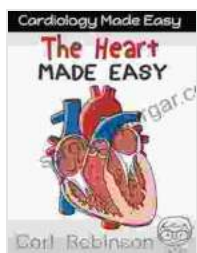


The Heart Made Easy: Cardiology Made Easy

Are you eager to delve into the fascinating world of cardiology but feel overwhelmed by its complexities? Look no further than 'The Heart Made Easy: Cardiology Made Easy'! This comprehensive guidebook is meticulously crafted to make cardiology accessible to everyone, regardless of their background or level of understanding.



The Heart Made Easy (Cardiology Made Easy Book 1)

by Carl Robinson

★★★★☆ 4.4 out of 5

Language : English

File size : 6974 KB

Text-to-Speech : Enabled

Screen Reader : Supported

Enhanced typesetting : Enabled

Word Wise : Enabled

Print length : 71 pages

Lending : Enabled

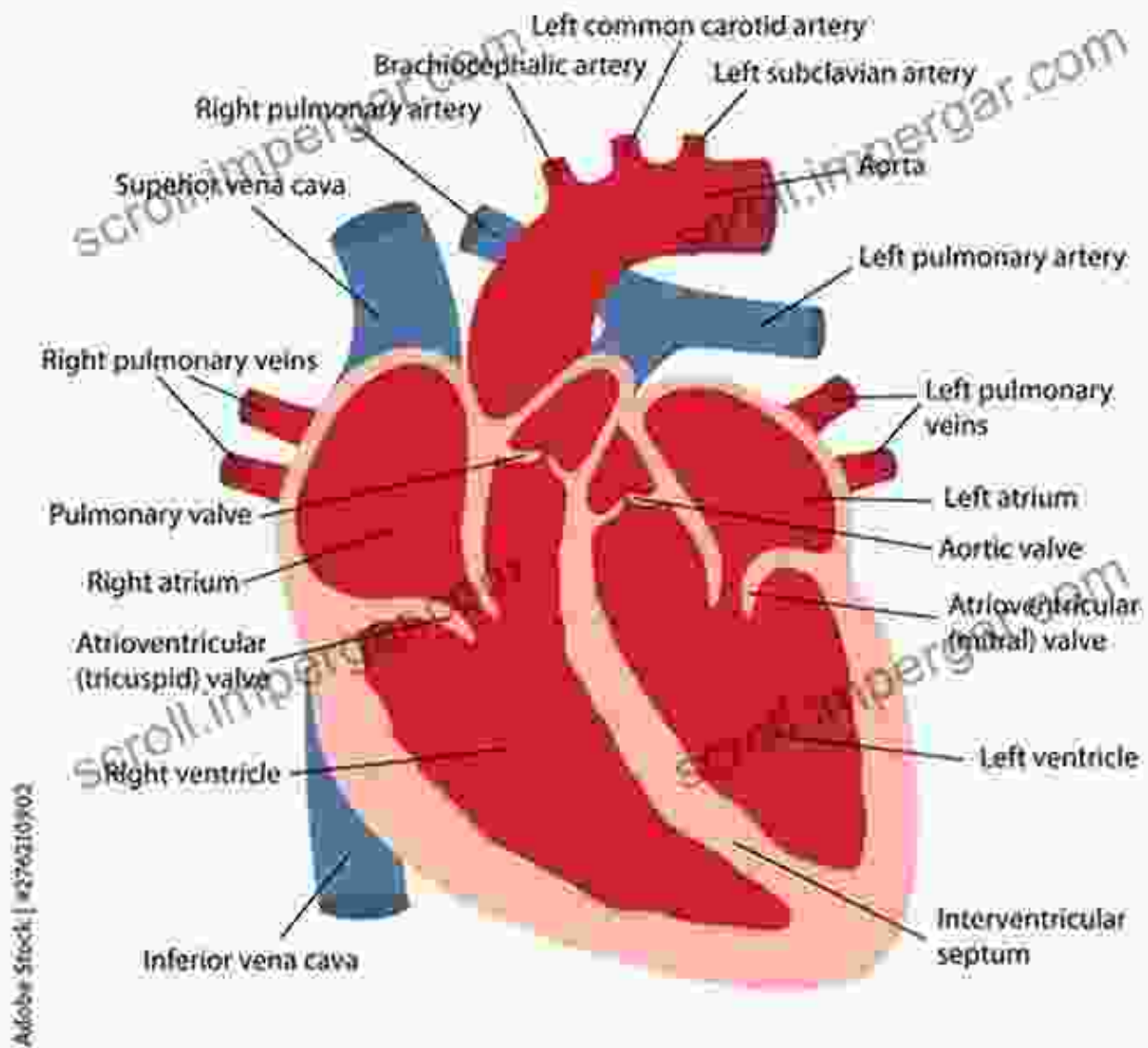


Unveiling the Secrets of the Human Heart

Embark on a journey to unravel the intricate workings of the human heart. 'The Heart Made Easy' takes you on a captivating exploration of:

