



Sports Medicine & Shoulder Surgery

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Hamstring Strains

What is a hamstring?

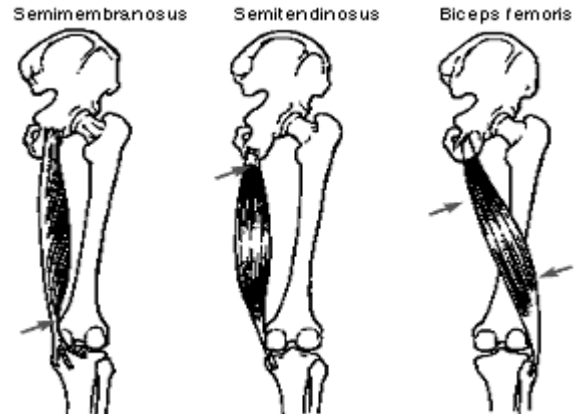
The hamstring is made up of three long muscles that span the back of leg and insert behind the knee. (Semimembranosus, Semitenondosus and Biceps Femoris)

What does the hamstring do?

They function together to help bend the knee and extend (straighten) the hip.

What is a hamstring strain?

Hamstring strains occur when one or more of muscles violently contracts, and strains or tears the muscle(s). Hamstring strains are common in sports that require bursts of speed or rapid acceleration.



What predisposes you to a hamstring strain?

- **Imbalance between the quadriceps and hamstring strength.** Hamstring strength should be 60% of quadriceps strength.
- **Improper warm-up.** Stretching should be performed for a minimum of 10 to 30 seconds and is most effective after a light 5 minute warm up. (biking, jogging)
- **Fatigue.** A majority of hamstring strains occur late in practice / games.
- **Previous injury.** A prior hamstring injury doubles the risk of re-injury within 8 weeks.

What can I expect from therapy?

Physical therapy will progress in three phases of progression:

- **Phase I:** (*acute injury phase*) where the emphasis will be to control pain and swelling and regain normal range of motion
- **Phase II:** (*subacute strengthening phase*) focuses on increasing strength and flexibility and progress normal functioning (walking/stair climbing, etc)
- **Phase III:** (*return to activity phase*) return to sport specific, recreational or occupational activities without pain or limitation

Helpful Web Sites

www.physsportmed.com/issues/1996/08_96best.htm

www.time-to-run.com/injuries/hamstring.htm

www.orthoinfo.aaos.org

Courtesy of Vanderbilt Sports Medicine