Contents

Acknowledgments xiii How To Use Bates' Guide To Physical Examination And History Taking xv
UNIT 1
Foundations of Health Assessment 1
CHAPTER
Foundations for Clinical Proficiency 3
PATIENT ASSESSMENT: COMPREHENSIVE OR FOCUSED 5
Determining the Scope of Your Assessment 5 Subjective Versus Objective Data 6
THE COMPREHENSIVE ADULT HEALTH HISTORY 7
The Comprehensive Adult Health History—Further Description 8
THE COMPREHENSIVE PHYSICAL EXAMINATION 14
Beginning the Examination: Setting the Stage 14 The Physical Examination—"Head to Toe" 21
CLINICAL REASONING, ASSESSMENT, AND PLAN 24
Clinical Reasoning and Assessment 25 Using Shared Decision-Making to Develop a Plan 29
THE QUALITY CLINICAL RECORD: THE CASE OF MRS. N. 29
The Importance of the Problem List 37
RECORDING YOUR FINDINGS 38
References 42

Faculty Reviewers vii

Preface ix

CHAPTER 2

Evaluating Clinical Evidence 45

THE HISTORY AND PHYSICAL EXAMINATION AS DIAGNOSTIC TESTS 46

EVALUATING DIAGNOSTIC TESTS 47

Validity 47 Reproducibility 53

HEALTH PROMOTION 55

CRITICAL APPRAISAL 56

Understanding Bias 56
Results 57
Generalizability 59
Guideline Recommendations 59

LOOKING AHEAD 60

References 64

CHAPTER 3

Interviewing and the Health History 65

DIFFERENT KINDS OF HEALTH HISTORIES 67
THE FUNDAMENTALS OF SKILLED

INTERVIEWING 68

INTERVIEWING 68

THE SEQUENCE AND CONTEXT OF THE INTERVIEW 73

Preparation 74

The Sequence of the Interview 75

The Cultural Context of the Interview 82

ADVANCED INTERVIEWING 86

Interviewing the Challenging Patient 86
Sensitive Topics 93

ETHICS AND PROFESSIONALISM 100

References 106

UNIT 2

Regional Examinations 109

CHAPTER 4

Beginning the Physical Examination: General Survey, Vital Signs, and Pain 111

THE HEALTH HISTORY 112

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS 114

THE GENERAL SURVEY 120

General Appearance 120

THE VITAL SIGNS 123

Blood Pressure 124
Special Situations 131
Heart Rate and Rhythm 132
Respiratory Rate and Rhythm 132
Temperature 133

ACUTE AND CHRONIC PAIN 134

Assessing Acute and Chronic Pain 134

RECORDING YOUR FINDINGS 138

References 144

CHAPTER 5

Behavior and Mental Status 147

SYMPTOMS AND BEHAVIOR 148

Understanding Symptoms: What Do They Mean? 148 Mental Health Screening 150

THE HEALTH HISTORY 153

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS 156

TECHNIQUES OF EXAMINATION 158

Appearance and Behavior 158
Speech and Language 160
Mood 161
Thought and Perceptions 161
Cognitive Functions 164
Higher Cognitive Functions 165
Special Techniques 167

RECORDING YOUR FINDINGS 168

References 170

CHAPTER 6

The Skin, Hair, and Nails 173

ANATOMY AND PHYSIOLOGY 173

Skin 173 Hair 174 Nails 175

Sebaceous Glands and Sweat Glands 175

THE HEALTH HISTORY 175

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS 176

TECHNIQUES OF EXAMINATION 180

Full-Body and Integrated Skin Examinations 180
Preparing for the Examination 181
The Skin Examination 182
Special Techniques 187

RECORDING YOUR FINDINGS 189

References 214

CHAPTER 7

The Head and Neck 215

THE HEALTH HISTORY 215

The Head 216
The Eyes 217
The Ears 219
The Nose and Sinuses 220
The Mouth, Throat, and Neck 221

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS 222

ANATOMY AND PHYSIOLOGY AND TECHNIQUES OF EXAMINATION 224

The Head 224
The Eyes 226
The Ear 242
The Nose and Paranasal Sinuses 248
Mouth and Pharynx 252
The Neck 257
Special Techniques 264