- The heart's anatomy and physiology
- The electrical system that governs the heartbeat
- The vital role of the heart in maintaining circulation

Anatomy of the human heart



Mastering the Language of Cardiology

Navigate the complex terminology of cardiology with ease. 'The Heart Made Easy' provides:

- Clear explanations of medical terms
- A glossary to assist in understanding unfamiliar words

- Real-life examples to illustrate concepts

Cardiology - Revision Notes

Anatomy & physiology: Background knowledge

The heart has 2 superior atria & 2 inferior ventricles separated by an internal partition called the **interventricular septum**.

Posterior atrial walls are smooth but anterior walls are ridged by muscle bundles called **pectinate muscles**. Blood enters R atrium via the **IVC, SVC & coronary sinus** & blood enters L atrium via **3 pulmonary veins**.

Internal ventricular walls have **chordae tendinae** & **papillary muscles** project into ventricles. R ventricle pumps blood to **pulmonary trunk** & L ventricle ejects blood into **aorta**.

Atrioventricular valves prevent back flow into the atria when ventricles contract (Atrioventricular valves = **tricuspid valve** & **bicuspid valve**). AV valves attached to chord tendinae & papillary muscles. **Semilunar valves** prevent back flow into ventricles from aorta & pulmonary trunk (made of 3 cusps).

Heart covered by **fibrous pericardium** & **serous pericardium** (pericardial cavity) that lines internal surface of fibrous pericardium & **visceral layer** of serous pericardium that is an integral part of the heart wall. Pericardial cavity between the 2 layers of serous pericardium.

3 layers of the heart wall: epicardium, myocardium & endocardium.

Coronary circulation: from the base of the aorta branches the left and right coronary arteries. From L coronary artery branches the left anterior descending art. (aka anterior interventricular art.) & the circumflex art. From R coronary artery branches the marginal art. & the posterior interventricular artery.

CARDIAC CYCLE:

- Passive relaxation:** blood flows passively into atria & ventricles (70% of ventricular filling), AV valves begin to close & following depolarisation, the atria contract (P wave). Remaining 30% of blood propelled into ventricles. Atria relax & ventricles depolarisation occurs (QRS complex).
- Isovolumetric contraction:** ventricles contract. At this point, the ventricles are completely sealed at lumens & volume of blood in ventricles remains constant. Semilunar valves forced open & blood fills pulmonary trunk/aorta.
- Early relaxation:** following the T wave, the ventricles relax. Higher pressure in pulmonary trunk/aorta than ventricles so semilunar valves close and blood begins to return to heart. Ventricles completely closed again.

ELECTRICAL ACTIVATION OF THE HEART:

The sinoatrial node (SAN) in the R atrial wall generates impulses 75 times per min. From the SAN the depolarisation wave spreads through the atria via the internal pathway to the atrioventricular node (AVN) in the inferior interatrial septum. At the AVN for complete atrial contraction, impulse moves from AVN to bundle of His, which splits into the left & right bundle branches. The impulse passes to the Purkinje fibres that go to the apex & turn superiorly into the ventricular walls. Total time between initiation of impulse by SAN & depolarisation of last ventricular muscle cell = **0.25 s**.




