HUMANTRAK
MOVEMENT ANALYSIS SYSTEM

PROFILE ASSESSMENT

Caio Prospero

5th March, 2024

PROFILE INFORMATION

NAME	Caio Prospero
ORGANISATION	On Morumbi Clinica Medica
DATE OF BIRTH	3rd July, 1969
GENDER	Male
HEIGHT	167cm / 65in
WEIGHT	70kg / 154lb
AGE	54

Standing Posture

Posture and Stability Assessment

Standing Posture is a baseline postural assessment that can provide insight into an individual's structural balance, alignment, and postural strategy.

RESULTS

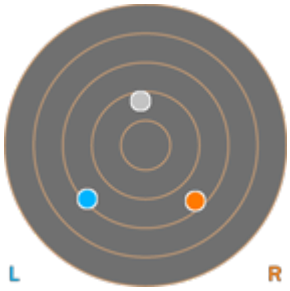
BALANCE SNAPSHOT

SIDETRAK POSTURAL DEVIATION (SAGITTAL PLANE/SIDE VIEW)

KEY RESULTS

Neck lateral flexion	0.7° Right ▼
Trunk lateral flexion	2.7° Left ▼
Pelvis Lateral Tilt	3.2° Left ▼
Trunk Flexion	0.7° Posterior

SWAYTRAK MOVEMENT PATHS (KNEES AND CENTRE OF MASS)



PRACTITIONER COMMENTS

Single Leg Stand

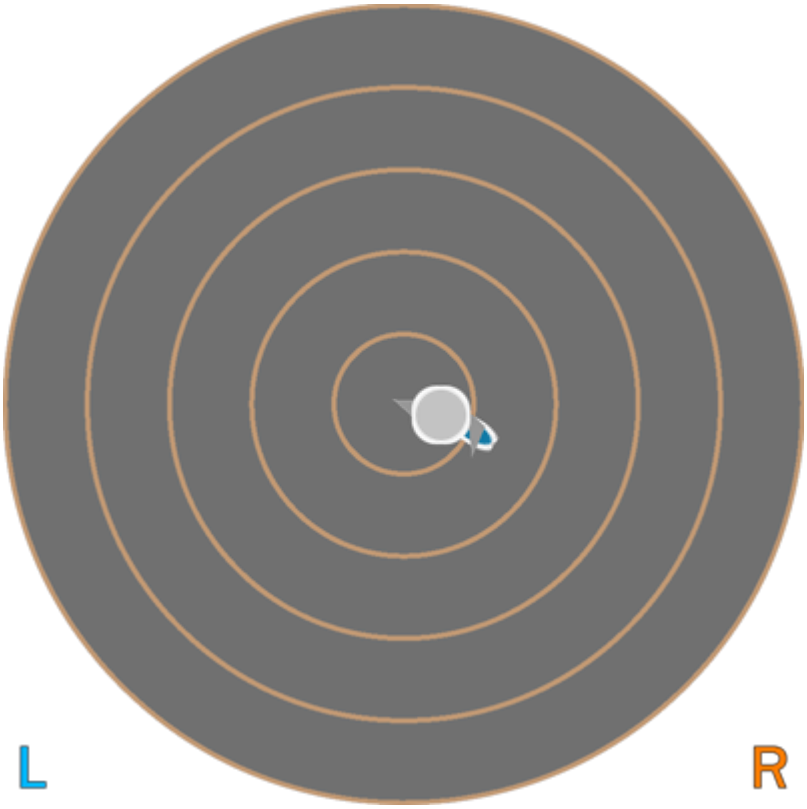
Balance Assessment

Standing balance over time is assessed while standing on one leg.

Eyes	Open
Surface	Stable
Time	10.0 s

RESULTS

BALANCE RESULTS (LEFT)

SNAPSHOT – START OF TEST	CENTER OF MASS PATH
	

KEY METRICS	RESULTS
Ellipse Area	3.14 cm-2
COM Path Length	27.92 cm
Range – ML	9.01 cm
Range – AP	4.79 cm
Pelvis Lateral Tilt	7.4° Right ▼
Trunk lateral flexion	6.4° Right ▼

PRACTITIONER COMMENTS

Single Leg Stand

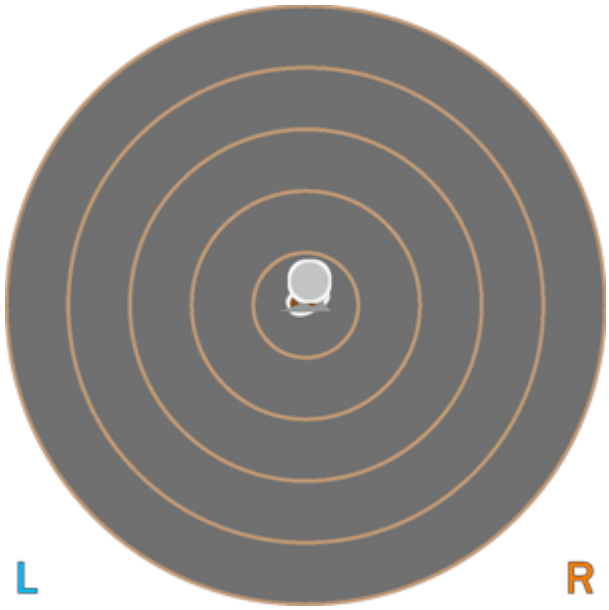
Balance Assessment

Standing balance over time is assessed while standing on one leg.

Eyes	Open
Surface	Stable
Time	10.0 s

RESULTS

BALANCE RESULTS (RIGHT)

SNAPSHOT – START OF TEST	CENTER OF MASS PATH
	

KEY METRICS	RESULTS
Ellipse Area	8.08 cm-2
COM Path Length	105.96 cm
Range – ML	11.66 cm
Range – AP	6.50 cm
Pelvis Lateral Tilt	3.4° Left ▼
Trunk lateral flexion	2.3° Left ▼

PRACTITIONER COMMENTS

Tandem Stand

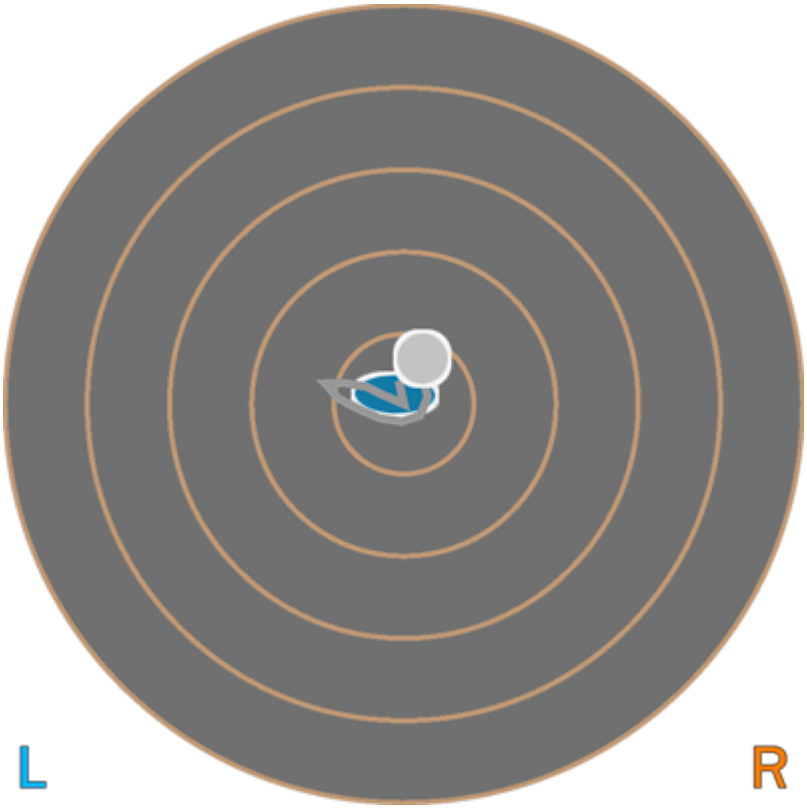
Balance Assessment

Standing balance over time is assessed with one foot directly in front of the other.

Eyes	Closed
Surface	Stable
Time	10.0 s

RESULTS

BALANCE RESULTS (LEFT)

SNAPSHOT – START OF TEST	CENTER OF MASS PATH
	

KEY METRICS	RESULTS
Ellipse Area	4.58 cm-2
COM Path Length	39.06 cm
Range – ML	11.49 cm
Range – AP	7.04 cm
Pelvis Lateral Tilt	0.6° Right ▼
Trunk lateral flexion	1.7° Right ▼

PRACTITIONER COMMENTS

Tandem Stand

Balance Assessment

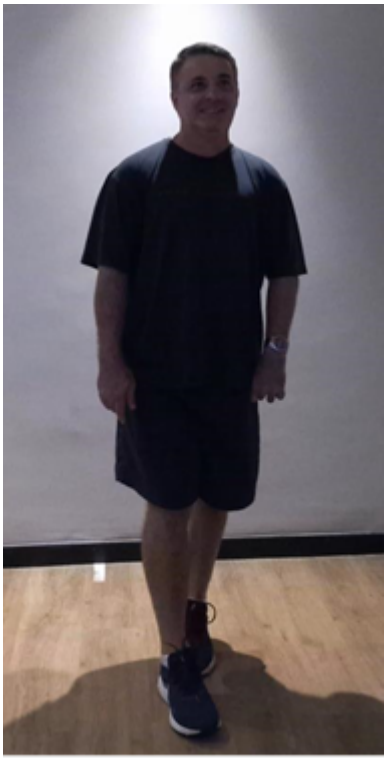
Standing balance over time is assessed with one foot directly in front of the other.

Eyes	Closed
Surface	Stable
Time	10.0 s

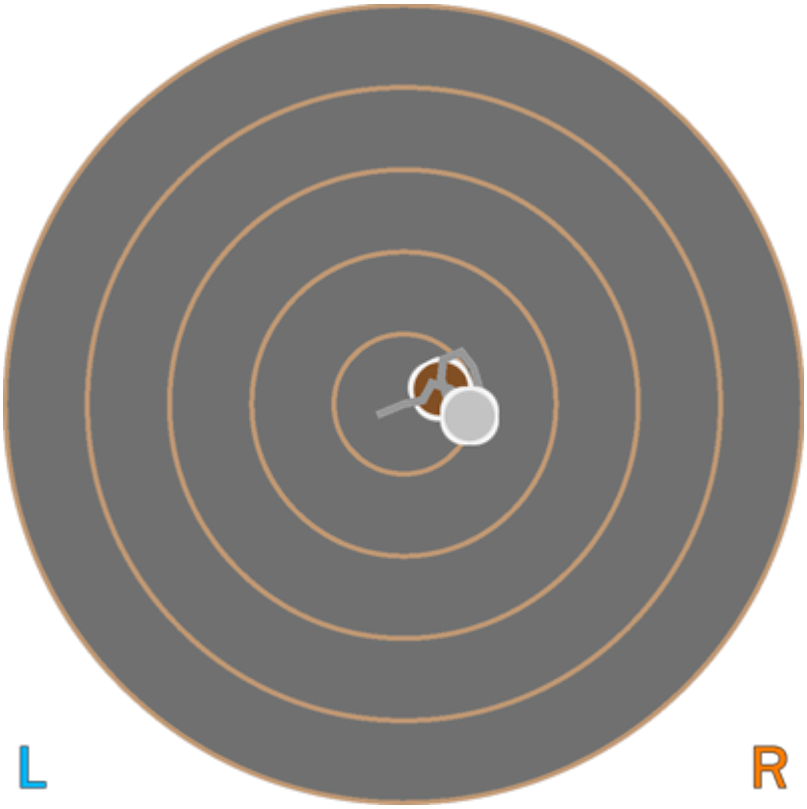
RESULTS

BALANCE RESULTS (RIGHT)

SNAPSHOT – START OF TEST



CENTER OF MASS PATH



KEY METRICS	RESULTS
Ellipse Area	2.45 cm-2
COM Path Length	44.75 cm
Range – ML	7.33 cm
Range – AP	8.55 cm
Pelvis Lateral Tilt	2.9° Left ▼
Trunk lateral flexion	1.5° Left ▼

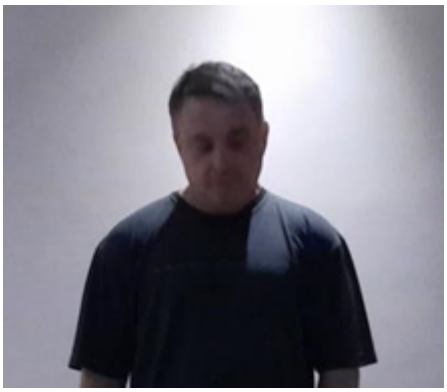
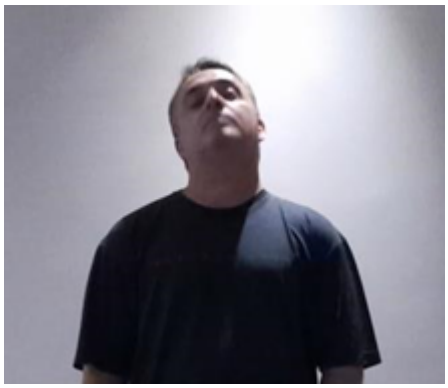
PRACTITIONER COMMENTS

Cervical Spine Flexion/Extension

Range of Motion Assessment

Cervical Spine Flexion (forward) / Extension (backwards) calculated by taking the inclination of the head relative to the line of the trunk in the sagittal plane (side view).

RESULTS

PEAK FLEXION SNAPSHOT	PEAK EXTENSION SNAPSHOT
	

KEY RESULTS	STARTING POSITION	PEAK FLEXION	PEAK EXTENSION	TOTAL RANGE
Flexion/Extension	0.0°	28.3°	1.7°	30.0°
Trunk Flexion	9.0° **Posterior**	4.7° **Posterior**	10.2° **Posterior**	N/A
Trunk lateral flexion	2.7°	1.9° Left ▼	1.9° Left ▼	N/A

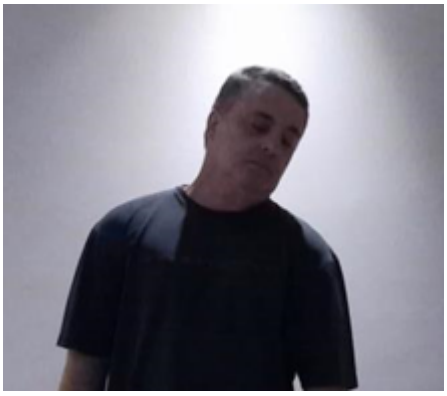
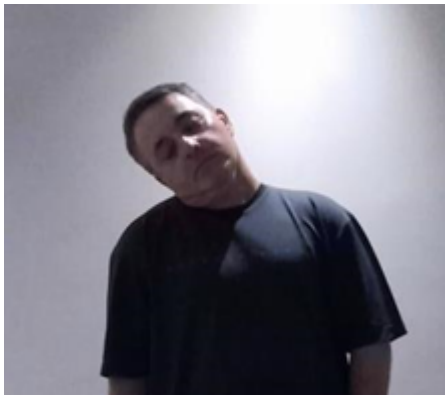
PRACTITIONER COMMENTS

Cervical Spine Lateral Flexion

Range of Motion Assessment

Cervical Spine Lateral Flexion (left and right) is calculated by taking the inclination of the head relative to the line of the trunk in the frontal plane (front view).

RESULTS

PEAK LEFT LATERAL FLEXION	PEAK RIGHT LATERAL FLEXION
	

KEY RESULTS	PEAK FLEXION (LEFT)	PEAK FLEXION (RIGHT)	IMBALANCE
Lateral Flexion	14.2°	24.6°	+10.4°
Trunk Flexion	5.2° **Posterior**	8.4° **Posterior**	N/A
Trunk lateral flexion at Peak Flexion	7.6° **Left** ▼	6.5° **Right** ▼	+1.1°

PRACTITIONER COMMENTS

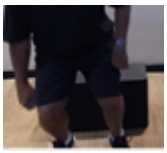
Drop Jump

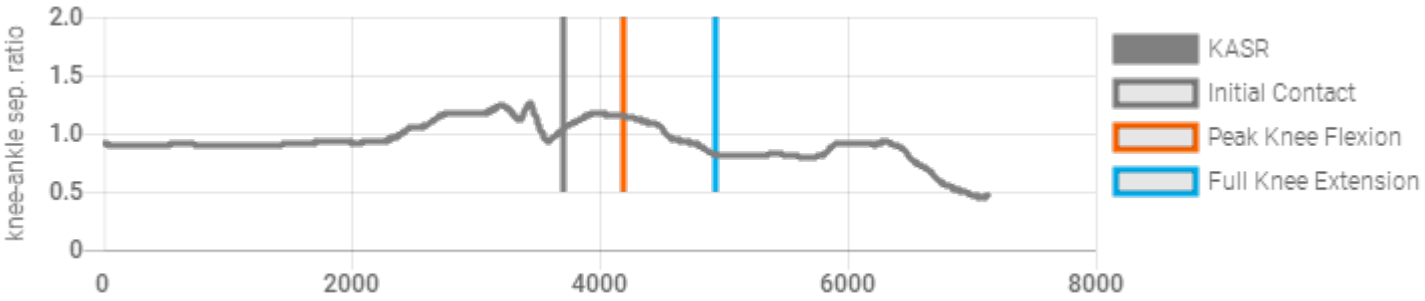
Lower Body Dynamic Assessment

Drop Jump is used to assess coordination, balance, joint stability and power, requiring the patient to drop from a box or platform and transition from landing into an explosive jump .

Height unspecified

RESULTS

PHASE	Initial Contact	Peak Knee Flexion
SNAPSHOTS		
Result		
Knee-Ankle Separation Ratio	1.0	1.1
Hip Flexion (Left)	47.5°	72.9°
Hip Flexion (Right)	42.3°	68.1°
Knee Flexion (Left)	71.8°	100.2°
Knee Flexion (Right)	67.7°	102.0°



PRACTITIONER COMMENTS

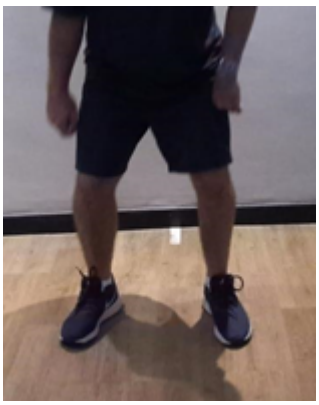
Countermovement Jump

Lower Body Dynamic Assessment

The Countermovement Jump assesses the landing posture during an explosive dynamic exercise.

RESULTS

PEAK KNEE FLEXION
after landing



KEY METRICS (TORSO)			
Jump Height	15.74 cm		
Peak Spine Tilt after landing	21.2° **Anterior**		
Peak Lateral Spine Tilt after landing	1.9° **Right**		
Peak Lateral Pelvic Tilt after landing	5.2° **Right**		
KEY METRICS (LEGS)	**LEFT LEG**	**RIGHT LEG**	**ASYMMETRY**
Peak Hip Flexion after landing	43.4°	41.6°	4.2%
Peak Knee Flexion after landing	54.9°	55.5°	1.1%
Peak Knee Valgus/Varus after landing	20.8° **Varus**	16.9° **Varus**	18.8%

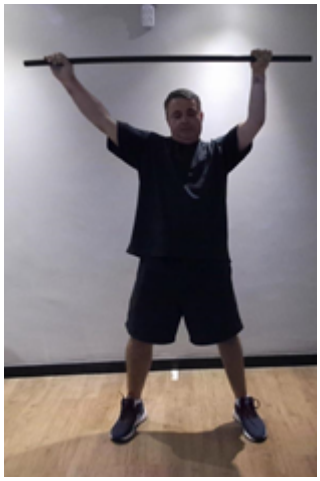
PRACTITIONER COMMENTS

Overhead Squat

Lower Body Dynamic Assessment

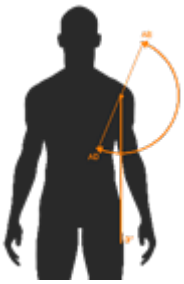
Overhead squat is a dynamic movement assessment providing insight into an individual's balance, stability, flexibility, and strength.

