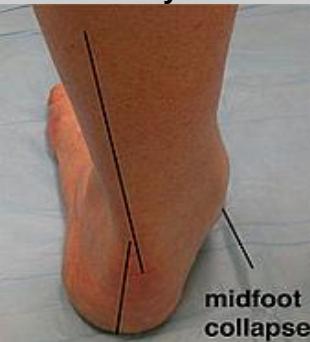


## Referral Guidelines for Specific Foot & Ankle Conditions

Diagnosis	Signs & Symptoms	Investigations	Primary treatment	Specialist Referral
<b>Hallux Valgus</b> 	<ul style="list-style-type: none"> <li>Lateral deviation of Hallux</li> <li>Pain over bunion prominence</li> <li>Difficulty to fit in shoes</li> <li>Pain under lesser metatarsal heads (transfer metatarsalgia)</li> </ul>	Xray Foot AP & Lat Weight bearing 	<ul style="list-style-type: none"> <li>Advice on Footwear – Low heel, wide &amp; high toebox</li> <li>OTC available padding of bony prominence</li> </ul>	Significant symptoms affecting work and ADL
<b>Hallux Rigidus</b> 	<ul style="list-style-type: none"> <li>Pain &amp; tenderness first MTPJ</li> <li>Dorsal bunion</li> <li>Limitation of R.O.M. especially dorsiflexion</li> <li>Pain under lesser metatarsal heads (transfer metatarsalgia)</li> </ul>	Xray Foot AP & Lat Weight bearing 	<ul style="list-style-type: none"> <li>NSAID/Analgesia</li> <li>Low heel, Rigid / Rockerbottom sole</li> <li>Intra-articular injection</li> </ul>	Significant symptoms affecting work and ADL
<b>Midfoot Arthritis</b> 	<ul style="list-style-type: none"> <li>Midfoot Pain &amp; tenderness</li> <li>Collapse at medial longitudinal arch/ Rockerbottom foot</li> </ul>	Xray Foot & Ankle AP & Lat Weight bearing 	<ul style="list-style-type: none"> <li>NSAID/Analgesia</li> <li>Accommodative footwear</li> <li>Insole</li> </ul>	Significant symptoms affecting Work and ADL

<b>Tibialis Posterior Insufficiency</b> 	<ul style="list-style-type: none"> <li>Pain along postero-medial ankle</li> <li>Lateral subtalar impingement pain</li> <li>Unable to do single stance heel raise</li> <li>Hindfoot valgus + Loss of medial longitudinal arch</li> </ul>		<ul style="list-style-type: none"> <li>NSAID/Analgesia</li> <li>Insole – medial arch support with heel cup</li> <li>Physiotherapy – Muscle strengthening, Achilles stretching</li> <li>Weight reduction</li> </ul>	Failure of conservative treatment
<b>Ankle instability</b>	<ul style="list-style-type: none"> <li>Often post-traumatic</li> <li>Recurrent giving-way +/- tender lateral ligament</li> </ul>		<ul style="list-style-type: none"> <li>Physiotherapy – Proprioceptive &amp; Peroneal strengthening exercises</li> <li>Brace</li> </ul>	Failure of conservative treatment
<b>Ankle/ Hindfoot arthritis</b>	<ul style="list-style-type: none"> <li>Limitation of ROM</li> <li>Painful on weight-bearing activities</li> <li>Local tenderness</li> <li>Deformity often varus</li> </ul>	Xray Ankle AP & Lat Weight bearing 	<ul style="list-style-type: none"> <li>NSAID/ Analgesia</li> <li>Weight reduction</li> <li>Boots/Brace</li> <li>Intra-articular steroid injection</li> </ul>	Significant symptoms affecting Work and ADL

Specialist Referral

First line of treatment

Diagnosis

#### Mortons neuroma

- Avoid footwear with narrow toe-box / high heel
- Local injection/ USG guided
- Insole (Metatarsal bar)
- Tender 2/3 or ¾ webspace
- Worse pain in footwear than barefoot
- Paraesthesia