FIGURE 22-3
Internal Anatomy of the Heart and Coronary Circulation

FIGURE 22-4
External Anatomy of the Heart

FIGURE 22-5
The Heart Wall

FIGURE 22-6
Coronary Circulation

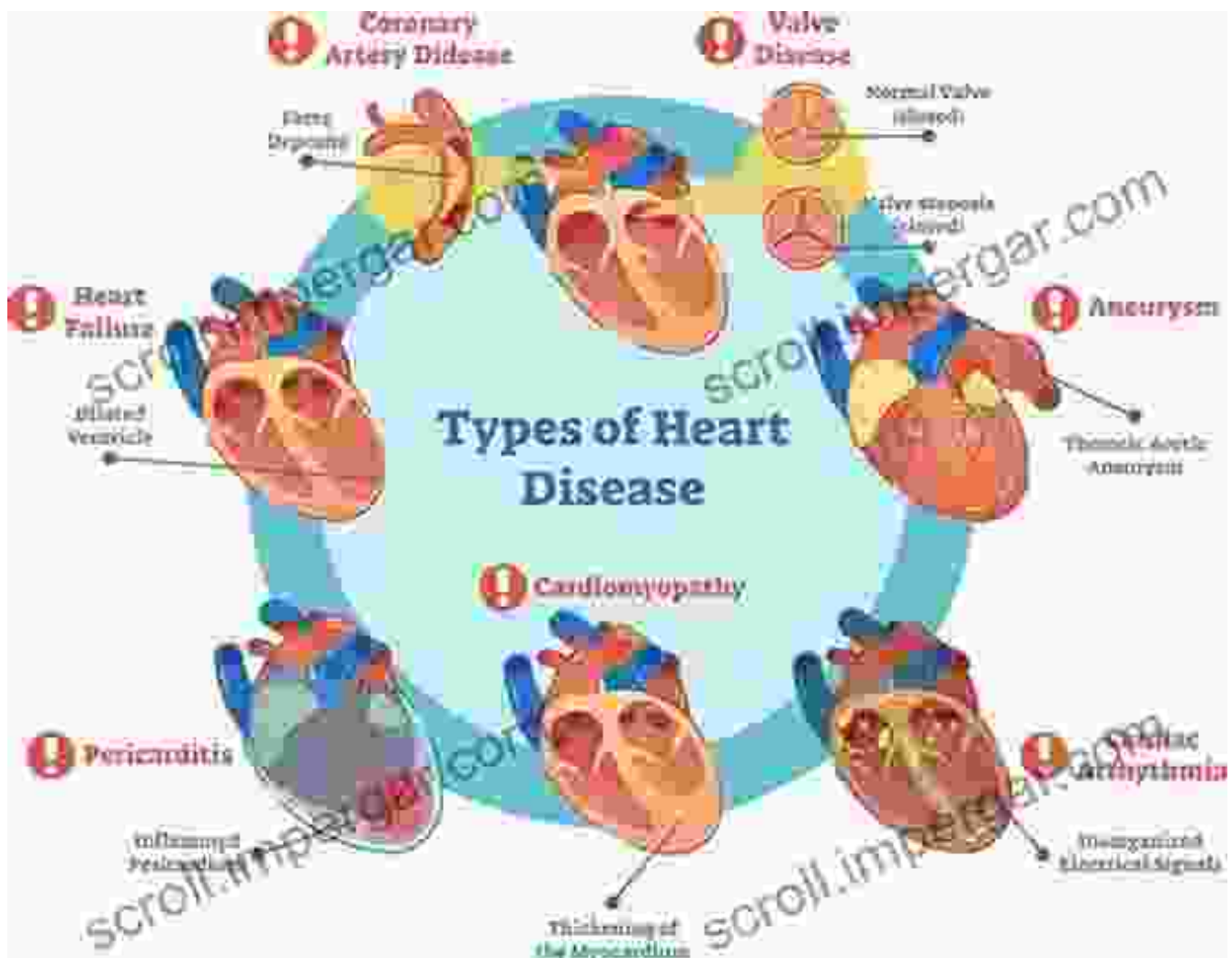
Understanding Heart Diseases and Their Management

Gain a comprehensive understanding of the spectrum of heart diseases, including:

- Coronary artery disease

- Heart failure
- Arrhythmias
- Valvular heart disease

Learn about the latest diagnostic techniques and treatment options, empowering you to make informed decisions about your cardiovascular health.



Empowering You with Heart Awareness

'The Heart Made Easy' is more than just a textbook; it's a valuable resource that empowers you to:

