

Eduardo Mirra Galante Miller 9<sup>th</sup> March, 2023

### **PROFILE INFORMATION**

NAME	Eduardo Mirra Galante Miller
ORGANISATION	On Morumbi Clinica Medica
DATE OF BIRTH	27 <sup>th</sup> June, 1992
GENDER	Male
HEIGHT	172cm / 67in
WEIGHT	78kg / 171lb
AGE	30



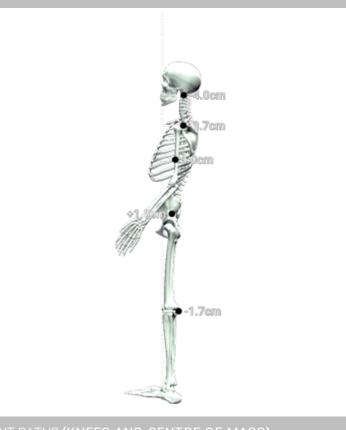
# Standing Posture Posture and Stability Assessment

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

## **RESULTS**







### SWAYTRAK MOVEMENT PATHS (KNEES AND CENTRE OF MASS)

Neck lateral flexion	1.3° Right ▼
Trunk lateral flexion	1.3° Left ▼
Pelvis Lateral Tilt	1.2° Left ▼
Trunk Flexion	1.3° Posterior

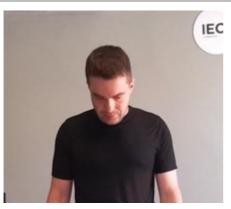




# Cervical Spine Flexion/Extension Range of Motion Assessment

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**





KEY RESULTS	STARTING POSITION	PEAK FLEXION	PEAK EXTENSION	TOTAL RANGE
Flexion/Extension	0.0°	30.5°	7.8°	38.4°
Trunk Flexion	4.2° Posterior	1.1° Anterior	4.4° Posterior	N/A
Trunk lateral flexion	1.2°	0.5° Left ▼	0.7° Left ▼	N/A



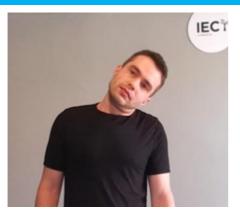
# Cervical Spine Lateral Flexion Range of Motion Assessment

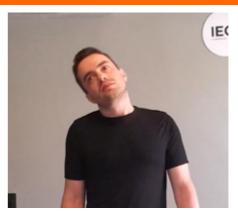
Cervical Spine Lateral Flexion (left and right) is calculated by taking the inclination of the head relative to the line of the trunk in the frontal plane (front view).

## **RESULTS**

#### PEAK LEFT LATERAL FLEXION







KEY RESULTS	PEAK FLEXION (LEFT)	PEAK FLEXION (RIGHT)	IMBALANCE
Lateral Flexion	22.1°	23.0°	+0.9°
Trunk Flexion	4.0° Posterior	4.7° Posterior	N/A
Trunk lateral flexion at Peak Flexion	6.8° Left ▼	3.1° Right ▼	+3.7°



# 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 AD	PEAK ADDUCTION		PEAK ABDUCTION	
LEFT	RIGHT	LEFT	RIGHT	
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KEY RESULTS	LEFT	RIGHT	IMBALANCE	
Shoulder Adduction	23.2°	9.2°	+14.1°	
Shoulder Abduction	179.8°	167.9°	+11.9°	
Trunk lateral flexion at Peak Abduction	4.1° Right ▼	3.9° Left ▼	+0.2°	
PRACTITIONER COMMENT	S(LEFT)	PRACTITIONER COMMEN	TS ( 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
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KEY RESULTS	LEFT	RIGHT	IMBALANCE
Shoulder Flexion	191.4°	198.3°	+6.9°
Shoulder Extension	28.1°	27.7°	+0.4°
Trunk lateral flexion at Peak Flexion	0.3° Left ▼	1.1° Left ▼	+0.8°
PRACTITIONER COMMENT	S(LEFT)	PRACTITIONER COMMEN	TS ( RIGHT )





## Shoulder Internal/External Rotation

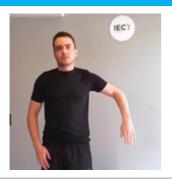
### **Range of Motion Assessment**

Shoulder Internal/External Rotation calculated by taking the angle created by the forearm relative to horizontal in the sagittal plane (side view).