Pain between metatarsal heads

## Metatarsalgia

Often associated with

- Hallux valgus
- Pes cavus
- Pes planus
- Ankle equinus
- Obesity

Pain at metatarsal heads

Diagnosis

First line of treatment

Specialist Referral

#### MTPJ synovitis

- Tender under MTPJ +/- deformity
- Increase in pain on stressing/ subluxing MTPJ

Refer if all else fails

- NSAID
- Stiff sole shoes/ rocker bottom
- Strapping toe in neutral
- USG guided injection



#### Freibergs

- Pain at MTPJ with stiffness
- Enlarged metatarsal head (bone thickening)

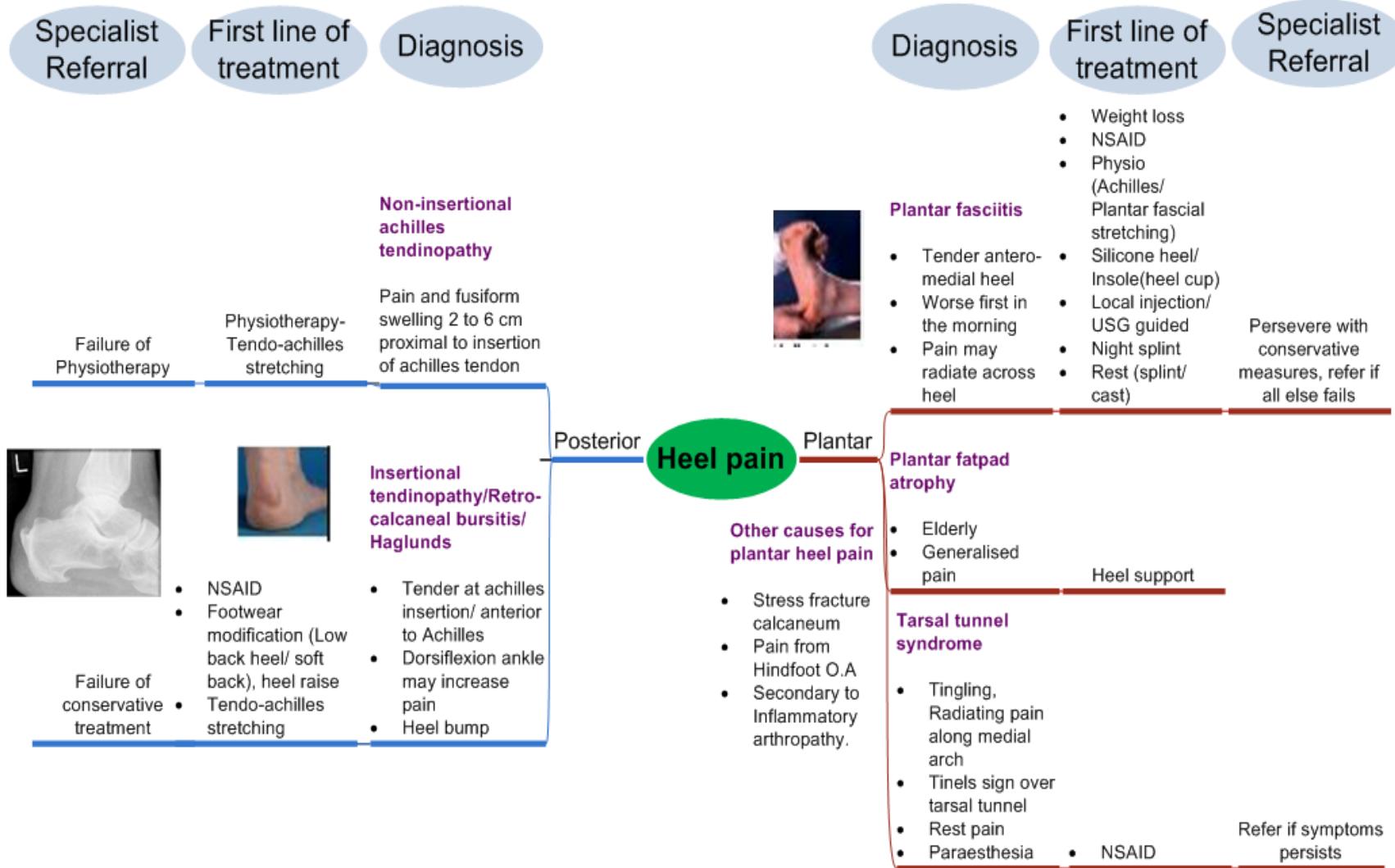
Refer if all else fails

- Stiff sole shoes/ Metatarsal dome
- Analgesia

#### Lesser toe deformities – Hammer toe/ Claw toe

- Pain +/- callus at tip of toe/ Sub-metatarsal
- Dorsal rubbing of toes against shoes
- Extension deformity MTPJ flexion PIPJ
- Analgesia
- Footwear modification (Low heel, wide toe-box)
