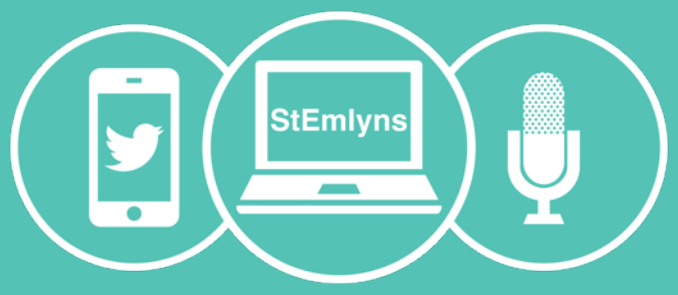
HIP EXAM

a visual learning guide

Nick Smith



HIP EXAM

LOOK → FEEL → MOVE → SPECIAL TESTS → OTHER

Gait

Antalgic - (limp) - shortened stance phase, reduced flexion of knee

Trendelenberg - ABductor weakness

Foot-drop - damage to common peroneal nerve

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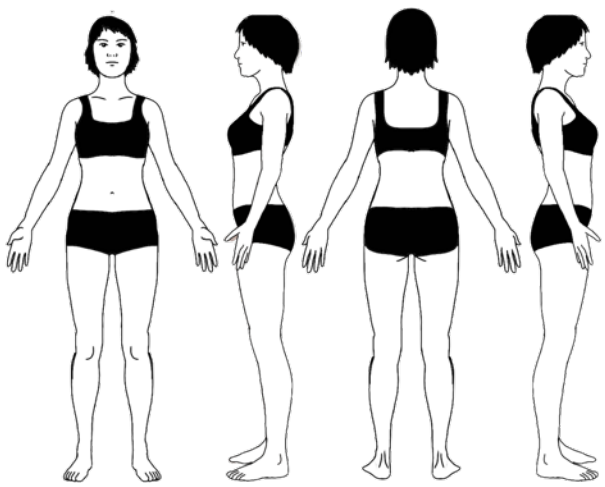
360 inspection



Ideally in underwear

Overall alignment and willingness to weight bear

Deformity - alignment of the pelvis, spine: excessive lumbar lordosis (?fixed flexion deformity) scoliosis, hip rotation (look at foot), knee flexion (?compensation for FFD)

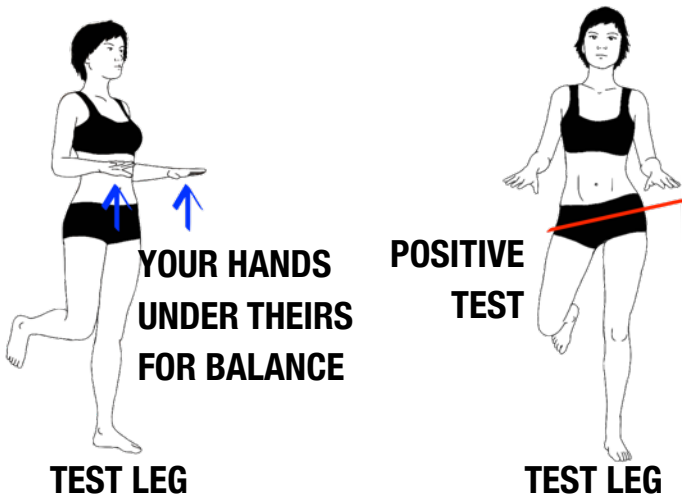
Scars - arthroscopy, hip replacement

Wasting - quadriceps and gluteal muscles

Swelling - effusion, inflammation, bursitis

Skin changes - erythema, bruising, nodules

Trendelenberg Test



Stand in front of the patient with your hands on their iliac crests - They can place their hands on your hands to balance if needed.

Ask them to stand on the test leg by bending the knee of the other leg.

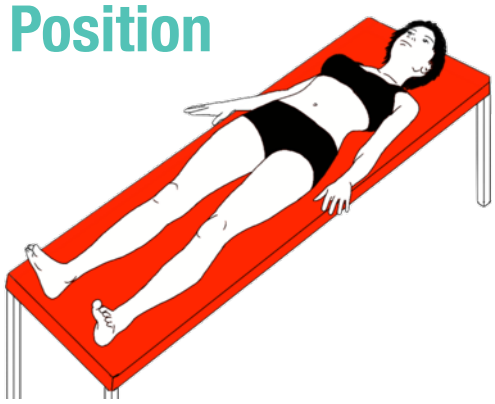
Test positive if the pelvis on the non-test leg drops indicating ABductor weakness - you may need up to 60sec of standing on leg for +ve test to occur

Causes: Pain causing inhibition of muscles, muscle wasting disease, nerve damage.

