

THE ROBERT JONES AND AGNES HUNT ORTHOPAEDIC HOSPITAL FOUNDATION NHS TRUST

REHABILITATION *GUIDE* LATERAL LIGAMENT RECONSTRUCTION

(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 ○ ROM restrictions – <ul style="list-style-type: none"> - Avoid AROM/AAROM/PROM into inversion - Avoid AROM/AAROM/PROM into plantarflexion 	<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

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<p><u>Week 2-6</u></p> <p>(reviewed in out patient clinic by a member of the F+A team for removal of stitches and removal of cast)</p>	PWB in Aircast boot	<ul style="list-style-type: none"> Start active NWB ROM exercises out of the boot ROM restrictions - <ul style="list-style-type: none"> -Limit AROM/AAROM/PROM into eversion to 10° in safe controlled manner -No inversion AROM/AAROM/PROM -Gentle and controlled AROM/AAROM/PROM into plantarflexion -Submaximal ankle isometrics in all directions excluding inversion 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 Note: ROM is not equivalent to stretching Stretching should be avoided until week 12

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<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>Weight bearing as tolerated</p> <p>Normal footwear</p> <p>A60 splint recommended</p>	<ul style="list-style-type: none"> ○ Specific Exercises – <ul style="list-style-type: none"> • ROM restrictions - Avoid inversion AROM/AAROM/PROM until week 9 • Stretch tight structures as appropriate (eg gastrocnemius and soleus – care to be taken to keep STJt neutral to avoid excessive stretch on lateral ankle) • Commence proprioception exercise in controlled/predictable manner • CV exercise (no impact) ○ Manual Therapy <ul style="list-style-type: none"> • Soft tissue techniques • Joint mobilisations adhering to identified precautions and avoiding the tensioning of the CFL and ATFL • 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. • Cycling on static bike, rowing machine • Hydrotherapy for mobility, strength and gait re-education (consider wound healing) • ROM and strength exercises for other joints in kinetic chain as appropriate including core 	<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 avoiding excessive stretch especially inversion • Maintain Hip/ Knee ROM and strength • Prevent scar adherence. • Prevent joint stiffness.

strengthening exercises, hip, knee, gluts/
hams/ quads exercises.

- Pacing advice as appropriate

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<p><u>12 weeks – 4 months</u></p> <p>(review in out-patient clinic by F+A Consultant)</p>	<p>FWB</p> <p>Wean out of A60 splint as able</p>	<ul style="list-style-type: none"> ○ Specific Exercises <ul style="list-style-type: none"> • Progress weight bearing exercises (maintain neutral foot posture) • Progress to higher level balance and proprioception - unpredictable/uneven surface exercises • Double leg heel raises → Single leg heel raises ○ Manual Therapy <ul style="list-style-type: none"> • Soft tissue and Joint mobilisations as appropriate ○ Footwear advice –adjustable shoes to allow for any swelling and supportive. Avoid flip flops. ○ Begin unilateral weight bearing exercises ○ Strength exercises for foot and ankle and other muscle groups in kinetic chain as appropriate ○ Manual Therapy – soft tissue techniques, joint mobilisations and scar massage if indicated. ○ Stretch tight structures e.g. TA ○ Hydrotherapy to progress strength and mobility including controlled predictable plyometric work ○ Lower limb biomechanics/ kinetic chain assessment to address any findings including core stability progressions ○ Orthotics if required ○ Pacing advice 	<div style="text-align: right;">  <p>The Robert Jones and Agnes Hunt Orthopaedic Hospital NHS Foundation Trust</p> </div> <ul style="list-style-type: none"> • Promote independent gait • Optimise normal ankle and foot movement and restore gait pattern • Wear correct normal footwear • Achieve Full range of ankle movement • Achieve Grade 4 or 5 muscle strength around ankle • Optimise core strength and kinetic chain control • Guidelines for progression to next phase <ul style="list-style-type: none"> - Return of 90% function of the ankle compared with unaffected side measured with assessments that include but are not limited to - Single leg hop for distance - Triple hop for distance - Star excursion balance test - Y-Balance Test

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<u>From 4 months- 18 months</u>	FWB in normal footwear	<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) ○ Progression of higher level plyometric work in more unpredictable patterns ○ Manual Therapy – soft tissue techniques, joint mobilisations and scar massage if indicated. ○ Agility exercises ○ Sport specific drills/work related training ○ 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 ● Running can be initiated when patient is able to perform straight plane jogging without pain ● Post activity soreness can be used as guideline for return to sport or recreational activity