

Programme Summaries

Alan Murdoch

Speedworks Bath

Alan_Murdoch_coach

Phase 1: Programme 1

SESSION PARAMETERS			LOADING PARAMETERS		
EXERCISE	WEEK	DATE	SETS X REPS	TEMPO	REST
1 SL Leg Press	1		3 x 8	CNTRL	180
	2		4 x 6		
	3		5 x 4		
	4		3 x 7		
	5		4 x 5		
	6		5 x 3		
2 SL Hamstring Curl	1		3 x 8	CNTRL	120
	2		3 x 6		
	3		3 x 4		
	4		3 x 7		
	5		3 x 5		
	6		3 x 3		
3 SL Knee Extension	1		3 x 8	CNTRL	120
	2		3 x 6		
	3		3 x 4		
	4		3 x 7		
	5		3 x 5		
	6		3 x 3		

4A Seated Calf Raise	1		3 x 8 - 12	CNTRL	30s
	2		3 x 8 - 12		
	3		3 x 8 - 12		
	4		3 x 8 - 12		
	5		3 x 8 - 12		
	6		3 x 8 - 12		
4B TRUNK a) Seated Paloff (12/s) b) Plank Hold	1		x 3	CNTRL	30s
	2		x 3		
	3		x 3		
	4		x 3		
	5		x 3		
	6		x 3		

Phase 1: Programme 1

- Encourage cross education via intensifying set/rep schemes across 6 weeks for the contralateral side
- Exercise choice made in line with potential exercise selection for surgical side in next phase
 - Again to encourage cross education
- Trunk exercises selected for minimal weight bearing impact
- Plank was completed weight bearing
 - This was against guidelines but was chosen following athletes admission to doing it at home with no pain or response
- All set rep/schemes were intensified over time, besides calf, which was identified as needing more of a capacity/hypertrophy focus before proceeding towards strength training

Phase 2a: Programme 1

EXERCISE		WEEK	DATE	SETS X REPS	TEMPO	REST
Lateral Hip	1a Hip Hitch (3 s hold) 1) Dowel on back 2) Dowel OH 3) Plate OH 4) DB OH 5) BB OH w. Perturbation	7		3 x 6		180
		8		3 x 6		
		9		3 x 6		
		10		3 x 6		
		11		3 x 6		
		12		3 x 6		
Run Prep	1b Banded Dribble Pump (Aim to achieve full extension, with band behind Right Leg) Add in ankle dribble supersetted with dribble pump	7		3x20		180
		8		3x30		
		9		3x40		
		10				
		11		3x50		
		12				
Squat	2 Banded Box Squat (Progress to parallel when can squat evenly to tall box) FRONT SQUAT Week 4 onwards Introduce Babrbell @ 40kg week , session 2 Superset with standing banded balance	7		3x10		180
		8		4x10		
		9		5x10		
		10		5x10		
		11		5x10		
		12		5x10		

DL Hip	3 Deadlift 1) Above Knee 2) Below Knee 3) Mid Shin Superset with SSC Split Squat Week 1 Session 2 (3x5)	7		3x10		CNTRL	180
		8		4x10			
		9		5x10			
		10		5x10			
		11		5x10			
		12		5x10			
SL Hip	5 SL Block RDL (week 1, session 2) 1) Supported DB 2) Unsupported DB 3) BB Week 4: Intro Leg Extension supersetted with Block RDL Set 1: 3/5/9 plates	7		3x10		CNTRL	180
		8		4x10			
		9		5x10			
		10		5x10			
		11		5x10			
		12		5x10			
Rx STR	5 SL Leg Press	7				CNTRL	30
		8					
		9					
		10					
		11					
		12					
Calf	6A Calf Raise 1) Heel Raise Walk 2) Tip Toe Walk 3) Heel Raise w. Load 4) Tip Toe w. Load Banded Anklng 30 reps E/S	7		3 x 20m		NA	NA
		8		3 x 20m			
		9		3 x 20m			
		10		3 x 20m			
		11		3 x 20m			
		12		3 x 20m			

