to mention here that subjectivity and symptoms with a family history of heart attack *in the absence of any blood chemistry markers* should not be ignored.

BLOOD CHEMISTRY MARKERS OF IMPENDING M.I.

CK Isoenzymes—Fractionation of the total Creatine Kinase (CK) may or *may not* reveal the presence of the MB or what is considered to be the “heart” fraction. Sometimes in the very early stages, the MB fraction may not show; this does mean there is no heart muscle destruction taking place. If the patient has a family history of heart attack, begin treatment immediately! CK Isoenzymes are “real time” markers of destruction. If MB *is showing*, treat immediately!

SGOT/AST—Even though this is considered to be a “liver” enzyme it is more specific for detection of cardiac destruction than biliary or liver problems. If this is increased greater than optimum (30 U/L), and especially if increased greater than 45 U/L, further investigation is warranted such as family history, CK Isoenzyme fractionation and reviewing the other blood chemistry markers covered below. This patient may also have an increased SGPT/ALT as well, but usually it will not be increased as much as the SGOT/AST.

Iron Saturation—Jerome Sullivan, M.D., Ph.D first published the link between iron overload and heart disease. This was so politically incorrect at the time he could not get his findings published in a U.S. Journal; fortunately the Lancet accepted his monograph (see e-Bytes Issue 19). Many laboratories report the reference range for iron saturation at anywhere from 10 to 50%. Research by Stevens, et al, indicates that a saturation of greater than 30% has been linked to various conditions including cardiovascular problems. If your patient is symptomatic and has a saturation of more than 30% steps need to be taken immediately to reduce their iron load (Issue 19).

Total LDH and Isoenzymes—Here is where the real FUN begins. Let’s say a patient has an increased total LDH. Yet isoenzyme fractionation reveals that all the fractions are within range, in other words an isomorphic pattern. If the patient is symptomatic and/or has a family history of CVD, begin treatment immediately. Also review other markers discussed in this issue as a “second witness” and to get a sense of where on the continuum toward the actual event the patient may be. Most of the time, early stage nutritional therapy is an extremely successful preventative measure.

In fractionating LDH isoenzymes, fraction 1 (LD-1) and to a lesser extent LD-2 relate to heart muscle tissue. If LD-1 is increased it can be a forecast of an impending M.I. Also consider LD-5, which relates to the hepatic system. If this is increased as well it may be an indicator of the *cause* of the coronary problems. (If the isoenzyme study shows the presence of LD-6 the prognosis is extremely poor and the patient should be referred out immediately.)

SED RATE (ESR) and/or C-Reactive Protein (CRP)—According to information released by the American Heart Association on August 5, 2002, the real enemy of the cardiovascular system is INFLAMMATION! (See e-Bytes Issue 20.) As you know, ESR and C-Reactive Protein are both markers of inflammation ANYWHERE in the body, not just in the cardiovascular system. It can be another early warning marker of future problems. Consider this: increased iron can be pro-inflammatory. If the patient’s blood chemistry shows increased iron saturation along with an increased ESR or CRP, with current symptoms or family history of CVD, the dominos are beginning to fall in the direction of a possible coronary problem in the future. Also, according to Sullivan’s work, the CAUSE of the problem may also be revealed (iron overload).

Homocysteine (this test is not part of the Gateway Panel, but does have group pricing for Viotron Customers). Thanks to the work of McCully and Stampfer; elevated homocysteine is now recognized as a major risk factor for CAD (see e-Bytes Issue 14). Many researchers feel that homocysteine levels of 4 to 6 mmol are probably safe. This may be lower than your laboratory reference range. But, as I have written before, with a death rate of one out of three from heart attack, **safe** may be a more desirable range than “normal”.

Uric Acid and the lipid panel—Information contained in this section of the patient’s blood chemistry can indicate developing cardiovascular problems (arteriosclerosis). The pattern looks like this: uric acid increased; triglycerides increased; cholesterol in range to increased; HDL decreased; LDL increased. If the lipid panel is normal, rule out homocysteine as the locus of the problem.

Please note that the information in this issue is geared toward prevention. For this reason I have not dealt with what are considered to be emergency room (ER) tests such as troponins T or I, which do not increase until AFTER an M.I. has occurred. It is true that CK Isoenzymes are run in the ER, but they also show progressive increases as the patient moves toward the event, which gives us the opportunity of prevention.

SUPPLEMENTAL SUPPORT—**Myocardial Infarction** (prevention)*Biocardiozyme Forte* 2 tablets with each meal.*Co Q Zyme 30* 2 tablets with each meal.*Taurine* 1 capsule with each meal.

