GOLD COAST SOUTH REHAB

ACL Protocal

Surgery: ACL Reconstruction
Prognosis: 9-12 Months

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01 Pre-Operative Rehab

Injury Week: -4 to -1

Focus	Pre-Op Injuruy week	Phase week	Block	Goals	Outcome / Testing goals
Pre-Operative Rehab	-4	1	1	Prehabilitation: Reduce effusion/swelling Full ROM Restore quad function Neuromuscular control Gait re-education Setting expectations	Sweep test: no trace or 0 effusion Knee extension: full Knee flexion: 125+ aSLR: nil lag Normal gait Limb Circumference Pre-Op STR - capacity test as able
	-3	2			
	-2	3			
	-1	4			

Surgery Day

Recommended Product:

Ice Mate
- Ice & Compression

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01 Pre-Operative Rehab

Injury Week: -4 to -1

Phase week	Treatment	Rehab Specific (PT Lead)	Gym Strenght (EP lead)	Off-Feet Cond	Running
1	RICE Protocol - ICE MATE Effleurage +M/T	Gentle ROM as able Iso + IRQ Drills	Upper limb = supervised, supported and/or seated	Stationary Bike + CV Conditioning	Gait retraining - wean off crutches
2	RICE Protocol - ICE MATE Effleurage +M/T	A/A + progress STR - DL squat, HS, Glute, Calf	Upper limb = supervised, supported and/or seated	Stationary Bike + CV Conditioning	A/A + Gait Cycle Mech - Hip hitch, weight transfer
3	RICE Protocol - ICE MATE Effleurage +M/T	A/A + Bosch drilling - Hip cont + graft prep	Upper limb = supervised, supported and/or seated	Stationary Bike + CV Conditioning	A/A + gait drills - wall march, A march
4	RICE Protocol - ICE MATE Effleurage +M/T	A/A	Upper limb = supervised, supported and/or seated	Stationary Bike + CV Conditioning	A/A + triple ext
Surgery Day					

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02 Post-Operative Recovery

Injury Week: 1 to 6

Phase	Focus	Post Op Week	Phase Week	Block	Goals	Outcome / Testing Goals
1	Protection	1	1	1	Surgical Recovery: allow wound healing, avoid infection	Sweep Test: no trace or 0 effusion Knee Ext: full
		2	2			
		3	3	2	Normalise Gait Restore Quads & Hamstring Function	Sweep test: no trace or 0 effusion Knee Ext: full Knee Flexion: >90 aSLR: Nil quad lag Normal gait Limb Circumference
		4	4			
		5	5	3	Normalise Gait Restore Quads & Hamstring Function Improve ROM	Knee Flexion: >120-130 aSLR: Nil quad lag Normal gait Limb Circumference
		6	6			

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02 Post-Operative Recovery

Injury Week: 1 to 6

Phase Week	Treatment	Rehab specific (PT Lead)	Ofd-feet Cond	Ofd-feet Cond	Running
1-2	No sweating No excessive ROM RICE Protocol - ICE MATE M/T: Lateral thigh + PFJ	Isometric quads + HS Gentle ROM in flexion + ext	Nil	Nil	Gait Retraining - wean off crutches
3-4	RICE Protocol - ICE MATE Compex in brace & flexed knee Bike Pendulum if stiff++ M/T: lateral thigh + PFJ	A/A + TKE + wall sit DL CR Hamstring sliders Assisted squat SLR BFR: squat, knee ext/flx, calf	Non-affected limb = machine weights Cross-body strength program (5 x 5, high intensity).	Upper limb only	Gait Cycle Mechanics - Hip hitch, sweeps, hip extension
5-6	RICE Protocol - ICE MATE Compex + BFR protocols NMC initiated M/T: Lateral thigh + PFJ	A/A+BFR Hypertrophy+squat Graft ISOs GH raise Calf complex	As above + Upper limb = supervised, supported and/or seated	Upper limb only	Gait Drills - assisted march/hurdles, lateral step / weight transfer

Variations

Meniscus Tenodesis Other - MCL/PLC	The protocol will be adjusted based upon surgical outcome	6/52 NWB Braced - Surgeons Protocol Braced - Surgeons Protocol

