



Lower Leg Pain in a 60-Year-Old Cyclist

Post 50-Mile Ride – Near the Soleus Muscle

Throbbing pain in the calf (soleus region) after long ride. Pain improves with stretching.

Age
60 years old

Activity
Cycling

Trigger
After ~ 50 miles

Location
Lower leg (near soleus)

Pain Quality
Throbbing

Relief
Improves with stretching



Key Takeaway

Most likely a muscular overuse problem (soleus), but important vascular and other conditions must be considered. Stretching relief is helpful information, but not definitive. Evaluate red flags.



Anatomy: The Soleus Muscle

Deep calf muscle, important for cycling



Posterior View (right leg)

Role in Cycling

- Plantarflexion (point foot down)
- Stabilizes the ankle
- Continuous repetitive load during pedaling
- Helps maintain ankle position

Why It Can Hurt

- Repetitive loading
- Long duration rides
- Climbing / higher resistance
- Muscle fatigue
- Biomechanical factors (cleat position, cadence)
- Dehydration / electrolytes



Differential Diagnosis (DDx)

Possible causes of calf pain near soleus

		Relative Likelihood
1	Soleus overuse / muscle fatigue Common after long rides, deep ache, improves with movement	High
2	Soleus strain (minor) Repetitive load, micro-injury, focal tenderness	High
3	Myofascial trigger point / spasm Tight muscle, knotted area, relief with stretching	Moderate
4	Exercise-associated cramp Fatigue, hydration/electrolyte factors	Moderate
5	Gastrocnemius strain More superficial pain, affected by knee position	Moderate
6	Chronic exertional compartment syndrome Exercise-related pressure, predictable onset	Moderate
7	Deep venous thrombosis (DVT) Calf pain can be presenting symptom	Lower (but important)
8	Superficial thrombophlebitis Inflamed superficial vein, tender cord	Lower
9	Peripheral arterial disease (PAD) Exercise-induced ischemia, relieved by rest	Lower
10	Stress reaction / fracture (tibia or fibula) Point tenderness over bone, persists after activity	Lower
11	Nerve-related pain Burning, tingling, referred from back	Lower
12	Achilles tendinopathy / plantaris injury Pain near tendon or musculotendinous junction	Lower



Evaluation Flow

How to assess the pain



1. History

- Onset, timing, duration
- Exact location and character
- What makes it better or worse
- Any swelling, redness, warmth
- Other symptoms (numbness, etc.)



2. Physical Exam

- Inspect for swelling/asymmetry
- Palpate for tenderness
- Test range of motion
- Resisted plantarflexion
- Neurovascular assessment



3. Consider Further Testing (if indicated)

- Ultrasound (for DVT or muscle injury)
- Ankle-brachial index (for PAD)
- Compartment pressure testing (for CECS)
- X-ray or MRI (if stress injury suspected)



4. Diagnosis & Management

- Treat underlying cause
- Modify activity
- Monitor response
- Reassess if not improving



Red Flags – Seek Medical Care

Do not ignore these symptoms

- One calf is swollen, warm, red, or larger
- Persistent or worsening pain
- Shortness of breath or chest pain (possible pulmonary embolism)
- Cold or pale foot
- Numbness, tingling, or weakness
- Pain not explained by recent activity
- History of blood clots or high risk factors



Home Care (If Mild Muscular Cause)

Initial management

- Rest or reduce intense cycling
- Gentle walking if comfortable
- Hydrate and replace fluids lost through sweat
- Gentle stretching (avoid aggressive stretching if strain)
- Consider cold therapy (first 24–48 hours)
- Gradual return to activity
- Address bike fit, cadence, and training load



Prevention Strategies

Reduce risk of recurrence

- Gradual mileage progression
- Proper bike fit and cleat position
- Adequate hydration and nutrition
- Strengthening (calf, ankle, core)
- Mobility and flexibility work
- Avoid sudden increases in intensity or climbing load
- Listen to early warning signs



When to Return to Riding?

General guidance (not a substitute for medical advice)



Pain resolved at rest

No pain during walking or daily activities



Normal function returns

Able to do calf raises without pain



Start with short, easy rides

Flat routes, low intensity



Gradually increase distance and intensity

Monitor for recurrence



Full return

If no pain and no recurrence



Important

- This infographic is for educational purposes only.
- It does not replace a professional medical evaluation.
- If symptoms persist, recur, or you are concerned about a blood clot, vascular problem, or other serious condition, seek medical care.