

Low GLUTATHIONE levels may suggest a coming HEART ATTACK

Doctors ushered in a new era of heart disease detection Thursday with a report of a blood test that can better predict which chest-pain sufferers will have heart attacks. If the results of this and other studies hold up, the test will offer doctors a way to diagnose an imminent heart attack and act to prevent it.

This article describes the crucial role of glutathione in supporting the hemoglobin function and oxygen transport system of the red cell that ensures optimal oxygenation of the tissues.

Dr. Jimmy Gutman (*see biography*) has often stated that glutathione will increasingly be mentioned in the media. He feels that it will one day be as well known as the notion of vitamin supplementation or cholesterol levels. Looks like he's right!



Blood test can warn of heart attack

By Steve Sternberg, USA TODAY

Doctors ushered in a new era of heart disease detection Thursday with a report of a blood test that can better predict which chest-pain sufferers will have heart attacks. If the results of this and other studies hold up, the test will offer doctors a way to diagnose an imminent heart attack and act to prevent it.

Doctors believe the test would be used first in emergency rooms to distinguish people who are genuinely on the brink of a cardiac emergency from millions more who have chest pain from other causes. Eventually, it maybe offered in doctors' offices as part of a battery of blood tests capable of identifying those who have heart disease but don't know it.

The test could save thousands of lives. Each year, 1.1 million people have heart attacks, and 47% of those die, the American Heart Association says.

Tests available today, among them troponin blood tests and electrocardiograms, or EKGs, often don't detect heart attacks until hours after they have occurred.

For instance, troponin is a protein usually found in heart muscle cells. By the time it turns up in an emergency-room blood test, the damage is done. C-reactive protein tests can identify people with inflamed arteries who someday might have a heart attack. But the new study shows that C-reactive protein is an unreliable measure of heart attack risk, especially in people with a positive troponin test.

"You can tell a patient he did great (on a conventional test), and a week later he drops dead," says Eric Topol of the Cleveland Clinic, an author of the study in today's *New England Journal of Medicine*. "There's always been something missing. "The new test measures the enzyme myeloperoxidase, or MPO, made in white blood cells. The enzyme is produced when arteries are inflamed and have rupture-prone fatty deposits.

"It's a very easy test to measure. It should be inexpensive to do this," Topol says.

The study of 604 consecutive emergency room patients complaining of chest pains showed that those with the highest levels of MPO face a fourfold increased risk of a cardiac crisis within two months.

"It's the first simple blood test that will allow us to take a patient who comes into the hospital with chest pain and say whether he's in the early stages of a heart attack or if he's at risk of having a heart attack in 30 to 60 days," says Richard Stein of the Weill Cornell School of Medicine in New York.

The advance reflects a blossoming understanding of why heart attacks and strokes occur. Heart disease typically begins with unhealthy blood vessels that develop fatty deposits called plaques. When plaques become inflamed and burst, they send blood clots and particles flooding downstream. Large ones may clog major vessels causing massive heart attacks or strokes. Smaller particles lodge in smaller vessels, causing what's known as unstable angina.

By identifying which proteins are central to blood vessel inflammation, like C-reactive protein and MPO, doctors have begun to zero in on a new set of risk factors for heart disease. A second study by researchers at Gutenberg University in Mainz, Germany, showed for the first time that **low levels of the enzyme glutathione also suggest a coming heart attack**. The new tests are experimental and will not become widely available without more testing, says Teri Manolio of the National Heart, Lung and Blood Institute in an accompanying editorial.

Major drug companies, including Abbott Laboratories, have expressed interest in developing MPO tests, Topol says.

Once the tests become available, doctors may use them to decide who should be treated with aspirin, cholesterol-lowering drugs and other methods to reduce risk. "Over the next 10 years, we'll be rewriting the rules for the detection and treatment of heart disease," Stein says.

Biographical notes on Dr. Jimmy Gutman MD, FACEP

Dr. Jimmy Gutman is a board-certified emergency physician who now practices family medicine. He received his training at the University of Calgary, Canada, and took up his residency in emergency medicine at Emory University in Atlanta, Georgia, where he was Chief Resident.

Upon his return to Canada, Dr. Gutman went on to an accomplished career. He eventually became the Undergraduate Director, and he also held the position of Residency Training Director of Emergency Medicine at McGill University in Montreal, Quebec.

Dr. Gutman has contributed to the training of literally thousands of doctors and students. He has also served on the Board of Directors for the Canadian Association of Emergency Medicine, as well as various other academic and medical organization boards dealing with policy and education.

Dr. Gutman has developed an expertise in complimentary medical approaches, particularly involved with the topic of glutathione in health and illness. *He is dedicated to seeing the gap bridged between traditional and complementary medicine.*

Dr. Gutman is often heard on radio and television across North America and has recently published his third book on glutathione: “*Glutathione--Your Body’s Most Powerful Protector*”.

For More Information: