

PHYSICAL THERAPY HEP PROTOCOL

Conservative Management & Kinetic Chain Rehabilitation for Pes Planus (Flat Feet)

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PATIENT NAME:
[Patient Full Name]

PRESCRIPTION DATE:
September 2026

PROTOCOL PHASE:
Phase I - Intrinsic & Arch Core

FREQUENCY:
1-2x Daily (5 Days/Wk)

Physical Therapy Clinical Scope: This document serves strictly as a conservative physical therapy home exercise program (HEP) focused on muscle recruitment, joint mobilization, and postural gait alignment. It does not replace medical diagnosis, orthopaedic evaluation, or surgical management. Consult your physical therapist if sharp pain occurs.

1. BIOMECHANICAL RATIONALE & FOOT CORE DYNAMICS

Flexible Pes Planus (flat foot) is characterized by the collapse of the **Medial Longitudinal Arch (MLA)** during weight-bearing. Primary physical therapy objectives focus on activating the *intrinsic plantar flexors* (Abductor Hallucis, Flexor Digitorum Brevis) and the primary dynamic arch stabilizer—the **Tibialis Posterior tendon**. Lengthening the tight gastroc-soleus complex relieves excessive tension across the midfoot tarsal joints.

Anatomical Focus: Normal Arch vs. Collapsed Arch Mechanics

VISUAL GUIDE



Key Biomechanical Goal:

Transition the foot from a passive "floppy" structure (A) to an active rigid tripod (B). The short foot activation fires the *Abductor Hallucis* without curling the toes, locking the midfoot for efficient gait.

2. PHASE I TARGET EXERCISES

Exercise 1: Short Foot Exercise ("Foot Core Activation")

PRIMARY ARCH BUILDER

Clinical Technique:

- Sit upright in a chair with feet flat on the floor at 90 degrees.
- Keep your toes completely flat and relaxed (do NOT curl toes).
- Shorten your foot by drawing the ball of your big toe (1st metatarsal head) directly toward your heel along the floor.
- Feel the medial arch lift off the ground. Hold position firmly.

Parameter	Clinical Prescription
Hold Time	5 – 8 Seconds per hold
Reps / Sets	12 Repetitions x 3 Sets
Frequency	2x Daily (Morning & Evening)
PT Cue	"Shorten the foot, do not claw toes."

Exercise 2: Plantar Intrinsic Towel Curls & Resistance Gathering

INTRINSICS & FLEXORS

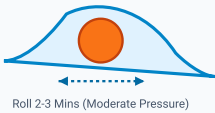
Clinical Technique:

- Place a small hand towel flat on a smooth surface (tile or wood).

Parameter	Clinical Prescription
Duration	2 - 3 Minutes per foot

Graphic Guide: Plantar Fascia Release & Towel Scrunching

A. Plantar Fascia Ball Roll



Roll 2-3 Mins (Moderate Pressure)

B. Towel Scrunch Action



Toes Curl Towel Inward

Myofascial Warm-Up Integration:

Perform 2 minutes of plantar fascia ball rolling (golf or firm massage ball) prior to towel curls. This releases plantar tightness and enhances sensory feedback to the intrinsic foot nerves.

Exercise 3: Tibialis Posterior Activation & Eccentric Heel Raise

Clinical Technique:

- Stand facing a wall with hands supported for light balance.
- Place a small rubber ball or rolled towel between your heels.
- Squeeze heels inward against the ball to engage Tibialis Posterior.
- Slowly rise up onto the balls of your feet over 2 seconds, maintaining heel squeeze. Lower slowly over 3 seconds.

Parameter	Clinical Prescription
Tempo	2 sec Concentric / 3 sec Eccentric
Reps / Sets	10 - 12 Reps x 3 Sets
Frequency	1x Daily
PT Cue	"Squeeze heels inward as you press upward."

Exercise 4: Gastrocnemius & Soleus Wall Lengthening Stretch

Clinical Technique:

- Stand in a runner's lunge position facing a wall, hands on wall at chest height.
- Extend target leg backward with heel flat on the floor and toe pointed straight ahead.
- Gastroc Stretch:** Keep back knee completely straight and lean hips forward.
- Soleus Stretch:** Bend back knee slightly while keeping rear heel flat.

Parameter	Clinical Prescription
Hold Duration	30 Seconds static hold
Reps / Sets	3 Reps each leg (Gastroc & Soleus)
Frequency	2x Daily (Post-exercise)
PT Cue	"Keep rear heel pinned firmly to floor."

Exercise 5: Proprioceptive Single-Leg Stance & Tripod Balance

Clinical Technique:

- Stand barefoot near a wall or counter for safety support.
- Actively engage the "Short Foot" posture on target leg (3-point distribution: heel, 1st toe base, 5th toe base).
- Lift opposite leg off the ground and maintain single-leg balance.
- Keep standing knee slightly soft (unlocked) and avoid arch collapse.

Parameter	Clinical Prescription
Hold Time	30 Seconds per leg
Sets	3 Holds each leg
Progression	Close eyes or stand on foam cushion
PT Cue	"Equal weight on heel, big toe, and pinky toe."