Stop Running from Gait Analysis

Simple Methods to Improve Running Mechanics in the Injured Athlete.

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Assessing Running Mechanics- Basics

Smartphone Apps
-Hudl (formerly Ubersense)-Free
-Dartfish Express
-Many more...

Mirror Gait Retraining
(Willy, 2012)

“Run with your knees apart with your kneecaps pointing straight ahead” and
“Squeeze your buttocks.”
Anterior Trunk Lean

- Patient instructed to forward lean while still comfortable running (Teng & Powers, 2014)

Reduced patellar femoral joint forces by 10%

Over-stride

Conditions Affected
- Barton (2016)
- Anterior compartment syndrome
- Plantar fasciitis
- Achilles Tendinopathy
- Medial Tibial Stress Syndrome
- PFPS
- Patellar tendinopathy
- Proximal Hamstring Tendinopathy
- Gluteal Tendinopathy

Norms=170-190 steps/minute

Addressing Over-stride

Increase Step Rate (5-10%)
- Metronome
- Songs BPM (give example)
- Cue to increase step rate

Decrease Stride Length
- Shouldn’t see feet while looking straight ahead
- Land with foot under hips
- Cue to take shorter stride
References


