

Breast Implants Might Give False Heart Attack Readings, New Research Suggests



By Erik Lief — June 21, 2017



Breast implant (photo courtesy: Shutterstock) [1]

There's new data to suggest that women with breast implants could receive an incorrect diagnosis for a heart attack when undergoing an electrocardiogram. That's according to research released today at a medical conference in Austria.

Doctors could not say with certainty that implants were the only cause for false readings. But their research, presented as "Electrocardiographic modifications induced by breasts implants: a comparative study" at ERHA EUROPACE - CARDIOSTIM 2017 in Vienna, indicated that they could very well be the cause.

Researchers were interested in this investigation because previous work using echocardiography showed that *seeing* the heart, using ultrasound, was compromised because breast implants blocked the view. As a result, "We wanted to find out if implants also disrupt an ECG," the abbreviation for electrocardiogram, according to lead author Dr. Sok-Sithikun Bun, a cardiologist at Princess Grace Hospital in Monaco, in a statement released by the European Society of Cardiology.



ECG's are used commonly in doctor's offices and emergency departments, using sensors – or leads – attached on various parts of the body, to record the heart's electrical activity (adjacent photo courtesy Shutterstock.com).

Dr. Bun's team assembled two groups of healthy women free of heart disease. The first, 28 of whom had implants; the second, comprised of 20 women without implants, acting as the control group. All 48 were given ECG's and two "experienced electrophysiologists" separately examined the results without knowledge the participants' health data or medical history.

The results were intriguing: with both experts analyzing the 20 participants control group, only one – meaning 1 in 40 readings – were misdiagnosed as abnormal.

But of those with breast implants, one expert identified abnormalities in 38 percent of the cases while the other found that 57 percent of the ECGs were problematic.

This indicated to researchers that the "abnormal ECG recordings were false readings due to the implants," adding that a "possible explanation is that implants may be a barrier that disturbs transmission of the electrical activity from the heart to the lead," said Dr. Bun. "Albeit echocardiography is difficult in women with implants, these measurements indicated that they had normal hearts and no structural heart disease, which suggests that there was no heart problem that could explain the abnormal ECGs."

As a result of these finding, these researchers have two recommendations for women that are safe, and potentially quite useful:

- (1) If you're considering having breast implants in the future, have a ECG performed before

the surgery to serve, if needed, as a baseline; it can be kept on file.

- (2) If you already have implants make sure your doctor is aware of their existence prior to having an ECG, and ask about any new research on this topic prior to performing the test.

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