

Musculoskeletal Pathway **FOOT & ANKLE**

FOOT AND ANKLE	Signs & Symptoms	Risk factors	Treatment	Diagnostic tests	Indications for surgery/surgical opinion
Hallux Valgus	Lateral deviation and pain MTP joint of the great toe	Hereditary Metatarsus primus varus	Explanation, advice footwear orthotics Surgery	X-ray (wt bearing) if considering surgery	Symptomatic - pain Recurrent skin breakdown
Hallux Ridgidus	Limitation of ROM Pain and swelling of MTP joint of great toe	Differential diagnosis from gout	Explanation & advice, Orthotics /footwear/ Rigid/rocker sole Steroid Injection & mobilise Surgery	X-ray (wt bearing) check degree of degeneration	Symptomatic – pain Fusion or cheilectomy
Metatarsalgia	Pain beneath metatarsal on weight bearing	RA Diabetes Dysfunction of Hallux	Explanation & advice, Orthotics Physiotherapy Footwear advice	WB x-ray Axial sesamoid	Onward referral if all else fails, significant pain

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Mortons Neuroma	Interdigital neuroma is most common between the 3 rd and 4 th toe interspace. Burning sensation, p+n, shooting pain, reduced sensation Pain increased on walking relieved by rest or removing shoe, tenderness in web space	None known	CSI Advise Orthotics Advise on shoe wear	Primarily clinical – +ve Mulder’s sign WB x-ray if considering surgery MRI if doubt	Not responding to non operative treatment and CSI Must be symptomatic
Hammer Toes	Abnormal flexion posture of the proximal IP joint, May or may not have ext deformity of MPJ	Effects one or more toes	Explanation & advice Footwear Podiatry Surgery		Failure of conservative treatment
Claw Toes	Extension deformity at MP joint Often have flexion deformity at PIP and DIP joints. Usually effects all toes.	Neuromuscular diseases Biomechanical imbalance Be aware of position 1 st toe Arthropathies	Orthotics / footwear advice Podiatry	X-ray if considering surgery	Failure of conservative treatment Symptomatic – ie. Pain. Refer onward if part of cavus complex or requires surgery.

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Plantar Fasciitis	Pain medial side of heel, pain over longitudinal arch Pain worse on 1 st few steps after inactivity Tender on palpation of medial heel Pain increase on toes extension and stretch	Inflammatory disease, diabetic S1 nerve root. Tight gastrocnemius	Physiotherapy, stretching exs (gastroc, TA, plantar fascia) Orthotics - soft spot insoles, footwear Activity moderation Weight loss advise if appropriate Steroid injection	Checked for other heel pain causes – ie spur	Failure of conservative treatment Rarely indicated. 90% resolve within 12 months
Heel Pain -	Localised pain posterior heel Pain on passive dorsiflexion and plantaflexion. Pain on resisted plantaflexion	Bursitis Haglunds deformity TA insertion	Physiotherapy Advise on footwear Orthotics		Failure of conservative treatment. Rarely indicated. 90% resolve within 12 months.
Achilles tendon	Pain and swelling TA Pain on resisted plantaflexion. Stiffness post in activity Thickening / palpable nodes.	Assess if recent trauma for partial tear.	Physiotherapy, rest, ice, immobilisation ?achillotrain Eccentric calf strengthening exercises	x-ray if insertion affected	Refer for surgery if all else fails

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Chronic Tibialis posterior tenosynovitis	Asymmetrical flat foot, hind foot valgus, midfoot abduction at midtarsal joint, forefoot pronation	Traumatic, degenerative, 2° to inflammatory disorder	Explanation & advice Orthotics Surgery	x-ray wt bearing ankle and foot Identify stage of inflammation 1-4	Refer for surgical opinion if conservative measures fail
Tendinopathies – Tib anterior / peroneal tendons	Pain on resisted muscle activity Altered biomechanics, lateral ankle instability Poor proprioception	Late, middle age – could have spontaneous rupture	Explanation, advice Rest, NSAIDS, splints, exercises, footwear Steroid injection surgery	X-ray WB ankle / foot	Refer for surgical opinion if conservative measures fail
Ankle instability	Usually post recurrent injuries ankle giving way	Post trauma	Physiotherapy – proprioception training Splint Orthotics	Positive instability test WB x-ray	Failure of conservative treatment
Chronic ankle Sprain	Low grade swelling around ankle Instability and functional limitations Tender anterior joint line.		Physiotherapy rehabilitation	MRI Weight bearing x-ray	Not responding to treatment, symptomatic for 3 months and on going instability.

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Painful ankle	Pain decreased PF/DF	Trauma Footballers ankle Osteochondritis dessicans	Physiotherapy	AP and lateral WB Xrays MRI ? OCD	Not responding to treatment, symptomatic for 3 months
Sudden onset of foot and ankle	Swelling, redness, increased temperature, pain Diagnose in primary care via blood tests	NA	NA	NA	NA
Arthritis of foot and ankle	Pain on weight bearing, decreased ROM, deformity, localised swelling, thickening	Post trauma Late / middle aged. Diabetics	Physiotherapy Orthotics / footwear Walking aids CSI	X-ray weight bearing	Onward referral if symptoms severely limiting function and progressive deformity