Hip Examination

Objective:

- **To be able to perform a proper hip examination and identify any abnormality that aids in diagnosis**

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References: Department handout, Notes(by moath baeshen), Browse's, 433 OSCE Team.

★ **WIPE**

- **W**ash your hands.
- **I**ntroduce yourself.
- Take **P**ermission.
- Insure the Patient **P**rivacy.
- **P**osition:
  - Start **Standing** then lying **supine** and **prone**.
- **E**xposure:
  - From the **Umbilicus to mid-thigh**. Keeping the patient dignity, cover the patient's genitalia.

- Start your examination with asking your patient to stand:

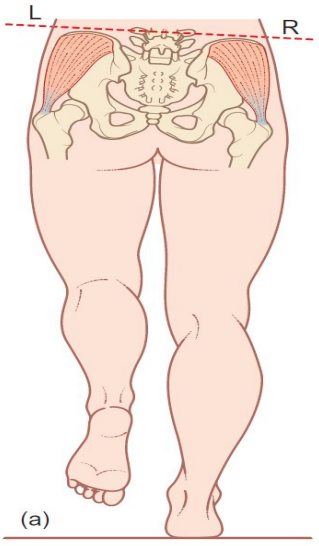
While Standing

★ **Look**

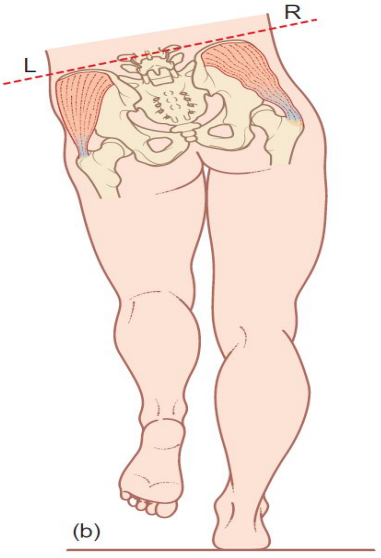
- Mainly you check for Pelvic Obliquity by commenting on:
  - Shoulder level.
  - Pelvis level.
  - Lumbar lordosis.
  - Spinal deformities (Kyphosis, Scoliosis,Hyperlordosis...).
- Next you ask the patient to walk in a straight line, comment on the Gait if it's:
  - **Antalgic Gait:** Shortened stance phase on the affected side. Pain is a common cause of the limp.Video.
  - **Trendelenburg Gait:** Abductor lurch during stance phase.Video.
  - **Waddling Gait:** Bilateral abductor lurch.Video, Video.
  - Comment if the patient is using any walking aids.

★ Special Test

- Look for **Trendelenburg's** Sign. Video, Video.Video.
- There are many ways for doing the test. The preferred way to do the test by the doctors who taught us is the following:
    - You sit on a chair in front of the patient and you ask him/her to stand unassisted on each leg in turn, while placing his/her hands on your shoulders for support.
    - Place your hands on the anterior superior iliac spines of the patient (one on each side).
    - Ask the patient to rise the foot on the contralateral side from the floor by flexing the knee. "If we want to examine the right side, ask patient to flex his/her left leg"
    - Normally, the hip is held stable by Gluteus Medius acting as an abductor in the supporting leg.
    - If the pelvis drops on the unsupported side/flexed knee = positive Trendelenburg sign.



(a) Ask the patient to stand on one leg. There should be a raising of the pelvis on the opposite side, a negative Trendelenburg test.



(b) When the pelvis drops, the sign is positive.

While Lying

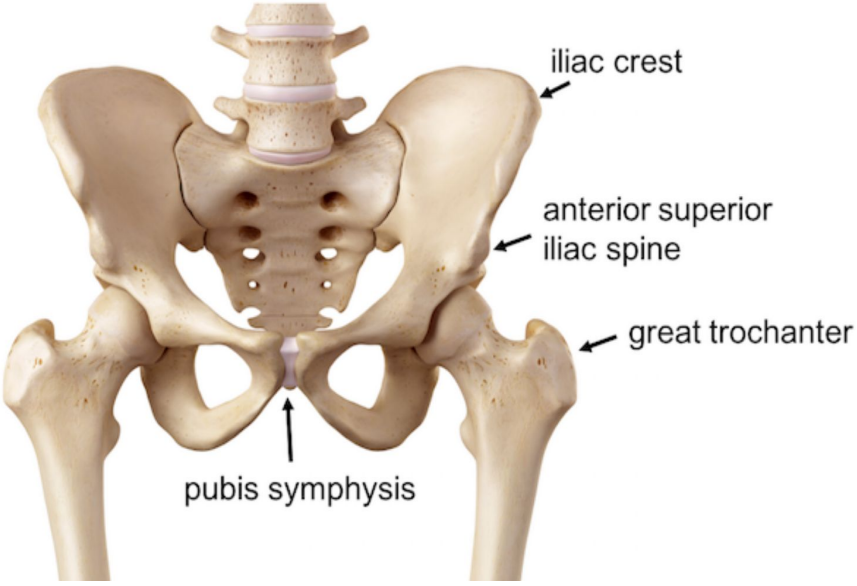
★ Look

- Skin Changes.
- Scars.
- Discolorations/erythema.
- Swellings.
- Muscle Wasting: Glutei.