RESULTS

SNAPSHOTS			
START	REP 1: PEAK KNEE FLEXION	REP 2: PEAK KNEE FLEXION	REP 3: PEAK KNEE FLEXION
			

KEY RESULTS	REP 1	REP 2	REP 3
Peak Knee Flexion (Left)	124.3°	129.9°	128.6°
Peak Knee Flexion (Right)	123.7°	133.1°	131.3°
Trunk Flexion at Peak Knee Flexion	10.2° Anterior	16.1° Anterior	17.0° Anterior
Trunk lateral flexion at Peak Knee Flexion	7.2° Right ▼	5.3° Right ▼	6.6° Right ▼

PRACTITIONER COMMENTS

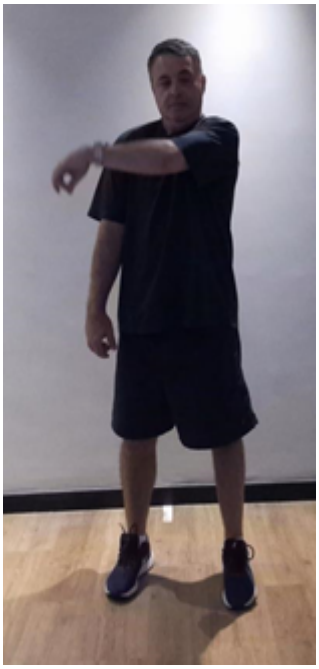
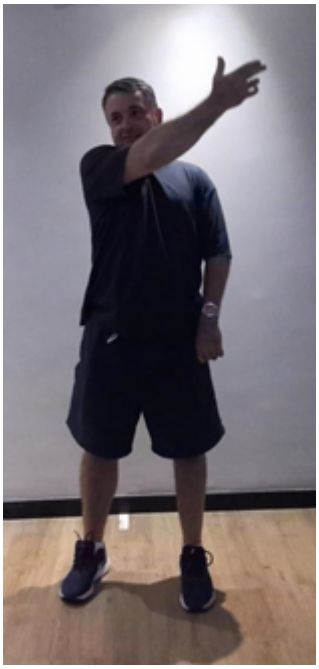
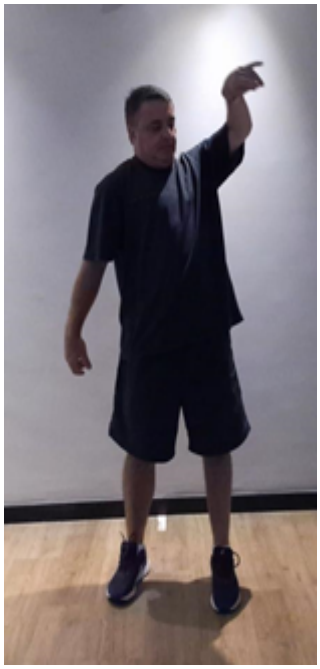
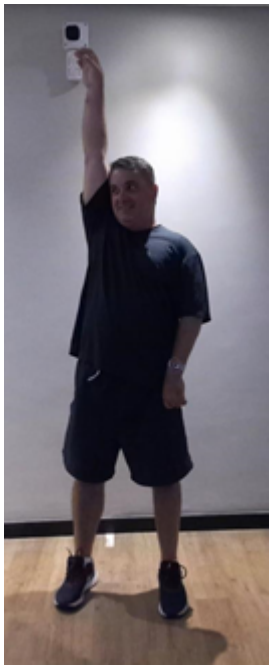


Shoulder Adduction/Abduction

Range of Motion Assessment

Shoulder Adduction/Abduction is calculated by taking the angle created by the humerus (upper arm) relative to the line of the trunk in the frontal plane (front view).

RESULTS

PEAK ADDUCTION		PEAK ABDUCTION	
LEFT	RIGHT	LEFT	RIGHT
			

KEY RESULTS	LEFT	RIGHT	IMBALANCE
Shoulder Adduction	62.1°	86.4°	+24.3°
Shoulder Abduction	119.6°	167.0°	+47.4°
Trunk lateral flexion at Peak Abduction	8.4° Right ▼	5.1° Left ▼	+3.4°

PRACTITIONER COMMENTS (LEFT)