Phase 2a: Programme 1

- Lateral hip
 - Increase in complexity and pelvic stability demands across sessions
- Run prep
 - Accumulation of volume, with contrasted prescription of full ankle dribble to expose system gradually to new load & pattern
- Squat progression in volume
 - Primary concern is the regaining of motor control, of which frequency and volume are key tenants
 - Athlete had a tendency for over supination & external rotation of the ankle, therefore squat super-setted with banded ankle balance where neutral active foot was encouraged
- Deadlift progression in volume
 - Range was increased weekly to demand more of the tissues at increasing length-tension relationships until normal pattern was restored
- Split squat was integrated early in this particular case, as it was considered a key loading strategy with objective markers during mid/late stages
- SL RDL utilised as an unstable hinge that required control of the pelvis and lateral hip stability
 - Key components in any ACL rehab
- Leg press remained consistent as a key tenant of neural transfer until the athlete regained range and control on the injured side
- Calf capacity was introduced first, with systematic progressions in intensity via complexity of movement
 - Once the athlete could demonstrate tolerating the last of these progression, a more reactive component (ankling) was added in week 9

Phase 2a: Programme 2

EXERCISE		WEEK	DATE	SETS X REPS	TEMPO	REST
Lateral Hip	1 Crab Stance (5 s hold) Progress to 1 black band per 20kg of body mass	7		3 x 6		180
		8		3 x 6		
		9		3 x 6		
		10		3 x 6		
		11		3 x 6		
		12		3 x 6		
Run Prep	1b Banded Dribble Pump (Aim to achieve full extension, with band behind Right Leg)	7		3x20		180
		8		3x30		
		9		3x40		
		10		3x50		
		11				
		12				
7		3x10			CNTRL	180
8		4x10				
9		5x10				
10		5x10				
11		5x10				
12		5x10				

Hamstring	3 SL Hamstring Bridge	7		3x10		CNTRL	120
		8		4x10			
		9		5x10			
		10		5x10			
		11		5x10			
		12		5x10			
SL Squat	4 SL Squat Focus on upright torso 1) High Box 2) Chair 3) bench Added leg extensions and hamstring curls week 10	7		3 x 6		CNTRL	120
		8		3 x 6			
		9		3 x 6			
		10		3 x 6			
		11		3 x 6			
		12		3 x 6			
Calf	5A Calf Raise 1) Heel Raise Walk 2) Tip Toe Walk 3) Heel Raise w. Load 4) Tip Toe w. Load Week 9 added SL POGO X10	7		3 x 20m		NA	NA
		8		3 x 20m			
		9		3 x 20m			
		10		3 x 20m			
		11		3 x 20m			
		12		3 x 20m			

Phase 2a: Programme 2

- Lateral hip
 - **Stability** worked on in isolation via seated and squat stance crab holds
 - Cues and focus was on maintenance of **pelvic control**, and **position of knee in relation to foot**
 - **Intensification** driven by resistance over weeks
- Run prep was again dribble pump and dribble ankle to re-enforce **mechanics** and provide adequate volume to help adaptation to load and re-integration of appropriate mechanics
 - As per programme 1, progress was made via accumulation of volume
- Squat intensity was driven by complexity, and once range and relative **symmetry** (coaches eye on the ability to maintain an even weight distribution throughout the squat) were achieved
 - Loads were progressed to the point of **technical breakdown**
- Closed kinetic chain hamstring bridging incorporated to develop posterior chain strength
 - Previously identified as a weakness, this was an inclusion for 2 reasons: (1) Lack of hamstring/glute strength due to surgery (2) Prepare the athlete to produce more horizontal force as acceleration ability was a major KPI for this rehab and beyond
- SL squat was included to challenge hip stability and isolate leg extension strength
 - Intensification was driven by range
 - As a marker of progression, one the athlete could tolerate a parallel SL squat with no technical breakdown or pain, leg extension was included in the programme
- Calf capacity was introduced first, with systematic progressions in intensity via complexity of movement.
 - Once the athlete could demonstrate tolerating the last of these progressions, a more reactive component (SL pogo) was added in week 9

