

Contents

List of Illustrations	xiii
Introduction	xix
CHAPTER 1. Functional Anatomy 1	
Mechanics of Joints	4
The Glenohumeral Joint	6
Glenoid Fossa	11
Glenohumeral Capsule	12
The Suprahumeral Joint	16
Musculature of the Glenohumeral Joint	18
Muscle Spindle System	18
The Rotator Cuff	22
The Rotator Cuff Tendon	25
The Deltoid Muscle	26
Glenohumeral Movement	27
Scapular Component of the Scapulohumeral Rhythm	33
Acromioclavicular and Sternoclavicular Joint Motion	38
Scapulohumeral Rhythm Movement	42
The Biceps Mechanism	46
Bibliography	50
CHAPTER 2. Tissues Sites and Mechanisms of Shoulder Girdle Pain 51	
Tendinitis: Trauma, Attrition, and Degeneration	54
Symptoms of Supraspinatus Tendinitis	60
Calcific Tendinitis	63
Bursitis: Subdeltoid (Subacromial) Bursitis	67

Diagnosis: Supraspinatus Tendinitis (Subdeltoid Bursitis)	68
Treatment	73
Therapeutic Exercises	81
Strengthening Exercises	84
Physiologic Effect of Exercise	87
Bibliography	93
CHAPTER 3. Rotator Cuff Tear: Partial and Complete	95
Physical Findings	97
Partial and Complete Tear	97
Confirmatory Test of Cuff Tear	99
Treatment of the Rotator Cuff Tear	100
Bibliography	103
CHAPTER 4. The Frozen Shoulder: Adhesive Capsulitis, Adhesive Bursitis	105
Clinical Picture: Physical Findings	6
Radiologic Signs	8
Treatment of the Frozen Shoulder	8
Conditions Relating to the Frozen Shoulder	9
Painful Shoulder Problems	10
Suggested Treatments	13
Technique of Manipulation	17
Distention Arthrography: Brisement	18
Bibliography	19
CHAPTER 5. Posture in Shoulder Pain	124
Posture	126
Posture Development	127
Bibliography	134
CHAPTER 6. Trauma to the Shoulder	135
Dislocation	135
Mechanism of Dislocation	137
Diagnosis of Dislocation	141
Treatment of Dislocation	142
Acromioclavicular Joint Injury	144
Diagnosis	144
Clavicular Fractures	147
Bibliography	147
CHAPTER 7. Sports Injuries to the Shoulder	149
Treatment of the Injured Athlete	157
External Rotator Exercise	167

CHAPTER 8. Neurologically Referred Shoulder Pain 168

Cervical Nerve Root Involvement (Radiculopathy)	168
Mechanism of Cervical Radicular Pain in the Upper Extremity	172
Thoracic Outlet Syndrome	176
Symptoms of TOS	180
Cervical Rib	182
Scalene Anticus Syndrome	182
Claviculocostal Syndrome	183
Hyperabduction TOS Syndrome	183
Physical Examination	183
Treatment	185
Brachial Plexus Injuries	186
Brachial Plexus Neuritis	188
Suprascapular Nerve Entrapment	189
Dorsal Scapular Nerve Entrapment	191
Bibliography	191

CHAPTER 9. The Shoulder in the Hemiplegic Patient 193

The Completed Stroke	193
Transient Ischemic Attack (TIA)	194
Flaccid Stage	194
Spastic Stage	195
Synergy Stage	198
The Shoulder in All Stages of Hemiplegia	198
Pathomechanics of Shoulder Function in Stroke Stages	201
Flaccid Stage	201
Spastic Stage	202
Synergy Stage	205
Sensory Loss in Stroke	205
Functional Recovery	206
Treatment Concepts of the Hemiplegic Shoulder	207
Flaccid Stage	207
Subluxation of the Shoulder	209
The Hemiplegic Shoulder in the Spastic Stage	214
Heterotrophic Ossification	223
Treatment	224
Bibliography	225

CHAPTER 10. Reflex Sympathetic Dystrophy 227

Reflex Sympathetic Dystrophy	227
Reflex Sympathetic Dystrophy in Shoulder Lesions	235
Shoulder-Hand-Finger Syndrome	235
Arterial Component	235
Venous Component	235

Mechanism of Shoulder-Hand-Finger Syndrome	237
Diagnosis of Shoulder-Hand-Finger-Syndrome	237
Treatment	243
Psychiatric Aspects	249
Bibliography	251
CHAPTER 11. Myofascial Pain: Scapulocostal Syndrome ...	253
Scapulocostal Syndrome	253
Fibrositis and Muscular Referred Pain Syndromes	257
Clinical Management	260
Bibliography	260
CHAPTER 12. Visceral Referred Pain	262
Bibliography	265
Index	267