

ELY'S TEST

Rectus femoris

Rectus femoris is part of the quadriceps group. It is a bulk of muscles located in the superior, anterior middle compartment of the thigh

and is the only muscle in the quadriceps group that crosses the hip and knee joint

Anatomy

-Origin

Originates from anterior inferior iliac spine(AIIS) and the part of alar of ilium superior to the acetabulum

-Insertion

Rectus Femoris together with vastus medialis, vastus lateralis and vastus intermedius joins the quadriceps tendon to insert at the patella and tibial tuberosity (via patellar ligament)

• Nerve supply

Rectus Femoris is innervated by the femoral nerve, originating from lumbar nerve 2, 3, and 4 nerve roots

Bloody supply

Blood is supplied to the Rectus Femoris via descending branch of the lateral circumflex femoral (LCF) artery.

Function- It flexes the thigh at the hip joint, and extends at the knee joint.

Rectus Femoris

Ely's test is used to assess rectus femoris spasticity or tightness

Technique:

- The patient lies prone in a relaxed state.
- The therapist is standing next to the patient, at the side of the leg that will be tested.
- One hand holding the leg at the heel.
- Passively flex the knee. The heel should touch the buttocks.
- Test both sides for comparison.

- The prone position is preferred because it can achieve better lumbar stabilization than sidelying.

Once in position, the knee of the involved LE is flexed to end range.

The test is positive:

- when the heel cannot touch the buttocks,
- the hip of the tested side rises up from the table
- the patient feels pain or tingling in the back or legs.
- Limited knee flexion (& lt; 135 degrees) or the production of hip flexion is a positive test.