Phase 2b: Programme 1

EXERCISE		WEEK	DATE	SETS X REPS	TEMPO	REST							
1a	Hip Hitch (3 s hold) Crab Hold Glute Split Stance Holds	11		3x6 3x20s 3x20s	CNTRL	60s	3	Leg Extension + SL Hamstring Curl	11		3x8	2:1	90s
		12							3x8				
		13							3x8				
		14							3x6				
		15							3x6				
		16							3x6				
1b	Banded Dribble Pump + Ankle Dribble (Dowel OH) * Progress to shin dribble when form and response allows *	11		5x20m		60s	4	Goblet Squat + SL Glute Bridge	11		3x10 3x10	2:1	
		12		6x20m					12		3x8 3x8		
		13		7x20m					13		3x6 3x6		
		14		8x20m					14				
		15		9x20m					15				
		16		10x20m					16				
2	10 -> 20 -> 30cm Box Jump & Land * Progress through heights as form and response allows *	11		3x5 (10cm)	EXPLOSIVE	30s	5	Ankling + SL Banded Pogos	11		3x20 (each side) 3x20 (each side)	EXPLOSIVE	
		12		3x5 (20cm)					12		3x30 (each side) 3x30 (each side)		
		13		3x5 (30cm)					13		3x40 (each side) 3x40 (each side)		
		14		3-5x5 (30cm)					14		3x50 (each side)		
		15		3-5x5 (30cm)					15				
		16		3-5x5 (30cm)					16				

Phase 2b: Programme 2

EXERCISE		WEEK	DATE	SETS X REPS	TEMPO	REST							
1a	Hip Hitch (3 s hold) Crab Hold Glute Split Stance Holds	11		3x6 3x20s 3x20s	CNTRL	60s	3	SSC Split Squat	11		3x8	2:1	90s
		12							3x8				
		13							3x8				
		14							3x6				
		15							3x6				
		16							3x6				
1b	Accel Sled Push * Accel mechanics * - long postures - explosive extensions into floor - tucked swing leg - pre-tensed ankle	11		5x10m		60s	4	RDL	11		3x10 3x10	2:1	90s
		12		6x10m					3x8 3x8				
		13		7x10m					3x6 3x6				
		14		8x10m									
		15		9x10m									
		16		10x10m									
2	10 -> 20 -> 30cm Box Jump & Land * Progress through heights as form and response allows *	11		3x5 (10cm)	EXPLOSIVE	30s	5	Isometric Calf Holds	11		3x10s	MAX	90s
		12		3x5 (20cm)					3x8s				
		13		3x5 (30cm)					3x5s				
		14		3-5x5 (30cm)					3x3s				
		15		3-5x5 (30cm)									
		16		3-5x5 (30cm)									

Phase 2b: Programme 1 & 2

- Hip stability & strength work is programmed in as a **warm-up** to allow for more exposure whilst opening more time to work on the priority within session (strength)
- Main strength exercises in this phase are leg extension, leg curl, squat, split squat, hip thrust and RDL
 - **Intensification** within these main lifts are via decreased volume, and increased intensity over a 6 week cycle
- Although not a classic “strength” stimulus, **run prep** is a major part of the strength programme, in that we are developing and regaining the necessary patterns for subsequent return to running
 - In this phase we will progress volume up to 200 m of dribble work, in an attempt to encourage **motor learning**
 - **Constraints** can be utilised to help accelerate motor learning at this stage
 - Acceleration mechanics in slow, forceful application via sled pushes can also be used at this stage to prepare for acceleration drills in subsequent phases
- Introduction of jump & lands
 - Now the athlete has demonstrated the ability to competently load the squat without **compensations**, they are ready for introductory exposure to jump & lands
 - This begins with 10 cm bilateral → unilateral box jump & box lands and progresses at a rate appropriate to their ability/response/confidence
 - The end goal here is 20-30 cm unilateral, which is aligned to the next phase of jump & lands: SL counter movement jump
- **Ankle stiffness** qualities will also be progressed, with reactive & elastic qualities developed at both ends of the week, whilst max strength will be developed via isometrics mid week in programme 2
 - Intensification of this will be via intensity of contraction (as stated on programme), with decreased time frames in which to apply max force.
- **LSI** will be taken at the end of this phase, and a decision made to progress to **isokinetic dynamometry** based on leg extension and hamstring curl ability
 - As leg extension is a pure test of knee extension and hamstring curl a pure test of knee flexion, it is prudent to use these exercises as guides as to when is appropriate to test the same mechanisms in iso-k