- Metatarsal pad/ Metatarsal dome/ Silicon caps

Referral to Orthotics/ Podiatry may help  
Refer if significant pain persist



## **Abbreviations:**

MT	- Metatarsal
OTC	- Over The Counter
MTPJ	- Metatarso-phalangeal Joint
IPJ	- Inter-phalangeal Joint
ADL	- Activities of Daily Living
ROM	- Range of Motion
AP & Lat	- Antero-posterior & Lateral
USG	- Ultrasound Scan

## **General Guidance**

### **Red Flags – Direct referral to Secondary Care**

- Possible tumour
- Rapidly advancing structural deformity
- Fracture
- Signs of infection
- Profound ulceration
- Past history – carcinoma, steroids, HIV
- Pathological weight loss
- Non mechanical pain

### **Conditions best seen by the podiatrists**

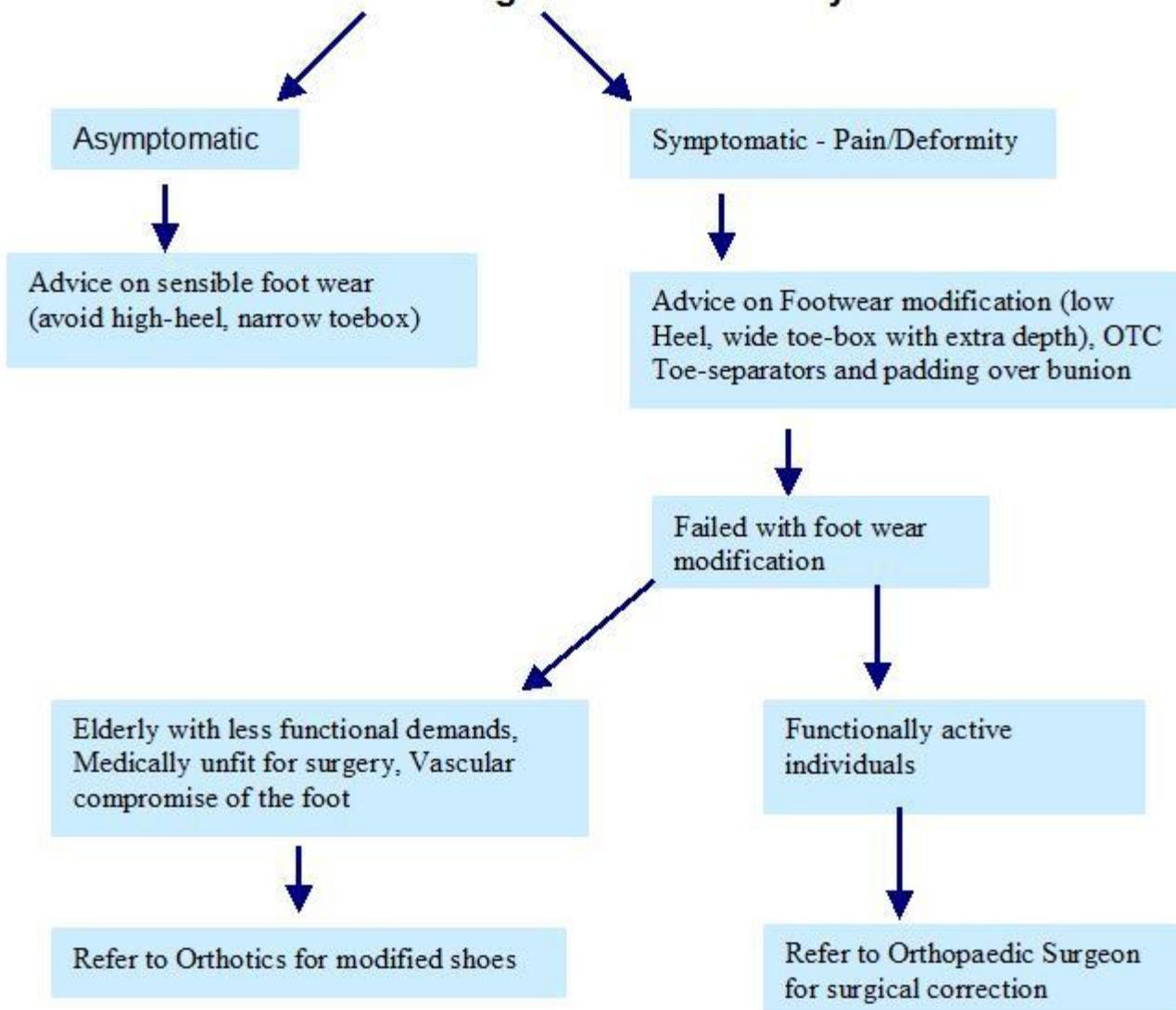
- Toenail problems such as Ingrowing toenails /Fungal nails
- Verrucae
- General podiatry
- Treatment of skins conditions - corns and callus