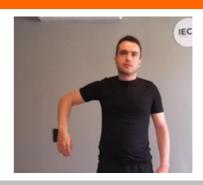
## **RESULTS**

#### PEAK INTERNAL ROTATION

**LEFT** 



**RIGHT** 



#### PEAK EXTERNAL ROTATION

**LEFT** 



**RIGHT** 



KEY RESULTS	LEFT	RIGHT	IMBALANCE
Shoulder Internal Rotation	43.4°	47.1°	+3.6°
Shoulder External Rotation	98.4°	91.0°	+7.5°
Total ROM	141.8°	138.0°	+3.8°
Trunk lateral flexion at Peak Internal Rotation	1.1° Left ▼	2.2° Left ▼	+1.1°

PRACTITIONER COMMENTS (LEFT)

PRACTITIONER COMMENTS ( RIGHT )





# Hip Internal/External Rotation Range of Motion Assessment

Hip Internal/External Rotation is calculated by taking the angle created by the tibia relative to vertical in the frontal plane (front view) while seated with  $90^{\circ}$  of hip flexion.

#### **RESULTS**

**LEFT** 



**RIGHT** 



**LEFT** 



PRACTITIONER COMMENTS (LEFT)

**RIGHT** 



PRACTITIONER COMMENTS ( RIGHT )

KEY RESULTS	LEFT	RIGHT	IMBALANCE
Peak Internal Rotation	44.7°	41.2°	+3.4°
Peak External Rotation	51.7°	32.4°	+19.3°
Total ROM	96.3°	73.6°	+22.7°



# Single Leg Stand Balance Assessment

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

Eyes Open Surface Stable Time 10.0 s

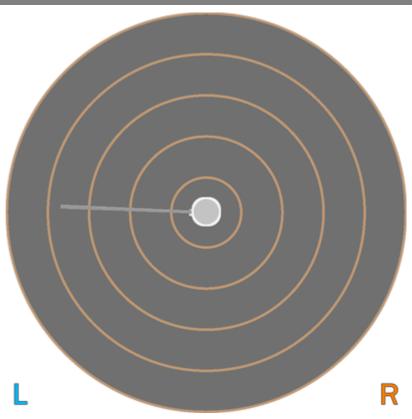
## **RESULTS**

## **BALANCE RESULTS (LEFT)**

## SNAPSHOT - START OF TEST







KEY METRICS	RESULTS
Ellipse Area	0.25 cm-2
COM Path Length	9.05 cm
Range - ML	1.77 cm
Range – AP	1.19 cm
Pelvis Lateral Tilt	12.0° Left ▼
Trunk lateral flexion	7.4° Left ▼



# Single Leg Stand Balance Assessment

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

Eyes Open Surface Stable Time  $10.0 \, s$ 

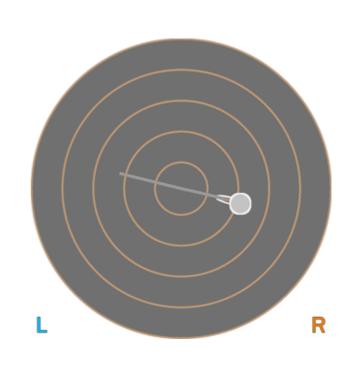
## **RESULTS**

#### **BALANCE RESULTS (RIGHT)**

## SNAPSHOT - START OF TEST



#### CENTER OF MASS PATH



KEY METRICS	RESULTS
Ellipse Area	0.38 cm-2
COM Path Length	8.46 cm
Range - ML	1.92 cm
Range – AP	1.55 cm
Pelvis Lateral Tilt	9.7° Right ▼
Trunk lateral flexion	6.1° Right ▼





# Lunge Lower Body Dynamic Assessment

The Lunge assesses the strength and range of motion of the knees and hips.