Phase 2c

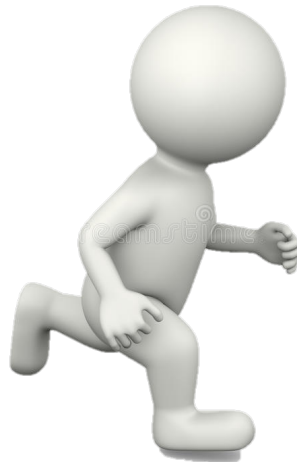
	Monday		Tuesday		Wednesday		Thursday
Gym	LB WU - Squat/SL Glute Bridge Prep - Hip Lck/Dribble/Jump&Land Anterior Strength - Leg Extension / Split Squat Posterior Strength - Leg Curl / Inner Hamstring Calf Conditioning - Toe Tap / Paqar	Set/Reps	UB + Trunk	Set/Reps	LB Prep - Hip Lck/Dribble/Jump&Land Anterior Strength - Leg Press Posterior Strength - RDL / Glute Bridge Calf Conditioning - Toe Tap / Paqar / Seated Raise	Set/Reps	OFF
Conditioning			Assault Bike 2min ON @ 60-65RPM 1min OFF @ 50-55RPM 10 rounds/30min				
Motor Control							
Foot Intrinsic / Balance	SL Balance with Palaf Hold → SL Squat (as deep as you can hold shape)	3 x 30s	SL Balance with Palaf Hold SL Balance with round the world KB	3 x 30s	SL Balance with Palaf Hold → SL Squat (as deep as you can hold shape)	3 x 30s	
Squat Pattern	Wall Squat SL Squat	3 x 5 (3r Eccentric) each	Wall Squat SL Squat	3 x 5 (3r Eccentric) each	Wall Squat SL Squat	3 x 5 (3r Eccentric) each	
Hip / Pelvis-Lumbar Stability	Lateral Walk / Manator Walk / 90 Degree Holdr	3x20/30s each side	SL Box Dipr Seated Palaf Tuirt	3 x 8 each side	Glute Activation (3x20/30s each side) Lateral Walk / Manator Walk / 90 Degree Holdr	3x20/30s each side	
Jump/Land	Tip Toe → SL Land & Stick (Use DBr)	5 x 5			Tip Toe → SL Land & Stick (Use DBr)	5 x 5	
	Round the clock 90 degree SL jump & landr	x3 clockwise/anti-clockwise			Round the clock 90 degree SL jump & landr x3 clockwise/anti-clockwise	x3 clockwise/anti-clockwise	
	5cm Drop jump	5x5			5cm Drop jump	5x5	
COD	Lateral Step with band (Dauel overhead)	5 x 5			Lateral Step with band (Dauel overhead) 5x5 each side	5 x 5	

Phase 2c

Friday		Saturday		Sunday
LB WU - Squat/SL Glute Bridge Prep - Hip Lck/Dribble/Jump&Land Anterior Strength - Leg Extension / Split Squat Posterior Strength - Leg Curl / Inner Hamstring Calf Conditioning - Toe Tap / Pagar	Setr/Repr	UB + Trunk	Setr/Repr	OFF
		WattBike Fan 2-3 36r ON @ 100RPM 24r OFF @ 70RPM x20/30min		
SL Balance with Palaf Hold → SL Squat (as deep as you can hold shape)	3 x 30r	SL Balance with Palaf Hold SL Balance with round the world KB	3 x 30r	
Wall Squat SL Squat	3 x 5 (3r Eccentric) each	Wall Squat SL Squat	3 x 5 (3r Eccentric) each	
Glute Activation (3x20/30r eachside) Lateral Walk / Manter Walk / 90 Degree Holdr	3x20/30r eachside	SL Box Dipr Seated Palaf Tuirt	3 x 8 eachside	
Tip Toe → SL Land & Stick (Use DBr)	5 x 5			
Round the clock 90 degree SL jump & land x3 clockwise/anti-clockwise	x3 clockwise/anti-clockwise			
5cm Drop jump	5x5			
Lateral Stop with band (Dauel overhead) 5x5 each side	5 x 5			