HIP EXAM

LOOK → FEEL → MOVE → SPECIAL TESTS → OTHER

Position



The patient should ideally be positioned supine on the couch so that the hip is in the neutral position and not flexed

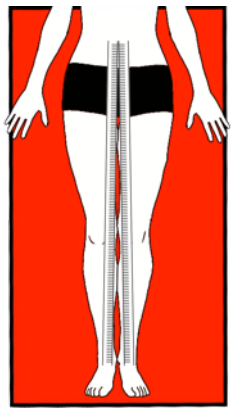
NB some patients may not tolerate this position

Leg length

Align the pelvis & bring the patient's ankles together

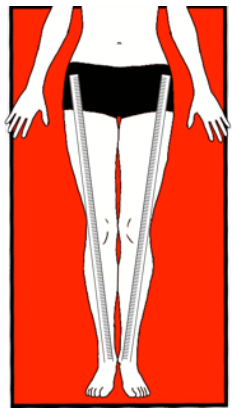
If the medial malleolus meet then there is likely to be no leg length discrepancy

If there is a discrepancy then go on and formally measure...



Apparent

Measure from the midline (belly button) to medial malleolus on both legs and compare



True

Measure from ASIS to medial malleolus on each leg and compare

If both the apparent and true leg length are different on the same leg then the patient has a bone difference

If only the apparent is different then it is a pelvic deformity

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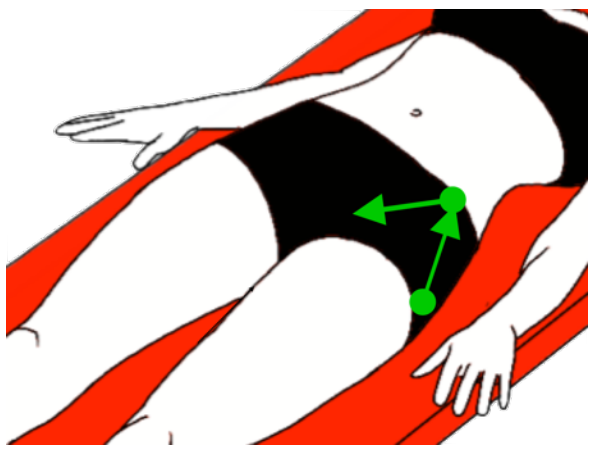
LOOK → FEEL → MOVE → SPECIAL TESTS → OTHER

Palpation



Feel the temperature over the GREATER TROCHANTER and then palpate for tenderness from the GREATER TROCHANTER, the ASIS and along the INGUINAL LIGAMENT

Since the hip is a deep set joint it's not possible to feel the joint line

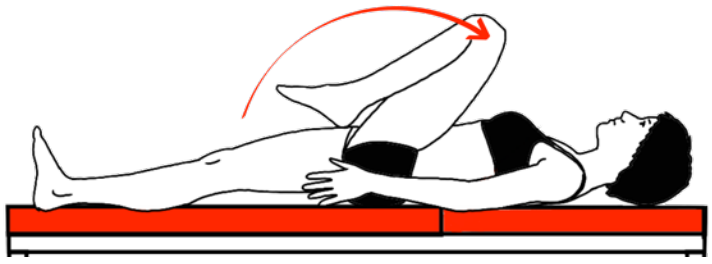
The greater trochanter is lower than most students think and is found on the approx level with the bottom of the pelvis. Rotating the leg may make it easier to feel

Pain here may indicate trochanteric bursitis

HIP EXAM

LOOK → FEEL → **MOVE** → SPECIAL TESTS → OTHER

Flexion



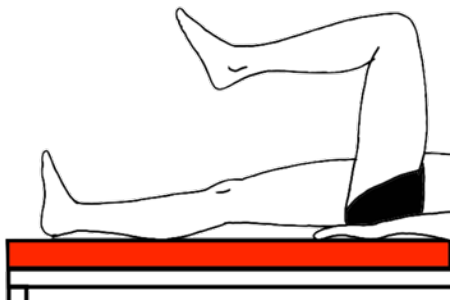
Active movement

"Can you bring your knee to your chest please?"
Most common mistake is for students to try to do a straight leg raise - the knee must be flexed