## **RESULTS**

## PEAK KNEE FLEXION

**LEFT** 





KEY METRICS	LEFT LEG	RIGHT LEG	ASYMMETRY
Peak Hip Flexion	49.7°	43.9°	11.7%
Peak Knee Flexion	72.4°	66.7°	7.9%
Peak Spine Lateral Tilt	0.4° Posterior	0.9° Anterior	N/A
Peak Pelvic Lateral Tilt	0.8° <b>Left</b>	0.8° <b>Right</b>	N/A

PRACTITIONER COMMENTS ( LEFT )

PRACTITIONER COMMENTS ( RIGHT )





### 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

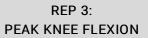


### REP 1: PEAK KNEE FLEXION



REP 2: PEAK KNEE FLEXION





-	

KEY RESULTS	REP 1	REP 2	REP 3
Peak Knee Flexion ( Left )	147.3°	145.9°	147.0°
Peak Knee Flexion ( Right )	147.9°	144.9°	144.2°
Spine Tilt at Peak Knee Flexion	30.9° Anterior	34.3° Anterior	32.0° Anterior
Trunk lateral flexion at Peak Knee Flexion	0.6° Right ▼	2.2° Right ▼	1.1° Right ▼



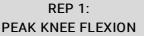
# Overhead Squat Lower Body Dynamic Assessment

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

## **RESULTS**









REP 2: PEAK KNEE FLEXION







KEY RESULTS	REP 1	REP 2	REP 3
Peak Knee Flexion ( Left )	137.2°	137.1°	138.6°
Peak Knee Flexion ( Right )	137.9°	135.3°	137.6°
Trunk Flexion at Peak Knee Flexion	19.1° Anterior	20.9° Anterior	19.7° Anterior
Trunk lateral flexion at Peak Knee Flexion	0.6° Right ▼	0.4° Right ▼	1.9° Right ▼



## 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 36.62 cm

Peak Spine Tilt after landing 23.5° Anterior

Peak Lateral Spine Tilt after landing 1.9° Left

Peak Lateral Pelvic Tilt
after landing

2.7° Right

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KEY METRICS (LEGS)	LEFT LEG	RIGHT LEG	ASYMMETRY
Peak Hip Flexion after landing	60.4°	58.2°	3.6%
Peak Knee Flexion after landing	71.6°	68.4°	4.5%
Peak Knee Valgus/Varus after landing	20.4° Varus	11.8° Varus	42%





# 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		P	eak Knee Flexion
SNAPSHOTS				
Result				
Knee-Ankle Separation Ratio	1.1		1.1	
Hip Flexion ( Left )	47.9°		74.0°	
Hip Flexion (Right)	45.7°		78.4°	
Knee Flexion ( Left )	74.7°		98.7°	
Knee Flexion (Right)	64.2°		104.2°	
copy copy copy copy copy copy copy copy				KASR Initial Contact Peak Knee Flexion Full Knee Extension
0	10000	20000	300	000





## Single Leg Squat

#### **Lower Body Dynamic Assessment**

Single Leg Squat is a dynamic movement assessment that provides insight into an individual's balance, stability, flexibility, and strength.

#### **RESULTS**

#### **LEFT LEG** REP 1: REP 2: REP 3: **START** PEAK KNEE FLEXION PEAK KNEE FLEXION PEAK KNEE FLEXION **KEY RESULTS** REP 2 REP 1 REP 3 106.3° Peak Knee Flexion 109.5° 108.2° **Knee Displacement** 17.4 cm 11.6 cm 13.5 cm (total) Peak Knee Valgus 3.2° Valgus 0.1° Valgus 0.1° Valgus Peak Knee Varus 18.7° Varus 18.2° Varus 15.8° Varus Trunk lateral flexion 11.1° Left ▼ 13.0° Left ▼ 9.8° **Left** ▼ at Peak Knee Flexion



## **RESULTS**

#### RIGHT LEG

#### SNAPSHOTS

START

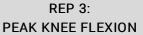


REP 1: PEAK KNEE FLEXION



REP 2: PEAK KNEE FLEXION







KEY RESULTS	REP 1	REP 2	REP 3
Peak Knee Flexion	110.9°	47.2°	108.3°
Knee Displacement (total)	12.5 cm	5.1 cm	12.3 cm
Peak Knee Valgus	4.4° Valgus	4.7° Valgus	4.9° <b>Valgus</b>
Peak Knee Varus	5.4° Varus	1° Varus	9° Varus
Trunk lateral flexion at Peak Knee Flexion	9.7° Right ▼	7.0° Left ▼	11.8° Right ▼