Progression streams

Plyometric	10cm Box Jump	20cm Box Jump	30cm Box Jump	Bilateral CMJ	Unilateral CMJ	5 -> 20cm bilateral Drop Jump	
	10 cm Box Land	20 cm Box Land	30 cm Box Land			5-> 20cm unilateral Drop Jump	
Acceleration	Sled Push Walks	Sled Push Exchanges	Sled Accelerations	1-10 Step Accelerations			
Change of Direction	Lateral Step (add dowel OH) (add resistance band)	Lateral Repeated Step (add dowel OH) (add resistance band)	Lateral Shuffle	Lateral Step Return	Y - Cut	T - Cut	180 degree turn



Phase 2c: Programme 1 & 2

- As identified by iso-k, **RFD** in leg extension was a requirement therefore cluster sets were programmed at slightly lighter weights (70-80% estimated 1RM) to encourage neural qualities associated with fast contraction rates (sets/reps used were 5x4-2 over 6 week block)
- Split squat progressions were programmed consistently at 4x6 reps, with **intensification** coming via load
 - The athlete was given the challenge of finding a 6RM on the uninjured side, and matching that weight on the injured side by the end of the 6 week programme
- Due to the results of the iso-k, it was necessary to programme the hamstring curl at a prescription which: (1) allowed for **consistent strength progression** (2) stimulated **capacity** and ability to continue to produce high levels of force when while fatigued in comparison to the non-injured side
 - This was done by 3x6 full range hamstring curls, and at the end of the session finishing with 3 sets of failure reps at 70% of the 6RM load
- Plyometrics were progressed via **bilateral** → **unilateral** prescription of CMJs
 - These were recorded over time to assess absolute scores and, importantly, asymmetries over time
 - Reactive drop jumps were included in this programme and progressed in the same manner (bilateral → unilateral and intensified by drop height also (5-20 cm over 6 weeks))
- **Multi-directional** single leg jump and lands were included within motor control to encourage the athlete to “feel” the **proprioceptive** and stability benefit of previous squat and **lumbopelvic stability**

Phase 2c: Programme 1 & 2

- **Change of direction mechanics** were introduced at this stage, to facilitate the subsequent stage of return to running
 - Exercise selection began very regressed (see COD stream) and progressed based on **technical competency**
- On LB2, Leg press was treated similarly to leg extension
 - In an attempt to elicit **RFD** qualities, cluster sets were programmed at slightly lighter weights (70-80% estimated 1RM) to encourage neural qualities associated with fast contraction rates (sets/reps used were 5 x 4-2 over 6 week block)
- RDL & Glute Bridge were kept constant at 5x5
 - Intensity was progressed via increased load over the 6 week block (there was an unofficial target of 1.5x BW for RDL and 2x BW for glute bridge)
- COD drills were prescribed on this day also to compliment LB1
 - As per run prep, this was to assure enough frequency to stimulate change in **motor learning** as well as physical adaptation of the tissue

Phase 3

<u>TRAINING</u>		Monday		Wednesday		Friday	
Gym		LB Anterior Strength - Leg Extension / Split Squat Posterior Strength - Leg Curl / Inner Hamstrings Calf Conditioning - SL Calf Raise	Sets/Reps Leg Extension sets (3 x (2x2) Split Squat 3x6 Leg Curl 3x3 (+2xfailure post sessions) Calf Raise 3x6 each side	LB Anterior Strength - Leg Press Posterior Strength - RDL / Glute Bridge Calf Conditioning - SL Calf Isometric	Sets/Reps Leg Press (3 x (2x2) RDL / Glute Bridge (5x5) Calf Raise 3x6s ISOMETRIC *explode*	LB Anterior Strength - Leg Extension / Split Squat Posterior Strength - Leg Curl / Inner Hamstrings Calf Conditioning - SL Calf Raise	Sets/Reps Leg Extension sets (3 x (2x2) Split Squat 3x6 Leg Curl 3x3 (+2xfailure post sessions) Calf Raise 3x6 each side
	Conditioning						
Motor Control	Foot Intrinsic / Balance	SL Banded Balance	3 x 30s	SL Banded Balance	3 x 30s	SL Banded Balance	3 x 30s
	Squat Pattern	Wall Squat	3 x 5 (3s Eccentric) each	Wall Squat	3 x 5 (3s Eccentric) each	Wall Squat	3 x 5 (3s Eccentric) each
	Hip / Pelvo Lumbar Stability	Psoas DeadBug	3x10 each side	Psoas DeadBug	3x10 each side	Psoas DeadBug	3x10 each side
Jump/Land		20cm DB Land & Stick	3x3	20cm DB Land & Stick	3x3	20cm DB Land & Stick	3x3
		20cm Drop Jump	3 x 5 each side	Round the clock 90degree SL jump & lands clockwise/anti-clockwise 3x each way	3 x 5 each side	20cm Drop Jump	3 x 5 each side
		SL CMJ	3x5 each side	20cm Drop Jump	3x5 each side	SL CMJ	3x5 each side
On-Feet		Linear Bias		COD Bias		Linear Bias	

