

Treadmill Running

28 strides · captured 23 Apr 2026, 13:22 · Recreational Runner

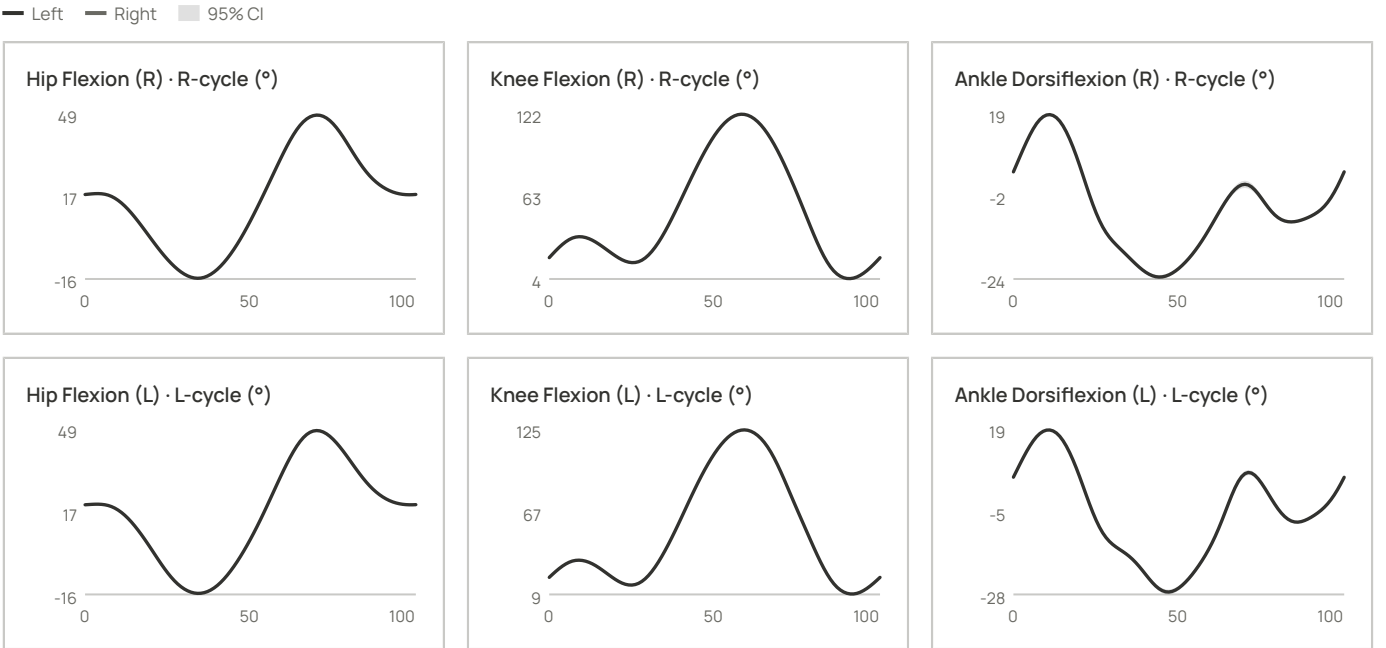
NOTES

[FICTIONAL]: 34 y/o recreational runner (~40 km/week), referred for right anterior knee pain, 6 weeks duration, worse downhill and on runs >12 km. Gradual onset; recent 20% mileage increase and shoe change (lower drop) preceded symptoms. No prior injury. Ran a marathon 4 months ago, no off-season since. Mild right hip tightness at rest. Pain 3/10 during running, resolves within an hour post-run. Subtle right-sided limp noted pre-warm-up, absent on treadmill. Right shoe shows more lateral wear than left. No reported swelling, locking, catching, or instability. Patient has not modified training in response to symptoms and continues to run through mild discomfort. No formal strength or mobility work currently in place.

METRIC OVERVIEW



NORMALIZED JOINT KINEMATICS



DETAILED RESULTS

METRIC	LEFT	RIGHT	ASYMMETRY
Cadence (steps/min)	168 spm		
Ground contact time (s)	0.21 s	0.21 s	0.0%
Duty factor (%)	30 %	29 %	3.3%
Step length (-)	1.24	1.24	0.0%
Step width (cm)	7 cm		
Center of mass excursion (cm)	10 cm		
Overstride (-)	12	12	5.0%
Foot strike angle (deg)	4 °	4 °	4.8%
Foot progression angle (deg)	1 °	6 °	83.6%
Knee flexion at initial contact (deg)	21 °	19 °	7.7%
Peak knee flexion during stance (deg)	33 °	34 °	4.4%
Hip extension at toe-off (deg)	20 °	20 °	1.0%
Speed (m/s)	3.5 m/s		
Step length symmetry (% R/L)	99 %		
Stride length (m)	2.48 m	2.48 m	0.0%
Mean trunk flexion (deg)	13 °		
Peak hip adduction during stance (deg)	1 °	3 °	52.0%
Flight time (s)	0.503 s	0.504 s	0.2%
Hip flexion at initial contact (deg)	20 °	17 °	11.3%
Ankle angle at initial contact (deg)	5 °	4 °	26.9%
Peak hip flexion during stance (deg)	20 °	18 °	10.2%
Peak ankle dorsiflexion angle during stance (deg)	19 °	19 °	0.5%
Knee flexion at toe-off (deg)	21 °	20 °	5.7%
Ankle angle at toe-off (deg)	-13 °	-13 °	0.0%

MEDIA

