

FDA Approved - Heart Attack Notifier

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Approved - the New implant that alerts when the patient is experiencing a heart attack

The American Food and Drugs Association (FDA) just approved the world's first chest implant in patients with potential Heart Attacks, and alerts when one is present. The implant is targeted towards people with a history of heart attacks and who are at high risk for a reoccurring one. Up until this point, out of the hundreds of patients with this device, dozens of lives have been saved thanks to this invention.

The device, also known as AngelMed Guardian, has now entered the market, mainly in the US. A pacemaker is very similar to the AngelMed Guardian in one respect - it's installation in the chest (surgically), yet the difference is the interface with the patient - a critical component, taking the essence of time to a whole new level. The focus group in which patients undergo this procedure are those who with high risk for heart attacks, especially those who had one in the past.

Currently, people with heart problems live in fear, overreacting to minor symptoms, inhibiting a visit to the hospital, leading to procedures, which sometimes are unnecessary. On the other hand, many patients don't have the "classic" symptoms of Angina (chest pain from the heart), radiation to shoulder/neck/ abdomen, sharp pain etc.

In clinical trials which underwent in the facility, out of roughly 700 trial patients, the device gave a precise alert whenever a patient was experiencing a heart attack, saving dozens, by early notification leading to fast transport to the surgical room (Angiogram), essentially saving time - a valuable asset in a situation like this.

Heart Attacks - thousands undiagnosed and die

Approximately 610,000 people die of heart disease in the US every year, and many more prefer not to get checked out by doctors in spite of having early signs, resulting in death. The essence of time is critical in this case, and the most important and beneficial treatment - rapid transport. In prehospital situations, this usually means transportation to the hospital, and in the hospital, itself is to receive special drugs or even surgery. Essentially, less than 6 hours is the timeline where in the hospital, the obstructed artery could be reopened immediately in a procedure called an Angioplasty, or using drugs that take apart the blood clot, resulting in restoring blood flow to the Myocardium - preventing further muscle death.

The main causes of heart attacks are usually a combination of genetics, bad diet, obesity, lack of physical activity, smoking and diabetes (Diabetes mellitus). Avoidance of preventable factors could potentially lower the odds.

To identify a heart attack, two out of the three following findings are needed:

- Early signs - weakness, chest pain w/ or w/o radiation to a shoulder/neck/back/abdomen, labored or difficulty breathing.
- EKG signs (VF, VT, etc.)
- Blood enzyme levels - CPK and Troponin, both released during and shortly after muscle damage - specifically in heart attacks.

The AngelMed Guardian may seem to some as "New but not leading-edge technology", but the key element in the equation is TIME, which now patients experiencing life-threatening heart attacks, have more of - arriving faster to the hospital, resulting in lives saved.

A number of other symptoms and signs may appear, but the first responder's treatment is almost always one thing - understand the situation (heart attack), call 911 and fast transport to the hospital [1-3].

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