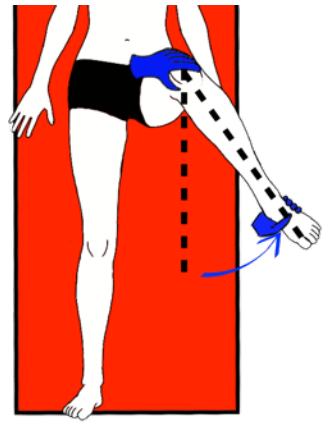
Passive movement

Gently see if you can take the hip a little further
Don't do it if patient had hip replacement!

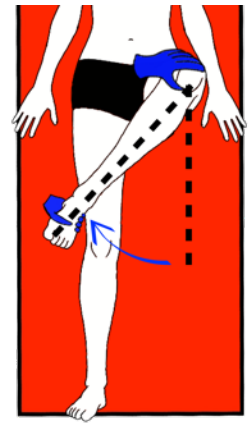
Internal/external rotation



Flex both the hip and the knee to 90º



Passively turn the lower leg outward to test INTERNAL rotation



Passively turn the lower leg inward to test EXTERNAL rotation

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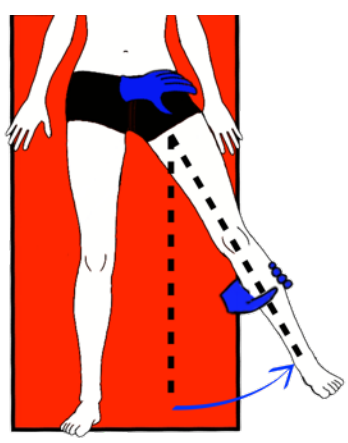
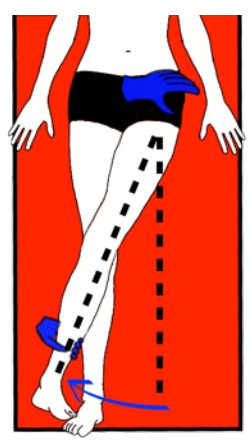
ABduction/ADduction





Fix the pelvis by placing your forearms across both ASIS's.

Passively ABduct/ADduct the hip until you feel the pelvis start to tilt - this is the point at which the hip has finished moving and the pelvis has taken over the movement

HIP EXAM

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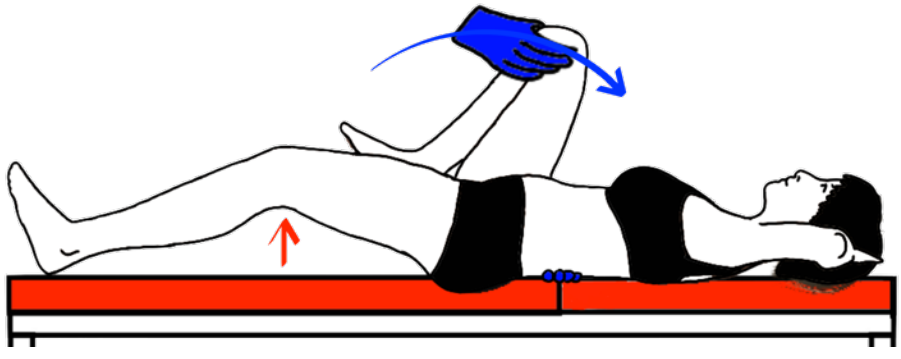
Thomas's Test



Place your left hand under the patients lumbar spine
Passively fully flex the non-test hip
Positive test if the thigh on the test hip rises off the couch

