

Palpitations

(February 2017)

Rationale

Palpitations are sensations of a rapid or irregular heartbeat. Palpitations are a common symptom and although the cause is often benign, it may indicate the presence of a serious underlying problem.

Causal Conditions

(list not exhaustive)

- Supraventricular
 - a. Sinus tachycardia
 - Increased demand (e.g., pregnancy, anemia)
 - Metabolic (e.g., thyrotoxicosis, pheochromocytoma)
 - Anxiety
 - Pharmacologic (e.g., cocaine, caffeine)
 - b. Atrial fibrillation/flutter
 - c. Supraventricular tachycardia (atrioventricular nodal reentrant tachycardia), Wolff-Parkinson-White syndrome
 - d. Junctional tachycardia
 - e. Premature junctional complexes and premature atrial contractions
- Ventricular
 - a. Ventricular tachycardia
 - b. Premature ventricular contractions

c. Ventricular fibrillation

Key Objectives

Given a patient with palpitations, the candidate will diagnose the cause, severity, and complications, and will initiate an appropriate management plan. In particular, the candidate will select patients in need of urgent treatment and differentiate palpitations due to intrinsic heart disease from those that are a manifestation of anxiety, physical exertion, or of another systemic disease.

Enabling Objectives

Given a patient with palpitations, the candidate will

- list and interpret critical clinical findings, including
 - a. perform a history and physical examination to determine the cardiac rate and rhythm and the hemodynamic stability of the patient;
 - b. identify underlying precipitants of the cardiac arrhythmia;
- list and interpret critical investigations, including
 - a. electrocardiogram and Holter monitoring;
 - b. appropriate investigations for underlying causes of the cardiac arrhythmia (e.g., echocardiogram, thyroid stimulating hormone);
- construct an effective initial management plan, including
 - a. immediate medical management in case of hemodynamic instability;
 - b. anticoagulation for stroke prevention, if indicated;
 - c. determination as to whether the patient requires hospitalization and specialized care;
 - d. reassuring the patient with a benign condition.