RECORDING YOUR FINDINGS 266

References 300

CHAPTER 8

The Thorax and Lungs 303

ANATOMY AND PHYSIOLOGY 303

Locating Findings on the Chest 304

THE HEALTH HISTORY 310

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS 313

TECHNIQUES OF EXAMINATION 317

Initial Survey of Respiration and the Thorax 318
Examination of the Posterior Chest 319
Examination of the Anterior Chest 327

Special Techniques 329

RECORDING YOUR FINDINGS 329

References 341

CHAPTER 9

The Cardiovascular System 343

ANATOMY AND PHYSIOLOGY 343

Surface Projections of the Heart and Great Vessels 343 Cardiac Chambers, Valves, and Circulation 345

Events in the Cardiac Cycle 345

The Splitting of Heart Sounds 348

Heart Murmurs 349

Relation of Auscultatory Findings to the

Chest Wall 350

The Conduction System 351

The Heart as a Pump 352

Arterial Pulses and Blood Pressure 353

Jugular Venous Pressure and Pulsations 354

Changes Over the Life Span 355

THE HEALTH HISTORY 355

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS 358

TECHNIQUES OF EXAMINATION 373

Blood Pressure and Heart Rate 373

lugular Venous Pressure and Pulsations 374

The Carotid Pulse 380

The Heart 382

Inspection 384

Palpation 384

Percussion 389

Auscultation 389

Integrating Cardiovascular Assessment 397
Special Techniques: Maneuvers to Identify

Murmurs and Heart Failure 397

The shall be a second and a second a second and a second

RECORDING YOUR FINDINGS 399

References 413

CHAPTER 10

The Breasts and Axillae 419

ANATOMY AND PHYSIOLOGY 419

The Female Breast 419

The Male Breast 421

Lymphatics 421

THE HEALTH HISTORY 422

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS 423

TECHNIQUES OF EXAMINATION 434

The Female Breast 434

The Male Breast 440

The Axillae 440

Special Techniques 441

RECORDING YOUR FINDINGS 443

References 446

CHAPTER

The Abdomen 449

ANATOMY AND PHYSIOLOGY 449

THE HEALTH HISTORY 453

Patterns and Mechanisms of Abdominal Pain 453

The Gastrointestinal Tract 455

The Urinary Tract 462

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS 464

TECHNIQUES OF EXAMINATION 470

The Abdomen 471

The Liver 475

The Spleen 479

The Kidneys 481

The Bladder 483

The Aorta 483

Special Techniques 484

RECORDING YOUR FINDINGS 487

References 505

CHAPTER 12

The Peripheral Vascular System 509

ANATOMY AND PHYSIOLOGY 510

Arteries 510

Veins 513

The Lymphatic System 515
Transcapillary Fluid Exchange 516

THE HEALTH HISTORY 517
HEALTH PROMOTION AND COUNSELING:
EVIDENCE AND RECOMMENDATIONS 519
TECHNIQUES OF EXAMINATION 521

Arms 522 Abdomen 524 Legs 524 Special Techniques 529

RECORDING YOUR FINDINGS 532

References 539

CHAPTER 13

Male Genitalia and Hernias 541

ANATOMY AND PHYSIOLOGY 541

Lymphatics 543 Anatomy of the Groin 543

THE HEALTH HISTORY 544
HEALTH PROMOTION AND COUNSELING:
EVIDENCE AND RECOMMENDATIONS 547
TECHNIQUES OF EXAMINATION 550

The Penis 551
The Scrotum and its Contents 552
Hernias 553
Special Techniques 555

RECORDING YOUR FINDINGS 556

References 562

CHAPTER 14

Female Genitalia 565

ANATOMY AND PHYSIOLOGY 565
THE HEALTH HISTORY 569
HEALTH PROMOTION AND COUNSELING:
EVIDENCE AND RECOMMENDATIONS 575
TECHNIQUES OF EXAMINATION 583

External Examination 586
Internal Examination 587
Hernias 594
Special Techniques 594

RECORDING YOUR FINDINGS 595

References 604

CHAPTER 15

The Anus, Rectum, and Prostate 607

ANATOMY AND PHYSIOLOGY 607
THE HEALTH HISTORY 609
HEALTH PROMOTION AND COUNSELING:
EVIDENCE AND RECOMMENDATIONS 610
TECHNIQUES OF EXAMINATION 616

