

MUSCLE STRAIN — HIP & THIGH

Hamstring Strain

Understanding your injury and getting back to full speed

WHAT IS IT?

The hamstrings are three muscles on the back of the thigh (biceps femoris, semitendinosus, semimembranosus) that extend the hip and bend the knee. Most strains occur where muscle meets tendon, in the biceps femoris, during the late swing phase of sprinting.

A **strain** means muscle fibers were overstretched. We grade strains I–III: **Grade I** — mild, microscopic fiber injury; **Grade II** — moderate, a partial tear with strength loss; **Grade III** — severe, complete disruption.

HOW IT HAPPENS

Sprinting or sudden acceleration; also stretch-type injuries (kicking, slide tackles, water-ski starts). Prior hamstring strain is the strongest risk factor for another one.

WHAT IT FEELS LIKE

Sudden pull or pop in the back of the thigh, pain with walking or bending forward, sitting discomfort, bruising that may appear days later behind the knee.

HOW LONG RECOVERY TAKES

- **Grade I:** 1–3 weeks
- **Grade II:** 4–8 weeks
- **Grade III:** 3+ months — and injuries at the top of the muscle near the sit bone (ischial tuberosity) may need surgical evaluation

TREATMENT

Almost all muscle strains heal without surgery. For the first 72 hours: relative rest, ice 15–20 minutes several times daily, compression, and *gentle* motion — complete rest slows healing. Then a progressive program: pain-free motion → isometrics → strengthening → **eccentric loading** (strengthening the muscle while it lengthens — the phase that prevents re-injury) → sport-specific work.

Eccentric strengthening (Nordic hamstring curls, single-leg deadlifts) is the best-proven way to rebuild the muscle and prevent re-injury; agility and trunk-stabilization programs outperform stretching-only rehab.

RETURNING TO SPORT

Return when strength is at least **90% of the other side**, motion is full and pain-free, and you can perform your sport's movements at full speed without hesitation. Returning before the muscle is re-strengthened is the main cause of re-injury.

PREVENTING THE NEXT ONE

In-season Nordic hamstring program, full warm-up before sprinting, gradual return to top speed — re-injury usually happens in the first two weeks back.

WHEN TO CALL US

A large bruise with a palpable gap, pain directly on the sit bone, or inability to walk — these suggest a high-grade or avulsion injury needing prompt evaluation and MRI.

CALL THE OFFICE RIGHT AWAY

Pain not controlled by medication, fever over 101.5°F, spreading redness or warmth, or new numbness or weakness. Direct office line (513) 441-5639; after hours (513) 354-3700.



SCAN FOR THE LATEST VERSION ONLINE

robertpettitmd.com/handouts/hamstring-strain.pdf

This handout is for general patient education and does not replace personalized medical advice. Always follow the specific instructions given by Dr. Pettit and your care team.