Phase 3: Programme 1 (weeks 25-27)

		Monday	Wednesday	Friday	Total Weekly Load
Linear Bias	<p><u>Week 1 (Intro)</u> Build up to 10m accel + 500m dribble bleeds</p>	<p>COD Step Returns Accel Prep 10 x 2 step accels Dribble Bleeds 5 x 50m</p>	<p>COD Step Returns Accel Prep 10 x 4 step accels Dribble Bleeds 8 x 50m</p>	<p>COD Step Returns Accel Prep 10 x 6 step accels Dribble Bleeds 10 x 50m</p>	<p>Accel efforts 30 Sprint metres 0 Total metres ~1500</p>
	<p><u>Week 2</u> Progress to 10x50m Accel -> tempo runs Progress COD work to shuffle returns</p>	<p>COD shuffles (resistance band) Accel Prep Max 3x10m Accels Dribble Warm-Up Intro 50m Tempo Runs (70-80%) up to 5 reps</p>	<p>Intro Shuffle/Step return series Accel Prep & Dribble Warm Up 8 x 50m Tempo Runs (75-85%)</p>	<p>Shuffle Return Banded Accels Max 10m Accels x3 10 x 50m Tempo Runs (85+%)</p>	<p>Accel efforts 40 Sprint metres 0 Total metres ~1750</p>
	<p><u>Week 3</u> Intro Y-T cuts Progress to 20m accels Intro IFT Conditioning</p>	<p>Reactive Shuffle Return Intro Y Cuts 3x15m Max Accel 10 x Tempo Runs (85%)</p>	<p>Reactive Shuffle Return -> Accel/Decel Intro T Cuts 10 x Tempo Runs (90%+)</p>	<p>T Cuts 3x20m Accel 2x8 reps IFT conditioning @ 80%</p>	<p>Accel efforts 50 Sprint metres 50 Total metres ~2000-2500</p>

Phase 3: Programme 1

- This 3 week block was biased towards **linear speed**, and therefore the week was split 2 : 1 (linear : COD)
- **Warm-ups** on linear days were to progress a COD drill, thus ensuring COD content throughout the week
 - Exercise selection was based on the COD stream of exercises and prescribed daily based on athlete competency
 - The main objective of COD inclusion was to prepare the athlete for the next phase which was COD biased, and therefore could progress through to more advanced drills in a shorter time frame
- **Acceleration** prep was based on identified errors in the athletes accel mechanics and were designed to educate and give the athlete context to the shapes in which we wanted to see
 - Accelerations progressed from 2-10 step efforts over a week, prior to accelerating maximally
- **Dribble bleeds** were a major component of this phase (continued on RTP)
 - The dribble bleed is designed to replicate **upright running mechanics**, namely cyclical patterning, stiff leg stance leg and rhythm
 - As the athlete has noted a goal of running faster, upright running drills will play a major part in achieving this
- **Tempo runs** are runs at which the athlete can maintain good running mechanics whilst travelling at submaximal speeds (70-90%)
 - These allowed the opportunity for the athlete to maximally accelerate and attain high speed running and it's benefits safely, without risk of inefficiently loading the tissues in poor positions
- After completing 10 tempo runs, **conditioning** runs were added to the programme
 - IFT conditioning, is a type of prescriptive running conditioning programme that is based off a baseline fitness test called the 30:15 (see Buchheit, (2008). *J. Strength Cond. Res.*, 22(2), 365-374)
- **Weekly on-foot load estimates** were projected, with a view to progressing towards the volume/load of a predicted weekly training week for rugby training
 - All numbers are estimates, and were purely used to guide on-foot prescription in line with potential demands on return to training