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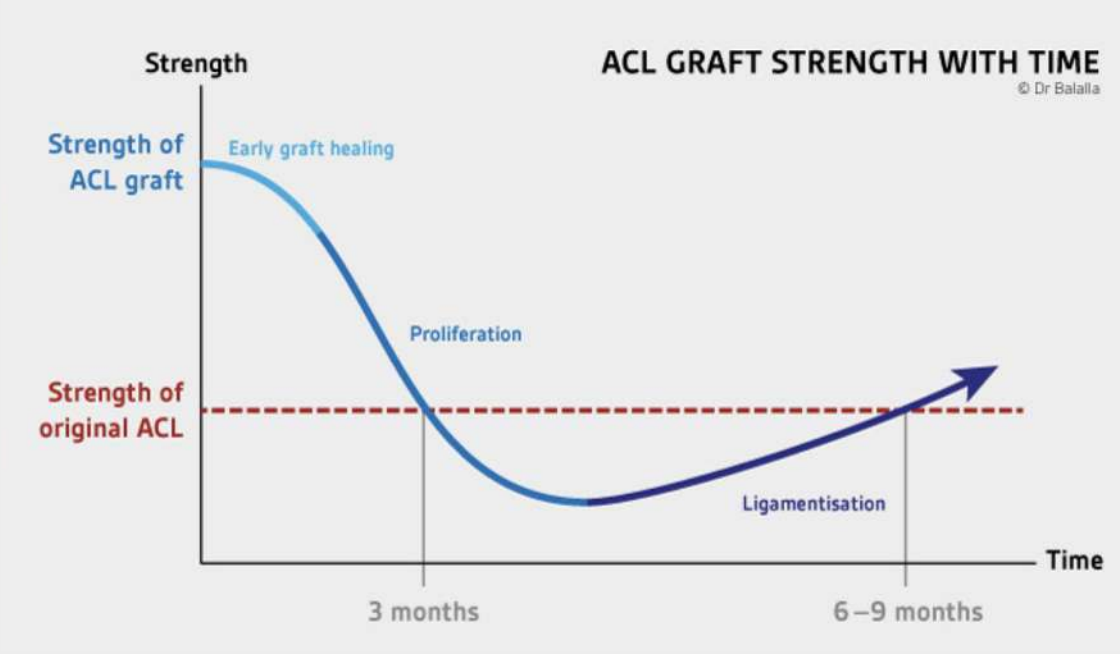
02 Post-Operative Recovery

Additional Information

The ACL graft progresses through 3 phases:

1. **Healing Phase (0-4 weeks)** - The graft is necrotic during this phase and is strongest. It re-establishes blood supply towards the end of this phase.
2. **Proliferation Phase (4-12 weeks)** - The graft is WEAKEST during this period and is prone to elongation and potential rupture due to re-vascularisation and an increase in growth factors. Damage during this phase will affect collagen re-organisation.
3. **Ligamentisation Phase (12 weeks-2 years)** - The graft undergoes structural changes and the remodelling of the graft is closest to a native ACL.



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03 Load Introduction

Injury Week: 7 to 12 & 13 to 16

Phase	Focus	Post Op Week	Phase Week	Block	Goals	Outcome / Testing Goals
2	Load Introduction	7	1	1	Neuromuscular Control + Endurance: Regain movement patterns with symmetry, control, endurance and efficiency.	Observed appropriate control for squat, glute bridge and SL squat/step down Nil asymmetry/shift on single leg stance SL Balance >30s Limb Circumference < 1cm Appropriate gait mech & lateral walk Progress hamstring loading Return to conditioning
		8	2			
		9	3			
		10	4		Continue as above + Hypertrophy Introduction: Full lower limb hypertrophy + limb symmetry	
		11	5			
		12	6			

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03 Load Introduction

Injury Week: 7 to 12 & 13 to 16

Phase	Focus	Post Op Week	Phase Week	Block	Goals	Outcome / Testing Goals
2	Load Introduction + Strength Accumulation (EP Transition)	13	7	2	Hypertrophy: Reintegration into gym-based exercise - hypertrophy focus Strength/Run Prep: Introduction if appropriate capacity. Eccentric control + plyometric introduction	Lower Limb Capacity Testing Protocol - ROM NMC SL Endurance VALD
		14	8			
		15	9			
		16	10			

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03 Load Introduction

Injury Week: 7 to 12 & 13 to 16

Treatment	Rehab Specific (PT Lead)	Gym Strenght (EP lead)	Off-Feet Cond	Running	Skills
Check: Hip IR KTW CET and M/T as appropriate (used to encourage good control of tested movements) Compex + BFR as appropriate`	Progress Bosch Drills: Hip locks A-frames DL + SL Iso Bosch Holds HS SB matrix competent Progress trunk work Progress graft site loading Eccentric control + Plyo intro Pilates + Hydro	General Hypertrophy Lower Limb (Dan Baker Periodisation Model or as appropriate) Upper limb nil restriction	Bike as required	Gait drills + Sled Push / Drag, Stair Walking + perturbations (water bag, med ball, etc)	Stationary / Walking

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04 Strength Accumulation

Injury Week: 17 to 20, 21 to 24, 25 to 28 & 29 to 32

Phase	Focus	Post Op Week	Phase Week	Block	Goals	Outcome / Testing Goals
3	Strength Accumulation	17	1	1	Strength / Running Prep Progress Eccentric control Progress Plyometrics Increase load to ensure successful return to running	Continue previous assessment + Observed appropriate control A-skip & Lateral Skip, Hop Progressions RTR Progression
		18	2			
		19	3			
		20	4			