### **Persevere with conservative approach for patients with**

- Less functional demand
- Medically unfit for surgery
- Vascular compromise of the limb

### **Diabetic foot problem referral to Diabetic clinic run by podiatrist & Diabetologist**

## Hallux Valgus Referral Pathway



## **References:**

- 1) Functional rehabilitation interventions for chronic ankle instability: a systematic review. Webster KA, Gribble PA. J Sport Rehabil. 2010 Feb;19(1):98-114.
- 2) Nonsurgical management of posterior tibial tendon dysfunction with orthoses and resistive exercise: a randomized controlled trial. Kulig K, Reischl SF, Pomrantz AB, Burnfield JM, Mais-Requejo S, Thordarson DB, Smith RW. Phys. Ther. 2009 Jan;89(1):26-37. Epub 2008 Nov 20.
- 3) <http://www2.cochrane.org/reviews/en/ab006801.html>. Custom made foot orthoses for the treatment of foot pain - Hawke F, Burns J, Radford JA, du Toit V
- 4) [http://www.cks.nhs.uk/plantar\\_fasciitis/evidence](http://www.cks.nhs.uk/plantar_fasciitis/evidence)
- 5) <http://www2.cochrane.org/reviews/en/ab000232.html> - Interventions for acute & Chronic Achilles tendonitis - McLauchlan G, Handoll HHG
- 6) <http://www2.cochrane.org/reviews/en/ab000964.html> - Interventions for treating hallux valgus - Ferrari J, Higgins JPT, Prior TD
- 7) Surgery vs Orthosis vs Watchful Waiting for Hallux Valgus: A Randomized Controlled Trial. Markus Torkki, Antti Malmivaara, Seppo Seitsalo, Veijo Hoikka, Pekka Laippala, Pekka Paavolainen. JAMA. 2001;285(19):2474-2480.
- 8) [http://www.pathways.scot.nhs.uk/Orthopaedics/PP\\_FootAnk\\_ET2004.pdf](http://www.pathways.scot.nhs.uk/Orthopaedics/PP_FootAnk_ET2004.pdf)
- 9) [http://www.dorset-ots.nhs.uk/Foot&Ankle\\_Pathway2010.pdf](http://www.dorset-ots.nhs.uk/Foot&Ankle_Pathway2010.pdf)
- 10) <http://www.northyorkshireandyork.nhs.uk/AdviceInformation/MakingDecisions/docs/Clinical%20Pathways%20and%20Referrals%20Guide%20may%202010.pdf>
- 11) <http://www.pathways.scot.nhs.uk/Orthopaedics/Orthopaedics%20Foot%20Apr05.pdf>
- 12) <http://www.blackburnfeet.org.uk/hyperbook>