Phase 3: Programme 2 (weeks 28-30)

COD Bias	<p>Week 4 Intro reactive COD Intro 180 turns (constrained) Intro COD IFT Intro Contact; tackler & ball carrier</p>	<p>Reactive Shuffle Return Reactive Y/T Cuts Intro 180 degree step-> Ball throw Intro COD IFT 3x8 reps @ 80% Isolated contact drills</p>	<p>Dribble Warm - Up Accel Prep 3x20m Max Accels -> 40m bleeds 10 x Tempo Runs (90%)</p>	<p>Reactive Shuffle Return Reactive Y/T Cuts -> Accel decel Intro 180 degree accel-> Ball throw Intro COD IFT 2x12 reps @ 80-85% Isolated contact drills</p>	<p>Accel efforts 75 Sprint metres 75 Total metres ~3000-4000</p>	<p>Contact Low momentum/short lever low momentum/long lever</p>
	<p>Week 5 Intro Closed Quarters evasion Progress to Vmax exposure Progress IFT Conditioning Continue contact work within Closed agility</p>	<p>Y/T Ball Drop Drill Reactive Y/T Cuts -> Accel decel (ball in hand) Stepping Square 3 x 10 IFT @ 85%</p>	<p>Dribble Warm - Up Accel Prep 3x30m Max Effort Sprints 3 x 10 IFT @ 85% (+ 400m active recovery round pitch)</p>	<p>Stepping Square (+ contact) Situational cone drill (reactive, multi-directional) 3 x 12 IFT @ 85%</p>	<p>Accel efforts 100 Sprint metres 100 Total metres ~5000-7000</p>	<p>Contact Moderate momentum/short lever Moderate momentum/long lever</p>
	<p>Week 6 Intro Open evasion Re-exposure to Vmax Progress IFT Conditioning Progress contact work within closed and open agility</p>	<p>Stepping Square Situational cone drill (reactive, multi-directional) (contact) Situational 1v1 open evasion games 4 x 12 IFT @ 80%</p>	<p>Dribble Warm - Up Accel Prep 5x30m Max Effort Sprints 10 x 50m Tempo runs at 90-95%</p>	<p>Stepping Square Situational cone drill (reactive, multi-directional) Open Evasion 2v1 drills (+ contact) 4 x 12 IFT @ 80% (+ 400m active recovery round pitch)</p>	<p>Accel efforts 100+ Sprint metres 150-200 Total metres ~10000+</p>	<p>Contact High momentum / short lever High Momentum / long lever</p>

Phase 3: Programme 2

- The second 3 week block of return to running was focussed towards **COD**, with a split of 2 : 1 (COD : linear)
- **Warm-ups** progressed to reactive COD components of previous patterns, and progressively introduced complex patterns such as Y-cuts, T-cuts and 180 degree turns (see COD stream)
 - These drills were constrained where necessary to promote good technique, and prevent classic error patterns such as **trunk sway and knee valgus**
- **Agility** was gradually introduced in 1v1 scenarios where the objective was either defence (connection) or attack (evasion)
 - The space in which this was carried out was kept small to avoid unsafe velocities, and gradually opened out (expansive agility) into 1v1 & 1v2 scenarios where the athlete had to make movement decisions at higher speeds, in scenarios that were relevant to tasks they would potentially be exposed to on the pitch
- **IFT conditioning** was continuously progressed throughout this phase with the addition of active recovery, which accumulated slow speed metres and added to weekly volume load
- **Sprint running** was progressed throughout this phase up to 5 x 30m efforts
- **Contact** was progressively added throughout this phase as a second stimulus of the previous exposure
 - If closed agility was introduced on 1st day, closed agility + contact was introduced on the 2nd exposure
- Weekly and phase running loads were **aligned** to projected weekly training loads for when the athlete returned to rugby training
 - All numbers are estimates, and were purely used to guide on-feet prescription in line with potential demands on return to training