

CONTENTS

1. Anatomy of the Ankle joint.....	1
-Ankle compartments.....	3
• Posterior Compartment.....	4
• Medial Compartment.....	5
▪ Deltoid ligament(Medial collateral ligament).....	5
▪ Tarsal tunnel and Tibial nerve.....	7
▪ Posterior tibial nerve.....	7
• Lateral Compartment.....	9
• Dorsal Compartment.....	12
• Plantar Compartment.....	14
• Kager's fat pad (pre-achillis fat pad).....	15
• Retinacula.....	15
• Blood vessels.....	19
• Nerves.....	19
2. Sonographic anatomy of the Ankle joint.....	20
• Posterior Compartment.....	20
• Medial Compartment.....	23
▪ Flexor hallucis longus tendon.....	24
▪ Tarsal tunnel and tibial nerve.....	25
▪ Deltoid ligament.....	27

• Lateral Compartment.....	28
▪ Peroneal tendons.....	29
▪ Talofibular ligament.....	30
▪ Anterior TibioFibular ligament.....	31
▪ CalcaneoFibular Ligament.....	31
• Dorsal Compartment.....	32
• Plantar.....	34
3. Tendon measurements.....	34 I
4. Pathology of ankle joint.....	35
▪ Joint and bursal effusion and synovitis.....	36
▪ Localization of joint effusion.....	36
▪ Synovitis.....	38
▪ Avulsion fracture.....	39
▪ Osteoarthritis.....	39
▪ Osteomyelitis.....	40
▪ Foreign Bodies.....	42
▪ Tenosynovitis.....	42
▪ Tendinosis.....	43
▪ Tendinitis.....	44
▪ Tendon tears.....	44
▪ Ankle sprain.....	45
▪ Ankle Tendon Impingement.....	46
▪ Muscle.....	48
▪ The Subcutaneous Tissues.....	49
▪ Peripheral nerves.....	50
▪ Vasculitis and Raynaud's disease.....	51
▪ Raynaud's phenomenon.....	52
▪ Masses.....	52
▪ Interventional musculoskeletal ultrasonography.....	53
5. Ankle Pain.....	54

Medial Ankle pain.....	56
▪ Posterior tibial tendon.....	56
• Posterior Tibial Tendon (PTT) Tear.....	56
• Posterior Tibial Tendinosis.....	57
• Posterior Tibial Tendon Dysfunction(PTTD) =Tendonitis.....	59
▪ Tarsal tunnel syndrome.....	62
▪ Medial Ankle Ligament Sprain(Deltoid Ligament).....	64
Lateral ankle pain.....	67
▪ Ankle sprains.....	67
▪ Peroneal Tendon Rupture.....	68
▪ Peroneal Tendon Subluxation.....	69
▪ Peroneal Tendonitis.....	71
▪ Peroneal tendons Impingement.....	72
Achilles Tendon Pain.....	73
▪ Acute Achilles rupture.....	73
▪ Achillis tendonitis.....	76
▪ Achilles Tendinosis.....	77
▪ Achilles Tendon Bursitis(Retrocalcaneal Bursitis).....	80
Dorsal Ankle pain.....	81
Impingement of extensor hallucis longus tendon.....	86
Ankle Masses.....	88
▪ Ganglia.....	88
▪ Neurogenic Tumors.....	89
▪ Soft-Tissue Abscesses.....	91

Mycotic aneurysm of dorsalis pedis artery.....	92
Plantar pain.....	92
▪ Plantar fasciitis.....	92
▪ planter fibroma.....	95
Global ankle pain.....	96
Cases.....	97
Summary.....	110
References.....	112
Arabic summary.....	118