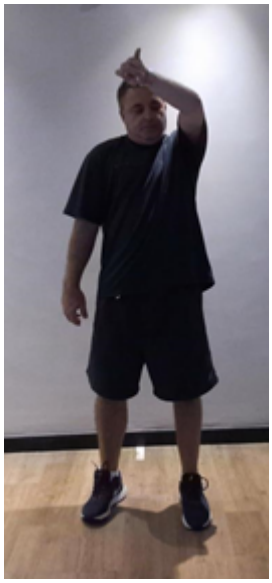
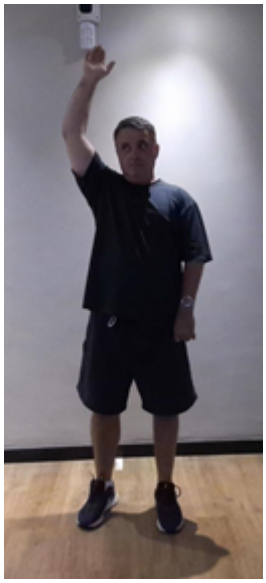
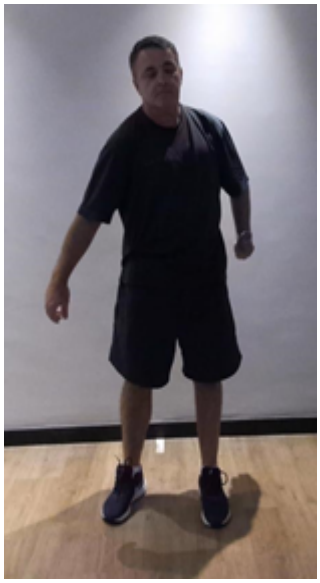
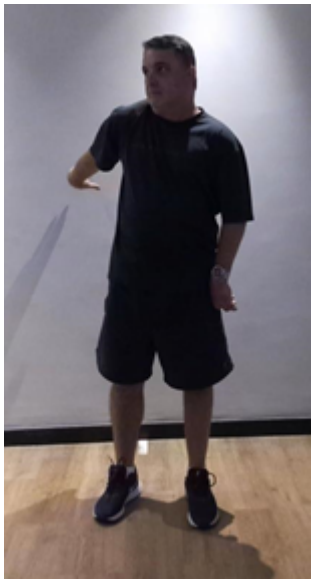
PRACTITIONER COMMENTS (RIGHT)

Shoulder Flexion/Extension

Range of Motion Assessment

Shoulder Flexion/Extension is calculated by taking the angle created by the humerus (upper arm) relative to the line of the trunk in the sagittal plane (side view).

RESULTS

PEAK FLEXION		PEAK EXTENSION	
LEFT	RIGHT	LEFT	RIGHT
			

KEY RESULTS	LEFT	RIGHT	IMBALANCE
Shoulder Flexion	113.3°	194.7°	+81.3°
Shoulder Extension	33.0°	64.1°	+31.1°
Trunk lateral flexion at Peak Flexion	1.8° Right ▼	2.8° Left ▼	+1.1°

PRACTITIONER COMMENTS (LEFT)

PRACTITIONER COMMENTS (RIGHT)

30 Second Sit To Stand

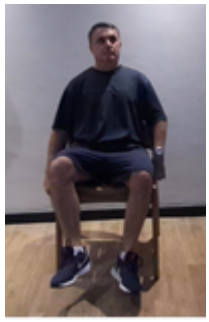
Lower Body Dynamic Assessment

30 Second Sit To Stand is an assessment that provides information on function leg power and strength of participants.

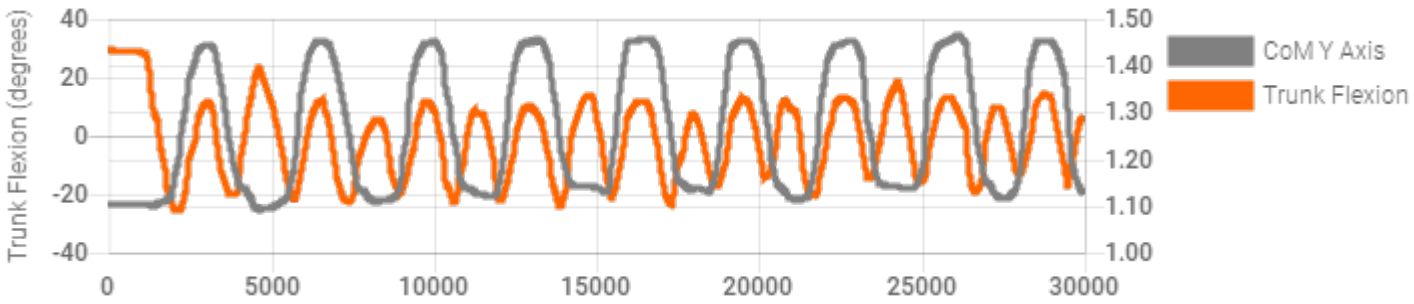
RESULTS

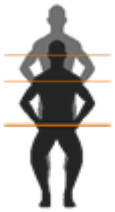
KEY RESULTS	OVERALL
Successful Repetitions	9
Peak Knee Extension	L 3.4° R 4.7°
Knee Displacement	L 17.6 cm R 18.6 cm
Peak Lateral Trunk Flexion	5.9° Right ▼