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04 Strength Accumulation

Injury Week: 17 to 20, 21 to 24, 25 to 28 & 29 to 32

Treatment	Rehab Specific (PT Lead)	Gym Strenght (EP lead)	Off-Feet Cond	Running	Skills
Monitor ROM testing M/T for previous and to encourage running positions i.e. hip extension	Pogo progressions Bound to hop + SL progressions Advanced bosch drills + perturbations	General Strength Lower Limb (Dan Baker Periodisation Model or as appropriate)	Bike as required	ntroduce a/b/c drills and progressions as appropriate Other technique drills i.e. alternating a-frame on wall, trampoline running	Stationary / Walking

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04 Strength Accumulation

Injury Week: 17 to 20, 21 to 24, 25 to 28 & 29 to 32

Phase	Focus	Post Op Week	Phase Week	Block	Goals	Outcome / Testing Goals
3	Strength Accumulation	21	5	2	Linear Program: Build running volume Introduce acceleration and deceleration control / mechanics	Successful completion of linear running program + accel/decel Squat / SL Leg Press 1RM: 1.8x BW Nordic Hamstring Curl: > 330N
		22	6			
		23	7			
		24	8			

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04 Strength Accumulation

Injury Week: 17 to 20, 21 to 24, 25 to 28 & 29 to 32

Treatment	Rehab Specific (PT Lead)	Gym Strenght (EP lead)	Off-Feet Cond	Running	Skills
M/T as required	SL pogos Hops Jumps Introduce drop jump Lateral/crossover SL hops + Chaos drills in gym setting	Max Strength / Power	Watt Bike as required	Linear High Speed Running Volume Program (build to 2.5km @ 5.5m/s) Accel/Decel Drills: Box drill / 10m shuttles	Low-mod intensity linear skills i.e. dribbling, passing, shooting, catching

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04 Strength Accumulation

Injury Week: 17 to 20, 21 to 24, 25 to 28 & 29 to 32

Phase	Focus	Post Op Week	Phase Week	Block	Goals	Outcome / Testing Goals
3	Strength Accumulation + COD Introduction	25	9	3	Planned COD	Successful completion of COD drills, simple skill integration drills and max velocity. SL DJ: >0.27 +>95% SL Hop: >95% + x 0.7 height Triple Hop: >95% Triple Crossover: >95% 6m Timed Hop: >95%
		26	10			
		27	11			
		28	13			

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04 Strength Accumulation

Injury Week: 17 to 20, 21 to 24, 25 to 28 & 29 to 32

Treatment	Rehab Specific (PT Lead)	Gym Strenght (EP lead)	Off-Feet Cond	Running	Skills	Contact
M/T as required	As previous + Lateral progressions X Hop progressions LLRLs Hurdles Shocks	Max Strength / Power - reactive strength	Watt Bike as required	Very-High Speed Running Volume (1.5km @ 6.5m/s) Accel/Deccel Drills: 20m shuttles (5m accel/deccel zone) COD: pre-planned + no stimulus. Progress from S-bends to multi-directional	Mod-high intensity linear skills & low-mod intensity planned COD	Light-mod Planned contact

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04 Strength Accumulation

Injury Week: 17 to 20, 21 to 24, 25 to 28 & 29 to 32

Phase	Focus	Post Op Week	Phase Week	Block	Goals	Outcome / Testing Goals
3	Strength Accumulation + COD Introduction	29	13	4	Unplanned COD	30s Lateral hop test: >95% + >55/41 Balance: SEBT: >95% Isokinetic quads/HS: >95% T-Agility 5-0-5 2km TT Bronco Yo-Yo ACL-RSIq: >76%
		30	14			
		31	15			
		32	16			

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05 Training Integration

Injury Week: 33 to 36

Phase	Focus	Post Op Week	Phase Week	Block	Goals	Outcome / Testing Goals
4	Training Integration	33	1	1	Return to Training & Sport Specific Skills	Continue previous assessment + RTP Clearance
		34	2			
		35	3			
		36	4			

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05 Training Integration

Injury Week: 33 to 36

Phase Week	Treatment	Rehab Specific (PT Lead)	Gym Strenght (EP lead)	Off-Feet Cond	Runn ing	Skills	Contact
1-2	As required	Integrate complete chaos in control exercises	Full Programming	Full Programming	Closed - Open Skills	Mod-high intensity Unplanned COD Progress cognitive stimulus and opposition Cont to progress	Light-mod Unplanned contact
3-4							Mod-heavy Unplanned contact

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06 Return to Performance

Injury Week: 37 to 40

Phase	Focus	Post Op Week	Phase Week	Block	Goals	Outcome / Testing Goals
5	Return to Performance	37	1	1	Return to Play & Return to Perform	Continue previous assessment
		38	2			
		39	3			
		40	4			

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06 Return to Performance

Injury Week: 37 to 40

Treatment	Rehab Specific (PT Lead)	Gym Strenght (EP lead)	Off-Feet Cond	Running	Skills	Contact
As required	Integrate complete chaos in control exercises	Full Programming	Full Programming	Full Programming	No Restriction	No Restriction
Sport Specific Variation + Timelines						
Contact Sport: Surfing: Snow Sport: Triathlon: Dance: Swimming: ETC ETC						

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