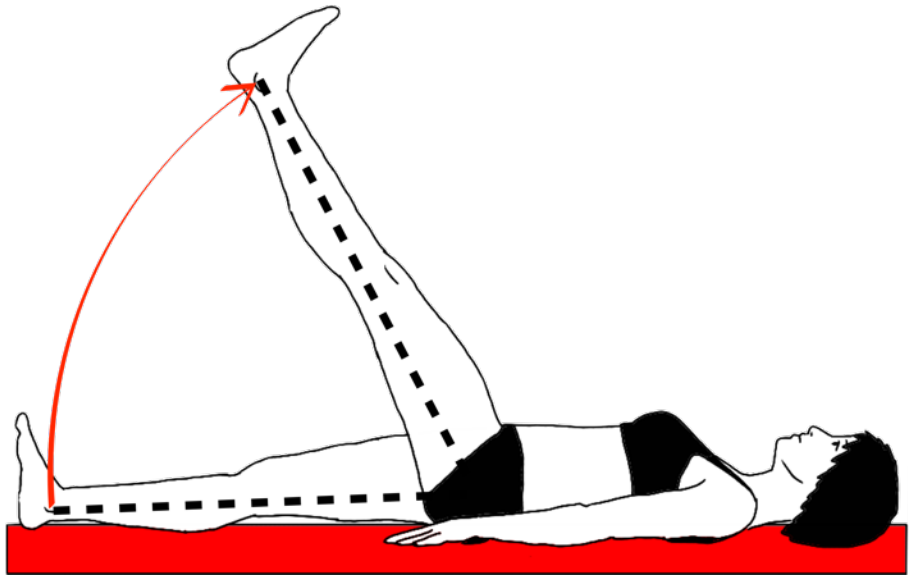
Tests for a fixed flexion deformity of the hip.

Tightening or shortening of the hip flexors, OA

A patient with a fixed flexion deformity may be able to get their thigh down on the couch by tilting their pelvis. This is why the examiners hand should be under the lumbar spine since tilting the pelvis will cause a return of the lumbar lordosis which is normally eliminated when we lay supine.

LOOK → FEEL → MOVE → SPECIAL TESTS → **OTHER**

Joint Above: lumbar spine



Straight Leg Raise

It is normal to be able to raise a straight leg to greater than 60 degrees without pain although movement is sometimes limited by tightness of the hamstrings.

If there is pain in the hip or lumbar region go on and perform a full lumbar spine examination.

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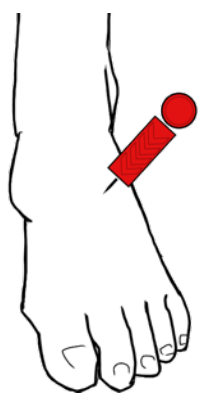
Neurovascular

The sciatic nerve (which splits to the common peroneal & tibial nerve) and femoral are the most likely to be damaged in a hip problem.

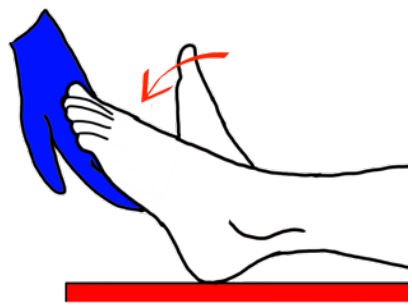
COMMON PERONEAL NERVE

POWER: EXTENSION OF TOES

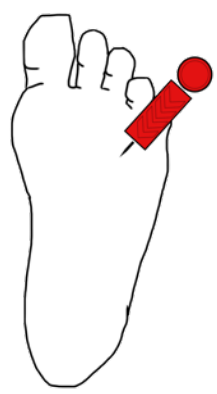


SENSATION

TIBIAL NERVE

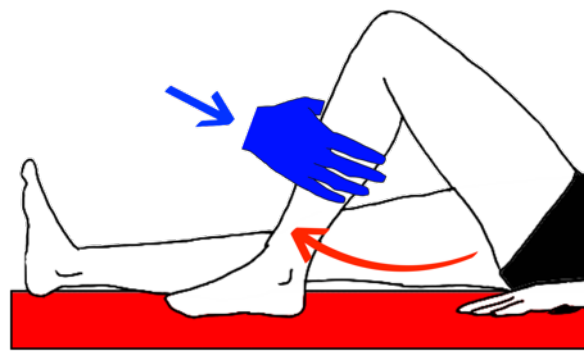


POWER: FLEXION OF ANKLE



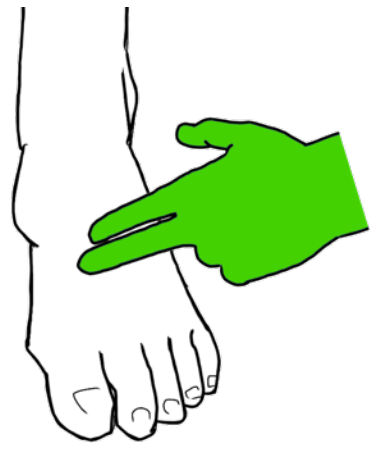
SENSATION

FEMORAL NERVE



POWER: EXTENSION OF KNEE

SENSATION



DISTAL PULSES