SNAPSHOTS

START	1st REP: PEAK TRUNK FLEXION	Q1 REP: PEAK TRUNK FLEXION	MEDIAN REP: PEAK TRUNK FLEXION	Q3 REP: PEAK TRUNK FLEXION	LAST REP: PEAK TRUNK FLEXION
					

KEY METRICS	1st REP	Q1 REP	MEDIAN REP	Q3 REP	LAST REP
Knee-Ankle Separation Ratio	1.2	1.1	1.2	1.7	1.1
Lateral Trunk Flexion	2.1° Right ▼	4.5° Right ▼	2.2° Right ▼	3.5° Right ▼	2.5° Right ▼
Knee Flexion	L 93.6° R 104.2°	L 63.6° R 73.6°	L 70.4° R 79.7°	L 90.5° R 93.1°	L 68.6° R 71.1°
Hip Flexion	L 57.6° R 66.0°	L 60.5° R 62.5°	L 63.8° R 63.3°	L 53.9° R 58.3°	L 55.7° R 53.7°
Trunk Flexion	2.1° Posterior	4.5° Posterior	2.2° Posterior	3.5° Posterior	2.5° Posterior



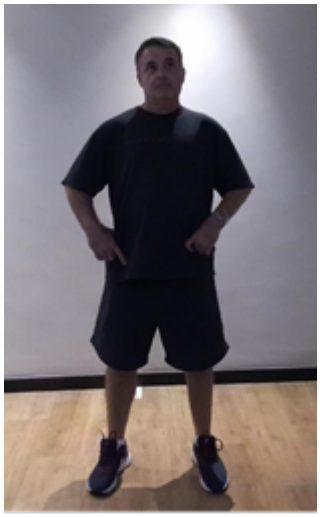
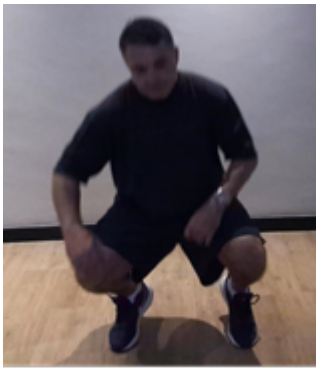
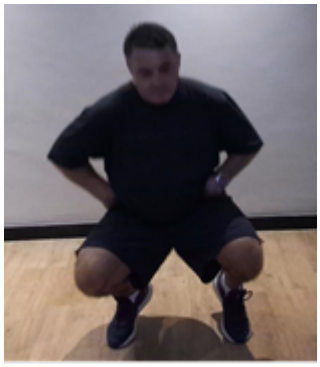
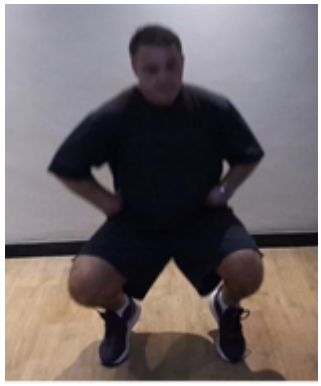


Squat

Lower Body Dynamic Assessment

Squat is a dynamic movement assessment providing insight into an individual's balance, stability, flexibility, and strength.

RESULTS

SNAPSHOTS			
START	REP 1: PEAK KNEE FLEXION	REP 2: PEAK KNEE FLEXION	REP 3: PEAK KNEE FLEXION
			

KEY RESULTS	REP 1	REP 2	REP 3
Peak Knee Flexion (Left)	135.2°	132.2°	137.5°
Peak Knee Flexion (Right)	142.8°	138.8°	136.4°
Spine Tilt at Peak Knee Flexion	20.2° Anterior	13.1° Anterior	8.4° Anterior
Trunk lateral flexion at Peak Knee Flexion	5.2° Right ▼	3.7° Right ▼	1.7° Right ▼

PRACTITIONER COMMENTS