

The Medical Book of Lists

A Primer of Differential Diagnosis in
Internal Medicine

Second Edition

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Preface

Two of the most important considerations in the practice of internal medicine are the formulation of the differential diagnosis and the recognition of precise criteria upon which to base a specific diagnosis. We have written this book because we believe that there is need for a reasonably brief treatise that deals primarily with differential diagnosis. The book is a direct outgrowth of morning report sessions at the University of Kansas Medical Center. At these sessions, cases are presented as unknowns and resident physicians are asked to develop a differential diagnosis and also to indicate the specific criteria necessary to establish various diagnoses. This book, which contains over 230 lists, is a selective distillation of topics covered at morning report exercises. As such, the book is not a substitute for standard textbooks of medicine. Rather, it is viewed as a quick reference to key questions that may arise on ward rounds or at conferences.

Several individuals have made great contributions to this book. We thank several former chief residents and are especially indebted to our secretaries Charlotte Johnson, Shirley Sears, Ruth Stricklen, and Bonnie O'Brien for their preparation of the manuscript.

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 - A. Children and adolescents
 - B. Pregnant women
 - C. Anxious persons
 - D. Funnel-breasted or flat-chested persons
 - E. Persons with the straight back syndrome
 - F. Hyperthyroid and anemic persons
- II. Types of innocent murmurs
Innocent murmurs may be classified as follows:
 - A. Completely innocent
 1. Cervical venous hum
 2. Supraclavicular arterial bruit
 3. Still's murmur
 4. Mammary souffle
 5. Ejection systolic murmur in the pulmonary area
 6. Innocent abdominal murmurs
 - B. Relatively innocent
 1. Early systolic murmur
 2. Pulmonary systolic murmur with high output states (hemic murmur)

I-2 CAUSES OF EXPIRATORY SPLITTING OF SECOND HEART SOUND

- I. Atrial septal defect (little respiratory variation)
- II. Pulmonary stenosis (diminished P2; respiratory variation)
- III. Right bundle branch block (respiratory variation)
- IV. Mitral insufficiency (uncommon with heart failure)
- V. Ventricular septal defect (difficult to appreciate clinically)
- VI. Pulmonary hypertension, especially thromboembolic (often close and fixed splitting with accentuated P2)
- VII. Postoperative atrial septal defect (respiratory variation)
- VIII. Sickle cell anemia (respiratory variation)
- IX. Idiopathic dilation of pulmonary artery (respiratory variation)
- X. Normal adolescence (in recumbent posture)
- XI. Wolff-Parkinson-White syndrome (occasional case)
- XII. Pulmonary valvular insufficiency
- XIII. Straight back syndrome
- XIV. Right ventricular decompensation (occasional case)
- XV. Left ventricular paced or ectopic beats

I-3 CAUSES OF SINGLE SECOND HEART SOUND

- I. Tetralogy of Fallot
- II. Truncus and pseudotruncus arteriosus
- III. Very severe pulmonary valvular stenosis (occasional case)
- IV. Tricuspid atresia
- V. Aortic stenosis (occasional case)
- VI. Left bundle branch block (occasional case)
- VII. Age over 45 years (variable)

I-4 CAUSES OF CONTINUOUS THORACIC MURMURS

- I. Patent ductus arteriosus
- II. Coronary arteriovenous fistula
- III. Ruptured aortic sinus of Valsalva aneurysm
- IV. Aortic septal defect
- V. Ventricular septal defect and aortic insufficiency
- VI. Cervical venous hum
- VII. Anomalous left coronary artery
- VIII. Anomalous pulmonary artery
- IX. Mammary souffle
- X. Pulmonary arterial branch stenosis
- XI. Bronchial collateral circulation
- XII. Small atrial septal defect with mitral stenosis or atresia

I-5 MECHANISMS OF CONTINUOUS MURMURS

- I. Turbulent flow within veins, e.g., the cervical venous hum, caput medusae about the umbilicus. These venous continuous murmurs have diastolic accentuation, whereas the remaining four groups display systolic accentuation.
- II. Communication between a systemic artery and a systemic vein, the right heart, or the pulmonary artery, e.g., systemic arteriovenous fistula, patent ductus arteriosus, aortic aneurysm rupture into the right heart.
- III. Severe narrowing of a systemic artery or a pulmonary artery, e.g., carotid artery stenosis, pulmonary arterial branch stenosis or thromboembolism.
- IV. Communication between pulmonary artery and vein: pulmonary arteriovenous fistula.
- V. Communication between left and right atrium, especially with a high left atrial pressure.

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 - B. Polyarthritits
 - C. Chorea
 - D. Erythema marginatum
 - E. Subcutaneous nodules
- II. Minor manifestations**
 - A. Fever
 - B. Arthralgias
 - C. Previous RF or RHD
 - D. Elevated ESR or CRP
 - E. Prolonged PR interval

Plus: Supporting evidence of preceding streptococcal infection: history of scarlet fever; (+) culture group A streptococcal pharyngitis, increased strep. antibodies.

American Heart Association, 1965

I-7 CAUSES OF MITRAL REGURGITATION

- I. Spontaneous rupture of chordae tendinae**
- II. Trauma**
- III. Mitral valve prolapse**
- IV. Ischemia**
- V. Myocardial infarction**
- VI. Aneurysm of left ventricle involving the mitral annulus**
- VII. Infective endocarditis**
- VIII. Congestive cardiomyopathies**
- IX. IHSS**
- X. Rheumatic heart disease**
- XI. S.L.E.**
- XII. Scleroderma**
- XIII. Takayasu's arteritis**
- XIV. Myxomatous degeneration of mitral valve leaflets**
- XV. Calcified mitral annulus**
- XVI. Marfan's syndrome**
- XVII. Ehlers-Danlos syndrome**
- XVIII. Pseudoxanthoma elasticum**
- XIX. Ankylosing spondylitis**

I-8 CAUSES OF AORTIC REGURGITATION

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- III. Dissecting thoracic aortic aneurysm
- IV. Trauma
- V. Rheumatic heart disease
- VI. Syphilis
- VII. Ankylosing spondylitis
- VIII. Rheumatoid arthritis
- IX. Takayasu's arteritis
- X. Reiter's syndrome
- XI. S.L.E.
- XII. Polychondritis
- XIII. Congenital (Marfan, Ehlers-Danlos, Pseudoxanthoma, osteogenesis imperfecta, mucopolysaccharidoses)
- XIV. Myxomatous degeneration of the valve
- XV. Ruptured sinus of Valsalva aneurysm

I-9 CAUSES OF TRICUSPID REGURGITATION

- I. Rheumatic heart disease
- II. Endocarditis
- III. Myocardial infarction
- IV. Trauma
- V. Pulmonary hypertension
- VI. Ebstein's anomaly
- VII. Endocardial pacemaker wire
- VIII. Pulmonary artery catheter (Swan-Ganz®)

I-10 CLASSIFICATION OF ATRIAL SEPTAL DEFECTS

- I. Patent foramen ovale
- II. Persistent ostium secundum defect (fossa ovalis defect)
- III. Sinus venosus defect (proximal defect)
- IV. Endocardial cushion defect (complete and partial atrioventricular canal)
 - A. Ostium primum defect (incomplete persistent common atrioventricular canal)
 - B. Complete persistent common atrioventricular canal