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Panic attacks linked to higher risk of heart attacks and heart disease, especially in younger people

People who have been diagnosed with panic attacks or panic disorder have a greater risk of subsequently developing heart disease or suffering a heart attack than the normal population, with higher rates occurring in younger people, according to research published in Europe's leading cardiology journal, the *European Heart Journal* [1] today (Thursday 11 December).

The study found that people who were younger than 50 when first diagnosed had a significantly higher risk of subsequent heart attacks (or myocardial infarctions, MI), but this was not the case in older people. It also found there was a significantly higher incidence of subsequent coronary heart disease (CHD) in people diagnosed with panic attacks/disorder at all ages, but this was more marked in the under 50s.

However, the research also showed that the risk of dying from CHD was actually reduced amongst people of all ages who had been diagnosed with panic attacks/disorder.

The study is the first to look at a very large sample of the UK population of all ages (a total of 404,654 people) selected from a primary care population that can be broadly generalised to other countries with a similar socio-demographic structure. It is also the first to identify that the higher risk of heart attacks with panic attacks/disorder is mainly in younger people (aged under 50 years), and that having a panic attacks/disorder diagnosis is associated with a lower risk of dying from heart conditions.

Dr Kate Walters, a senior lecturer in primary care at University College London (UK), who led the research, said: "Not much is known about the relationship between panic disorder and cardiac disease. The symptoms of panic attacks can closely mimic those of a heart attack or acute cardiac disease, and it seems that there may be a complex relationship between them.

"Our findings have significant implications for clinicians. Panic attacks were associated with a significant increased risk of a subsequent diagnosis of CHD and acute MI in those aged younger than 50. This may be due to initial misdiagnosis of CHD as panic attacks, or a true underlying increased risk of CHD with panic attacks. Clinicians should be vigilant for this possibility when diagnosing and treating people presenting with symptoms of panic."

Dr Walters and her colleagues looked at primary care medical records for 57,615 adults diagnosed with panic attacks/disorder and 347,039 adults who did not have the condition. They found that those aged under 50 were more than a third (38%) as likely to have a heart attack and nearly half (44%) as likely to develop heart disease subsequently than people who had not been diagnosed with the condition. For people aged over 50 there was a slightly increased risk of heart disease (11%).

However, when the researchers looked at deaths amongst adults diagnosed with panic attacks/disorder, they found that for all ages the risk of death from heart disease was reduced by about a quarter (24%) compared with the normal population.

Dr Walters speculated about the possible reasons for the reduced risk of death. "This might be because the higher risk of coronary heart disease and heart attacks occurred amongst younger people who have fewer heart-related deaths generally; or it might be because people with panic disorders go to their doctors earlier and more frequently and, therefore, are more likely to have their heart disease identified and treated early, thus reducing the likelihood of dying from it."

The study also found that women younger than 40 with panic attacks/disorder had higher increases in incidence of MI and CHD than men, but Dr Walters said this result needed to be treated with caution as the actual number of events was very low and so it could be due to chance.

The reasons why panic attacks/disorder are linked to higher rates of MI and CHD are not understood completely. Dr Walters said: "These findings could be due to several factors, including initial misdiagnosis of CHD as panic attacks/disorder by GPs or due to a true increase in CHD and acute MI caused by panic disorder, potentially through activation of the sympathetic nervous system [3] in ways that lead to clogging of the arteries and reductions in the normal variation in heart rate. This hypothesis, rather than GP misdiagnosis, is supported by the fact that we observed an increasing risk of CHD with increasing frequency of panic attacks/disorder events.

"In addition, although we made adjustments for identified depression, it is possible that some patients with panic might have had undiagnosed depression, which is also associated with an increased risk of CHD."

She stressed that people who have been diagnosed with panic attacks/disorder should not worry about her findings but should consult their doctors. "While there is a small increased risk among people diagnosed by their GP with panic attacks/disorder, the vast majority of people with panic attacks will not go on to have a heart attack or heart diseases such as angina," she said. "This is particularly the case for younger people, as the overall likelihood of heart attacks at this age is so low. For example, less than three in 10,000 men and less than two in 10,000 women under 40 diagnosed by their GP with panic attacks will go on to have a heart attack. In your 40s the risk of heart attacks is higher, but it is still less than four in 1,000 men with panic attacks and less than one in 1,000 women.

"People should be encouraged to go back to their GPs for further assessment if their symptoms continue or reoccur, and GPs should consider the possibility of CHD or MI.

"I should add that this research was based on a large database of GP records, and we do not know if any of our findings apply to people who do not consult their GPs about panic attacks."

(ends)

Notes:

[1] "Panic disorder and risk of new onset coronary heart disease, acute myocardial infarction, and cardiac mortality: cohort study using the general practice research database". *European Heart Journal*. doi:10.1093/eurheartj/ehn477. Volume 29, Number 24, December 2008, pages 2981-2988.

[2] The prevalence of panic attacks that do not meet the full criteria for panic disorder is 1.9% of the general population. Panic disorder has a prevalence of about 1.8%, and this rises to 5.6-9.2% of patients in primary care, and 10-53% in cardiology outpatients and patients with documented CHD.

[3] The sympathetic nervous system is a part of the nervous system that controls the body's internal, involuntary processes.

A pdf of the full paper is available on request from Emma Mason or is available at:
http://www.oxfordjournals.org/our_journals/eurheartj/press_releases/freepdf/ehn477.pdf

The European Heart Journal is the flagship journal of the European Society of Cardiology (<http://www.escardio.org>). Please acknowledge the journal as a source in any articles.

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