OSCE Tip: If you were asked to do a Focused exam on one side, this means that you have to do all the exam only to that side (not only the special tests). Mention that you'll examine the other side to compare at the end for the sake of time.

★ Feel

- Don't forget to Ask the patient before you start: Do you have any pain?
- Skin Temperature (by the dorsum of your hands).
- Tenderness over the Bony Landmarks:
    - **Anterior Superior Iliac Spine.**
    - **Iliac crest.**
    - **Greater Trochanter.**
    - **Pubic Tubercle.**



★ Move

- Flex the patient's hip passively. Comment on the degree.Video.
- Extension of the hip is done while the patient is prone. Comment on the degree.

> **OSCE tip:** While you're flexing the hip you can do the Thomas test at the same time. You can also do the hip extension (because it's done prone) at the End to gain time but don't forget to tell the examiner. The station is only 5 minutes try not to waste time.

- While flexing the hip you can examine the Internal Rotation and the External Rotation of hip at 90 degrees hip and knee flexion passively. Comment on the degree.
- Passive Abduction and Adduction and stabilize the pelvis. Comment on the degree.

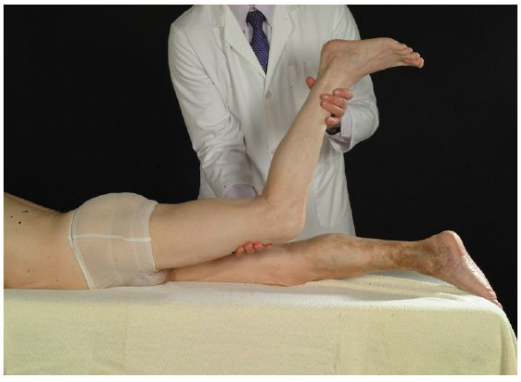


Fig. 8.8 With the patient lying on their front, lift each thigh and assess hip extension.

Fig. 8.6 Keep your fingers and thumb stretched across the iliac spines when testing abduction and adduction to detect any movement of the pelvis.

Fig. 8.5 When testing hip movements such as flexion, place your fingers on the greater trochanter and your thumb on the iliac spine so that you detect any tilting of the pelvis.

Fig. 8.7 Rotation is measured by flexing the hip and the knee to 90° and rotating the femur by moving the foot back and forth across the line of the limb.

★ Special Tests

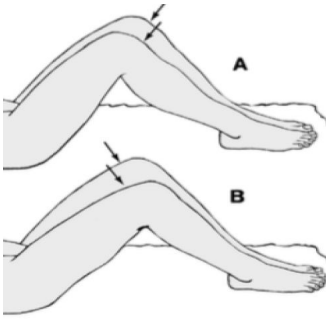
- **Thomas test:Video**
    - To look for the Fixed Flexion Deformity.
    - Put your hand under the patient Lumbar spine before flexing the Hip and while flexing it comment on the disappearance of Lumbar lordosis.
    - When the affected side" contralateral" shots up when flexing the other side That a positive sign.
    - If the Thomas Test is positive = assess the extension of the affected side with the patient lying on the same side of the flexed hip while stabilizing the pelvis.
    - Restricted extension = True FFD.

- **Leg Length Discrepancy:**
    - With the help of a measuring tape, measure both legs from the Anterior Superior Iliac spine to the medial malleolus of each side. ("True" leg length discrepancy measurement)
    - Compare both legs' length to look for any discrepancy.
    - If there is a difference, look for the Galeazzi sign to Identify level of leg length discrepancy. (The "apparent" leg length is measured from the umbilicus to the medial malleolus.)

Fig. 6.10 A quick method of detecting difference in bone length is to put the patient's heels together, with the knees flexed, and look from the side and the end of the bed. This patient has shortening of the right tibia and femur.

- **Galeazzi sign:Video**
    - knees flexed at 90° with hips and ankles at 45°.
    - Put the malleoli at the same level. Any hind foot(foot posterior ⅓) asymmetry makes the test inaccurate.
    - If you see the discrepancy when looking at the Femurs parallel (You're standing beside the patient's head):
        - Tibias at the same height. The discrepancy is above knee (Femur).
    - If you see the discrepancy when looking at the Tibias parallel (You are standing beside the patient feet):
        - Femurs at the same height. The is discrepancy in the tibia (knees at different levels).

- The position of the two knees should be compared.
  (A) This appearance suggests femoral shortening.
  (B) This appearance is suggestive of tibial shortening.
- You can never judge from the physical exam which side is normal and which side is not. You can only tell that there is a discrepancy and you will need further imaging to decide.



- **Mention at the end:**
    - I'll finish my examination by examining one joint above (Lumbar spine) and one joint below (knees).
    - I'll also do a full neurovascular exam.
    - I'll order imaging if it's indicated.
    - Don't forget to thank and to cover the patient.

OSCE Tip: At the end of your exam explain to the patient his/her most likely condition. We were told it was marked in the checklist.

- **Full Examination** Video.