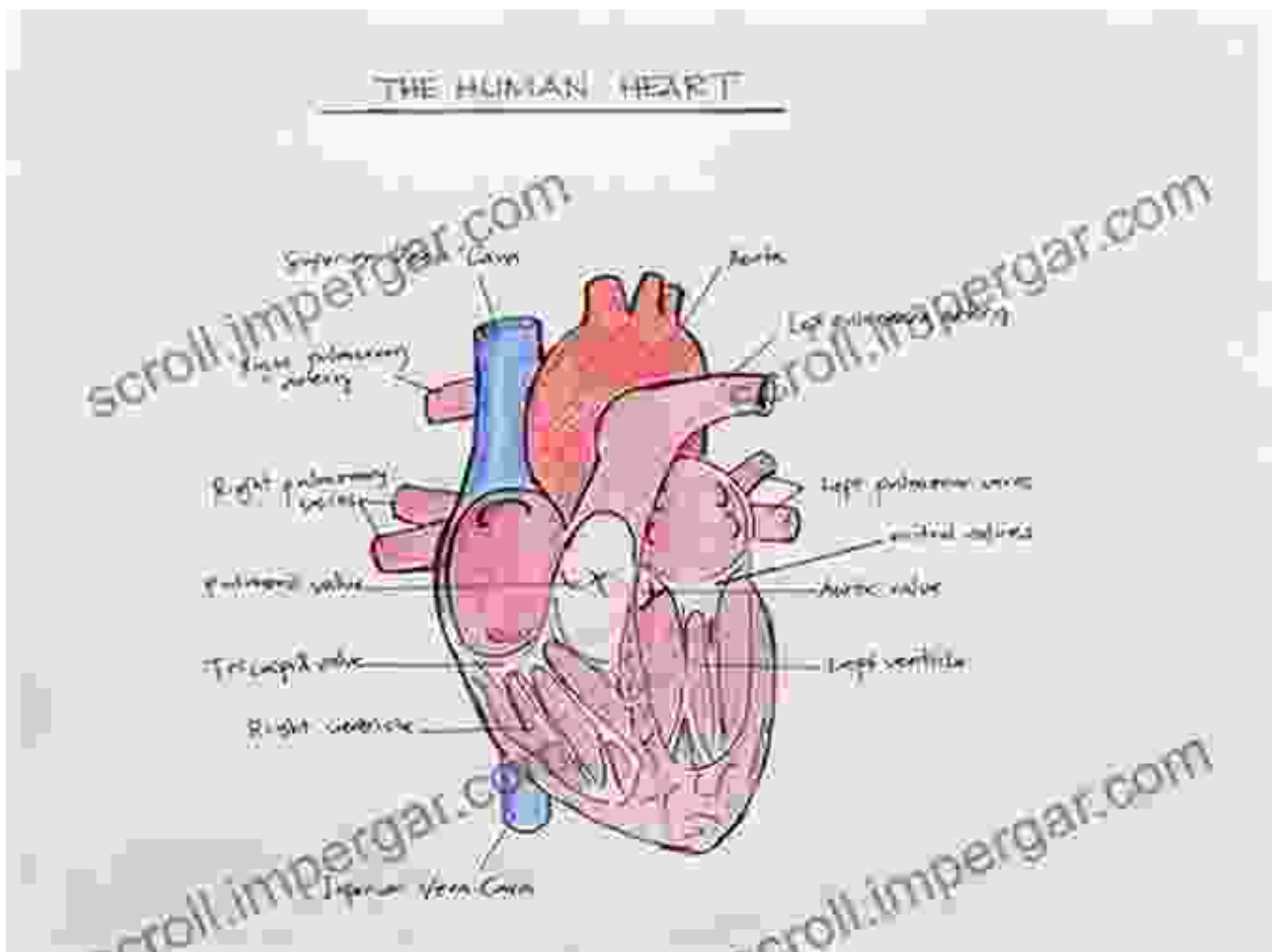
- Identify risk factors for heart disease
- Make lifestyle modifications to promote heart health
- Recognize and respond to heart emergencies
- Advocate for your cardiovascular well-being



Exceptional Features for Enhanced Learning

'The Heart Made Easy' is packed with exceptional features to enhance your learning experience:

- Step-by-step diagrams and illustrations
- Case studies to bridge the gap between theory and practice
- Interactive quizzes and exercises to test your understanding
- A comprehensive index for easy reference



Testimonials from Satisfied Readers

"This book is a lifesaver! I always struggled with cardiology, but 'The Heart Made Easy' made it crystal clear." - Dr. Emily Carter, Cardiologist

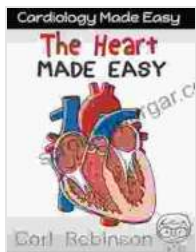
"As a nurse, I find this book invaluable for understanding the heart and communicating with my patients." - Susan Johnson, RN

"I'm a medical student, and 'The Heart Made Easy' has been a game-changer. It's the perfect balance of depth and accessibility." - John Smith, Medical Student

Free Download Your Copy Today!

Don't miss out on the opportunity to unlock the mysteries of cardiology and empower yourself with knowledge about your heart. Free Download your copy of 'The Heart Made Easy' today and embark on a journey towards a healthier, more informed you!

Buy Now



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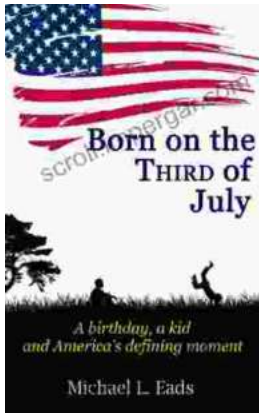
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