The Male Patient 616
The Female Patient 619

RECORDING YOUR FINDINGS 619

References 624

CHAPTER 16

The Musculoskeletal System 625

APPROACH TO MUSCULOSKELETAL DISORDERS 626

Types of Joints 628 Synovial Joints and Bursae 629

THE HEALTH HISTORY 630

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS 636

EXAMINATION OF SPECIFIC JOINTS: ANATOMY AND PHYSIOLOGY AND TECHNIQUES OF EXAMINATION 642

Temporomandibular Joint 644
The Shoulder 645
The Elbow 656
The Wrist and Hands 657
The Spine 666
The Hip 674
The Knee 682
The Ankle and Foot 690
Special Techniques 694

RECORDING YOUR FINDINGS 695

References 708

CHAPTER 17

The Nervous System 711

THE CHALLENGES OF NEUROLOGIC DIAGNOSIS 712

ANATOMY AND PHYSIOLOGY 713

Central Nervous System 713

Peripheral Nervous System 714

Motor Pathways 717

Sensory Pathways 719

Spinal Reflexes: The Muscle Stretch Response 720

THE HEALTH HISTORY 721

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS 726

TECHNIQUES OF EXAMINATION 733

The Cranial Nerves 735

The Motor System 741

The Sensory System 752

Muscle Stretch Reflexes 758

Cutaneous or Superficial Stimulation Reflexes 763

Special Techniques 764

RECORDING YOUR FINDINGS 773

References 794

иміт3

Special Populations 797

CHAPTER 18

Assessing Children: Infancy through Adolescence 799

GENERAL PRINCIPLES OF CHILD

DEVELOPMENT 800

HEALTH PROMOTION AND COUNSELING:

KEY COMPONENTS 801

Assessing the Newborn 803

Immediate Assessment at Birth 804

Assessment Several Hours After Birth 808

Assessing the Infant 809

Development 809

General Guidelines 810

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS 812

TECHNIQUES OF EXAMINATION 813

General Survey and Vital Signs 813

The Skin 816

The Head 820

The Eyes 823

The Ears 825

The Nose and Sinuses 826

The Mouth and Pharynx 826

The Neck 828

The Thorax and Lungs 829

The Heart 832

The Breasts 838

The Abdomen 838

Male Genitalia 840

Female Genitalia 841

Rectal Examination 842

The Musculoskeletal System 842

The Nervous System 845

Assessing Young and School-Aged Children 853

Development 853

THE HEALTH HISTORY 855

Assessing Younger Children 855

Assessing Older Children 857

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS 860

Children 1 to 4 Years 860

Children 5 to 10 Years 861

TECHNIQUES OF EXAMINATION 862

General Survey and Vital Signs 862

The Skin 865

The Head 865

The Eyes 866

The Ears 867

The Nose and Sinuses 871

The Mouth and Pharynx 872

The Neck 875

The Thorax and Lungs 876

The Heart 877

The Abdomen 879

Male Genitalia 881

Female Genitalia 882

The Rectal Examination 885

The Musculoskeletal System 885

The Nervous System 887

Assessing Adolescents 890

Development: 11 to 20 Years 890

THE HEALTH HISTORY 891

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS 893

TECHNIQUES OF EXAMINATION 894

General Survey and Vital Signs 894

The Skin 895

Head, Ears, Eyes, Throat, and Neck 895

The Heart 895

The Breasts 896

The Abdomen 898

Male Genitalia 898

Female Genitalia 900 The Musculoskeletal System 901 The Nervous System 906

RECORDING YOUR FINDINGS 906

References 924

CHAPTER 19

The Pregnant Woman 927

ANATOMY AND PHYSIOLOGY 927

Physiologic Hormonal Changes 927 Anatomic Changes 928

THE HEALTH HISTORY 932

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS 935

TECHNIQUES OF EXAMINATION 940

Positioning 940
Examining Equipment 941
General Inspection 941
Height, Weight, and Vital Signs 942
Head and Neck 942
Thorax and Lungs 943
Heart 943
Breasts 943
Abdomen 944
Genitalia 945

Anus 947
Rectum and Rectovaginal Septum 947
Extremities 948
Special Techniques 948

RECORDING YOUR FINDINGS 951

References 953

CHAPTER 20

The Older Adult 955

ANATOMY AND PHYSIOLOGY 957

THE HEALTH HISTORY 965

Approach to the Patient 965

Special Areas of Concern When Assessing Common Symptoms 970

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS 976

TECHNIQUES OF EXAMINATION 985

Assessing Functional Status: the "Sixth Vital Sign" 985 Physical Examination of the Older Adult 989

RECORDING YOUR FINDINGS 998

References 1004

Index 1009