

24 Hour or 48 Hour Holter for Young Patient with Palpitations?

1. In a young patient with palpitations, would you order a 24 hour or 48 hour holter? What decides if you want 24 hours or 48 hours?

Question submitted by: Question submitted by: Mark D. Goldstein, Thornhill, Ontario

Palpitations, awareness of the heart beat, occur at some time in most of us. Etiologies include cardiac, psychiatric, endocrine, drug related and others; most cases involve patients who do not suffer major consequences. Investigation should start with a good history, including associated symptoms (particularly syncope), family history of sudden death, a careful physical exam and a 12 lead EKG. If all these are normal

or negative, in a young person, I would not pursue further tests. Holter monitoring is of limited usefulness. In one study, palpitations were recorded as often in people without arrhythmia as in those who had it.¹ Probably more useful is the continuous event loop recorder, which can capture up to two minutes of electrocardiographic signals when activated by the patient. Such

monitors are often worn for at least two weeks. There are implantable event recorders that can capture spontaneous or patient-suspected arrhythmias for at least a year.

References:

1. Lok NS, Lau CP: Prevalence of Palpitations, Cardiac Arrhythmias and Their Associated Risk Factors in Ambulant Elderly. *Int J Cardiol*; 1996; 54:231-236.

Answered by:
Dr. Thomas W. Wilson

Abdominal Aortic Aneurysm Screening in High Risk Patients

2. Do you believe in screening for abdominal aortic aneurysms in higher risk patients (i.e., smokers)?

Question submitted by: Dr. E. J. Franczak, Toronto, Ontario

There are about 1,500 deaths secondary to abdominal aortic aneurysm (AAA) rupture annually in Canada. The peak incidence is among males around 70-years-of-age, and the prevalence among males over 60-years-old is 2% to 6%. The frequency is much higher in smokers than in non-smokers, with a ratio of eight to one, and the risk decreases slowly after smoking cessation. Other risk factors include hypertension and dyslipidemia. AAA is 4 to 6 times more common in male siblings of known patients, with a risk of 20 to 30%.

A clinical practice guideline by the U.S. Preventive Services Task Force recommends one-time screening for abdominal aortic

aneurysm (AAA) by ultrasonography in men age 65 to 75 years who have ever smoked. This is a grade B recommendation.

The largest of the randomized controlled trials on which this guideline was based reported significant short-term (number needed to screen after four years of approximately 590 to prevent non-fatal ruptured AAA plus AAA-related deaths) and long-term (number needed to screen after seven years of approximately 280 to prevent nonfatal ruptured AAA plus AAA-related deaths) benefit and cost effectiveness. Subsequent randomized controlled trials also found benefit.

In summary, I do believe that screening for AAA using ultrasound is advisable for higher risk patients.

References:

1. U.S. Preventive Services Task Force. "Screening for Abdominal Aortic Aneurysm: Recommendation Statement". *Ann. Intern. Med.* 2005; 142 (3): 198–202. PMID 15684208.
2. Fleming C, Whitlock EP, Beil TL, et al: (2005). "Screening for Abdominal Aortic Aneurysm: a Best-evidence Systematic Review for the U.S. Preventive Services Task Force". *Ann. Intern. Med.* 2005; 142 (3): 203–11. PMID 15684209. ACP Journal Club.

Answered by:
Dr. Brett Heilbron

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