

Hamstring Injury

By Joseph Killeen A .T., C.

Plainview Physical Therapy, Head Athletic Trainer

All-American Speed & Conditioning Inc., President

What is a Hamstring Strain (pulled hamstring)?

A pulled hamstring or a hamstring strain is a tear in one or more of the hamstring muscles. The muscles are stretched too far and some muscle fibers are torn which causes bleeding within the muscle. The hamstring muscle is a group of muscles that extend over the back of the thigh, from the lower pelvis to the back of the tibia. There are three hamstring muscles, **Semitendinosus, Semimembranosus and Bicep Femoris**. The primary function of the hamstring is to extend the hip and flex the knee.

How is a Hamstring strained?

Hamstring strains usually occur during an eccentric phase of running. It is in this phase as the foot is contacting the ground the hamstring muscles work extremely hard to decelerates the lower leg. This creates a tremendous force on the muscle that can cause tearing in the muscle fibers.

Factors contributing to Muscle Strains or Tears:

Age

Previous Injury

Flexibility

Hamstring Strength

Fatigue

Muscle Imbalance

Symptoms of a Pulled Hamstring:

Symptoms of a pulled hamstring depend on the severity of the injury.

A sudden sharp pain in the back of the leg during exercise

Muscle spasm is a common and painful symptom of a hamstring injury

Bruising is caused by tears in the muscle that results in bleeding and subsequent bruising

Felt or heard a "pop " in the hamstring muscle.

Treatment of a Pulled Hamstring:

The treatment of a hamstring injury starts immediately following the injury

R.I.C.E. (Rest, Ice, Compression, Elevation)

Compression Bandage to control swelling and minimize bleeding

Stretching and strengthening exercises pain free

See an Orthopedic Surgeon

Start Physical Therapy

Prevention of a Pulled Hamstring:

Begin a strengthening program.

Stretching before and after exercising.

Warm-up correctly before participating in any activity

Begin a running program.

Wear compression shorts

Stretching Program:

Perform each stretch 3-5x.

Hold each stretch 10-15 seconds.

Feel a stretch, **not** pain.

Stretch after a 3-5 minute slow jog.

If you feel pain while stretching, **STOP!**

If you have any questions, please call Joseph Killeen at 516-870-1549.