If homocysteine is increased greater than 6, add the following:

Oorganik-15 2 tablets with each meal.*Folic Acid 800* 2 tablets with each meal.*B12 2000 Lozenges* 1 lozenge 3 times daily dissolved in mouth.*B6 Phosphate* 2 tablets with each meal.

Re-evaluate clinical markers in 6 weeks.

If iron saturation is increased, add the following:

Zn Zyme Forte 2 tablets with each meal.*MnZyme Forte* 1 tablet with each meal.*CaZyme* 2 tablets with each meal.*Colon Plus Capsules* 4 capsules t.i.d.

See Issue 19 for the foods and supplements the patient should avoid while under care for iron overload.

RE-EVALUATE CLINICAL MARKERS IN 6 WEEKS

If SED Rate is increased, add the following:

Intenzyme Forte 4 tablets 3 times daily on an empty stomach.*Black Currant Seed Oil* 2 capsules with each meal.**ABSOLUTELY NO HYDROGENATED FATS OR OILS**

If Uric Acid is increased, add the following:

Folic Acid 800 3 tablets with each meal.*Li-Zyme Forte* 2 tablets with each meal.

Patient should follow Low Purine Diet.

If you need a copy of the Low Purine Diet, please let me know.

If lipid panel is abnormal, add the following:

Glucobalance 1 – 2 tablets with each meal.*ADHS* 1 tablet with breakfast and lunch.

Patient will probably be better off following the Atkins Diet.

And before anything else, evaluate the patient for hypochlorhydria and G.I. dysfunction. If positive, supplement them with the following:

Hydrozyme 2 to 4 tablets with each meal.*Beta TCP* 2 to 4 tablets right before each meal.(Use *Beta Plus* for patient's who have had gallbladder surgery.)**RE-EVALUATE ALL CLINICAL MARKERS IN 6 WEEKS**

GATEWAY PANEL

The Gateway Panel is so named because it is designed to be the initial, beginning, entry-level blood chemistry panel ordered for the patient beginning metabolic or nutritional therapy. It is intended to be a comprehensive panel but may not be all the laboratory tests needed to help every individual. It is comprehensive to help us determine if other laboratory tests are needed, specifically which tests they are. This panel does one other important thing; it provides us a baseline or biochemical snapshot of where the patient is right now. Results of previous blood tests are helpful in providing important *historical* clinical data. In other words, where has the patient been biochemically before getting to this specific point in time? Has their biochemistry changed significantly along the way for better or worse; or has it stabilized? Our specialty is balancing body chemistry. The more data we have available to us be it subjective, objective or clinical, the more successful we are in balancing body chemistry in each individual patient.

The Gateway Panel includes a Chem. 35, CBC w/Differential and a Thyroid Panel with TSH. The Chem. panel gives us information regarding various metabolic pathways, organ and gland function, excess or insufficiency of minerals, excess or insufficiency of proteins, gastrointestinal function, adequate or impaired fat metabolism, etc, etc. The CBC (Complete Blood Count) with Differential looks at various red blood cell indices as well as many of the *different* (hence Differential) white blood cell values. From these values we can determine if the patient is anemic or polycythemic; if they have an active or chronic infection; if they have parasites or sensitivities; if they are having difficulty converting iron to heme for red blood cell production; etc, etc. The Thyroid panel provides clinical data regarding thyroid function. Is thyroid function adequate, is the patient suffering with *hyper*thyroidism, primary **hypo**thyroidism, or one of the secondary forms of hypothyroidism, or are they an "under converter"?

INDIVIDUAL TESTS THAT MAKE UP THE GATEWAY PANEL

Glucose	Uric Acid	BUN	Creatinine	B/C Ratio
Sodium	Potassium	Chloride	CO2	Calcium
Calcium, Ionized	Phosphorus	Protein, Total	Albumin	Globulin
A/G Ratio	Bilirubin, Total	Bilirubin, Dir	Bilirubin, Ind	ALP
CK Total	LDH	AST	ALT	GGT
T.I.B.C.	UIBC	Iron, serum	Iron, saturation	Ferritin
Cholesterol	Triglycerides	HDL	VLDL	LDL
LDL/HDL Ratio	TSH	Thyroxin	T3 Uptake	FTI
WBC	RBC	HGB	HCT	MCV
MCH	MCHC	RDW	Platelets	Polys
Lymph's	Mono	Eos	Baso	Sed Rate

All of the above for \$108.00 your cost. Available only from LabCorp to Viotron customers.

If you are not using the Gateway Panel but would like to, please let me know.

I will tell you how to get set-up.