

Chapter 1 First principles

- 1.1 Anatomy
- 1.2 Physiology
- 1.3 Electrical activity and the ECG

Chapter 2 Understanding the normal ECG

- 2.1 Introduction
- 2.2 The limb leads
- 2.3 The chest leads
- 2.4 The lead orientation
- 2.5 ECG nomenclature

Chapter 3 Interpreting the ECG: a six-step approach

- 3.1 Step 1: is there electrical activity?
- 3.2 Step 2: what is the QRS (ventricular) rate?
- 3.3 Step 3: is the rhythm regular?
- 3.4 Step 4: is the QRS narrow (normal) or broad?
- 3.5 Step 5: is there atrial electrical activity?
- 3.6 Step 6: how is the atrial activity related to the ventricular activity?
- 3.7 Glossary of distinct ECG signs

Chapter 4 Bradyarrhythmias I: sinoatrial node dysfunction

- 4.1 Sinus bradycardia
- 4.2 Sinus pause with junctional escape beat

Chapter 5 Bradyarrhythmias II: conduction abnormalities

- 5.1 First-degree atrioventricular block
- 5.2 Second-degree atrioventricular block: Mobitz type 1 or Wenckebach
- 5.3 Second-degree atrioventricular block: Mobitz type 2
- 5.4 Second-degree heart block: 2:1 atrioventricular block
- 5.5 Third-degree (complete) atrioventricular block: narrow QRS
- 5.6 Third-degree (complete) atrioventricular block: broad QRS
- 5.7 Right bundle branch block
- 5.8 Left bundle branch block

Chapter 6 Ectopic beats

- 6.1 Atrial ectopic beats
- 6.2 Ventricular ectopic beats
- 6.3 Junctional ectopic beats

Chapter 7 Atrial arrhythmias

- 7.1 Atrial tachycardia
- 7.2 Multifocal atrial tachycardia
- 7.3 Atrial flutter
- 7.4 Atrial fibrillation
- 7.5 Atrial fibrillation with left bundle branch block

Chapter 8 Narrow-complex tachyarrhythmias (supraventricular tachycardias)

- 8.1 Atrioventricular nodal re-entrant tachycardia
- 8.2 Atrioventricular reciprocating tachycardia
- 8.3 Wolff–Parkinson–White syndrome: right-sided pathway
- 8.4 Wolff–Parkinson–White syndrome: left lateral pathway
- 8.5 Wolff–Parkinson–White syndrome: posterior pathway

8.6 Wolff–Parkinson–White syndrome plus atrial fibrillation

Chapter 9 Broad-complex tachyarrhythmias

- 9.1 Monomorphic ventricular tachycardia
- 9.2 Polymorphic ventricular tachycardia
- 9.3 Torsade de points
- 9.4 Ventricular fibrillation
- 9.5 Supraventricular tachycardia with bundle branch block

Chapter 10 Ischaemia and infarction

- 10.1 ST segment depression (cardiac ischaemia)
- 10.2 Acute myocardial ischaemia: T wave inversion and the LAD syndrome
- 10.3 ST segment elevation myocardial infarction: anterior
- 10.4 ST segment elevation myocardial infarction: acute inferior
- 10.5 ST segment elevation myocardial infarction: posterior
- 10.6 Completed myocardial infarction

Chapter 11 Inherited arrhythmia problems

- 11.1 Hypertrophic cardiomyopathy
- 11.2 Arrhythmogenic right ventricular dysplasia
- 11.3 Long QT syndrome
- 11.4 Brugada syndrome

Chapter 12 Cardiac chamber dilation, strain and hypertrophy

- 12.1 Left ventricular hypertrophy
- 12.2 Right ventricular hypertrophy
- 12.3 Pulmonary embolus
- 12.4 Left atrial dilation
- 12.5 Right atrial dilation

Chapter 13 Electrolyte and homeostasis disorders

- 13.1 Hyperkalaemia
- 13.2 Hypokalaemia
- 13.3 Hypercalcaemia
- 13.4 Hypocalcaemia
- 13.5 Hypothermia

Chapter 14 Miscellaneous conditions and normal variants

- 14.1 Pericarditis
- 14.2 Pacemaker
- 14.3 Biventricular pacemaker
- 14.4 Early repolarisation pattern
- 14.5 Non-pathological Q waves