

THE ROBERT JONES AND AGNES HUNT ORTHOPAEDIC FOUNDATION NHS TRUST

REHABILITATION *GUIDE* ADULT ACQUIRED FLATFOOT DEFORMITY RECONSTRUCTION **CALC OSTEOTOMY**

(This is not an exhaustive list of all rehabilitative techniques or therapies and this should not over rule any clinical judgement)

WEEK	MOBILITY	REHABILITATION EXERCISES	GOALS
<u>Week 0-2</u>	NWB in POP with appropriate walking aids	<ul style="list-style-type: none"> ○ Circulatory exercises ○ SQ/IRQ/SLR/Glut/Hams exercises ○ Upper body exercises ○ Flexibility exercises ○ Contralateral leg exercises ○ AROM exercise for hip and knee ○ Rest in elevation when not exercising or mobilising NWB 	<ul style="list-style-type: none"> • Good understanding of post- operative rehabilitation. • No complications following surgery. • Elevation to control swelling • Control of pain with adequate pain relief • Education and advice on self-monitoring /management of sensation, skin colour, circulation, temperature. • Safe and independently mobile with appropriate walking aids and correct weight bearing status as advised on discharge from hospital. • Safe with transfers and stairs if necessary
<u>Week 2-6</u> (reviewed in out patient clinic by a member of the F+A team for removal of stitches and removal of cast)	NWB → PWB→FWB over 4/52 (from POP to aircast boot) Progress to FWB in aircast boot Aircast boot to be worn in bed until week 6	<ul style="list-style-type: none"> ○ Start active NWB ROM exercises out of the boot ○ Avoid stretching into eversion ○ Avoid inversion/eversion strengthening exercises ○ Seated heel raises ○ Circulatory exercises ○ SQ/IRQ/SLR/Glut/Hams exercises ○ Upper body exercises ○ Flexibility exercises ○ Contralateral leg exercises ○ AROM exercise for hip and knee ○ Rest in elevation when not exercising or mobilising NWB ○ Increase weight bearing status 	<ul style="list-style-type: none"> • Control of swelling and pain • Education and advice on self-monitoring /management of sensation, skin colour, circulation, temperature and swelling. • Safe independent use of elbow crutches to encourage gradual increase in weight bearing status. • Education on the use of the aircast boot to be worn at all times except for hygiene reasons or when exercising. • To aim for FWB in Aircast boot by week 6

WEEK	MOBILITY	REHABILITATION EXERCISES	GOALS
<p><u>Week 6-12</u></p> <p>(review in out-patient clinic by a member of the F+A team 6/52 post op with X-ray)</p>	<p>FWB in aircast boot → FWB in normal footwear</p>	<ul style="list-style-type: none"> ○ Specific Exercises – <ul style="list-style-type: none"> • Active ROM now to include inversion and eversion • AROM exercises in graded weight bearing status (e.g. heel slides, seated heel raises) • NWB resisted inversion, progressing from isometric to theraband resistance • Stretch tight structures as appropriate (eg TA, gastroc – care to be taken to keep STJt neutral to avoid excessive stretches on medial foot structures and tendon transfer) • CV exercise (no impact) ○ Manual Therapy <ul style="list-style-type: none"> • Soft tissue techniques • Joint mobilisations (ankle, STJ. MTJ, forefoot, 1st MTPJ) • Swelling management • Gait re-education from aircast boot in to normal footwear. • Review lower limb biomechanics and kinetic chain • Gradual increase in time and distance weight bearing. • Balance and proprioception exercises • Cycling on static bike, rowing machine • Hydrotherapy for mobility, strength and gait re-education (consider wound healing) 	<ul style="list-style-type: none"> • Independently mobile in aircast boot +/- walking aid to independently mobile in normal footwear +/- walking aid • Aircast boot can be removed when sitting at rest and at night from week 6 • Swelling and pain control as appropriate • Education and advice on self-monitoring /management of sensation, skin colour, circulation, temperature and swelling. • Maintain/improve ankle ROM to achieve full active and passive ankle ROM • Maintain Hip/ Knee ROM and strength • Prevent scar adherence. • Prevent joint stiffness.

		<ul style="list-style-type: none"> • ROM and strength exercises for other joints in kinetic chain as appropriate including core strengthening exercises, hip, knee, gluts/ hams/ quads exercises. • Pacing advice as appropriate 	
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WEEK	MOBILITY	REHABILITATION EXERCISES	GOALS
<p><u>12 weeks – 6 months</u></p> <p>(review in out-patient clinic by F+A Consultant)</p>	FWB	<ul style="list-style-type: none"> ○ Specific Exercises <ul style="list-style-type: none"> • Progress weight bearing exercises (maintain neutral foot posture) • Double leg heel raises → Single leg heel raises • Progress strengthening of tendon transfer (avoid overactivity of tibialis anterior) ○ Manual Therapy <ul style="list-style-type: none"> • Soft tissue and Joint mobilisations as appropriate ○ Progressively wean off walking aids as able ○ Footwear advice – wider fitting shoes adjustable shoes ○ Begin unilateral weight bearing exercises ○ Strength exercises for foot and ankle and other muscle groups in kinetic chain as appropriate ○ Higher level balance and proprioception exercises ○ Manual Therapy – soft tissue techniques, joint mobilisations and scar massage if indicated. ○ Stretch tight structures e.g. TA ○ Hydrotherapy to progress strength and mobility ○ Lower limb biomechanics/ kinetic chain assessment to address any findings including core stability progressions ○ Orthotics if required ○ Pacing advice 	<ul style="list-style-type: none"> • Promote independent gait • Optimise normal ankle and foot movement and restore gait pattern • Wear correct normal footwear • Achieve optimal ankle ROM • Achieve Grade 4 or 5 muscle strength around ankle • Optimise core strength and kinetic chain control

<p><u>From 6 months- 18 months</u></p>	<p>FWB in normal footwear</p>	<ul style="list-style-type: none"> ○ Gait re-education continued- progressions of mobility and function, increasing dynamic control with specific training towards functional goals with return to gentle low impact sports/ activities ○ To achieve single leg heel raise ○ Progression of ROM, strength, balance and kinetic chain exercises including increasing resistances/ loading (progress resistance/load as clinical judgement suggests, aiming for Grade 4-5 inversion strength) ○ Manual Therapy – soft tissue techniques, joint mobilisations and scar massage if indicated. ○ Pacing advice ○ Establish long term maintenance programme to prevent re-injury 	<ul style="list-style-type: none"> ● Promote independent gait- unaided or with walking aid if required long term ● Good biomechanical and dynamic control. ● Promote appropriate muscle strength/power and endurance ● Achieve Grade 5 muscle strength around ankle. ● Maintain/improve cardiovascular fitness ● Return to gentle no impact sports/hobbies
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