



ORTHOPEDICS FORMS



DONE BY:
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3 Thigh compartments

Femoral nerve

↓ innervates

Anterior compartment

- Iliacus
- Rectus femoris
- Vastus medialis
- Vastus lateralis
- Vastus intermedius
- Sartorius

Obturator

↓ gives

Medial compartment

- Adductor Magnus
- Adductor Longus
- Adductor Brevis

Sciatic nerve

Posterior compartment

- Biceps femoris
- Semi tendinosus
- Semi membranous

Leg compartments

Common fibular (head of fibula)

Superficial fibular

Lateral

- Fibularis Longus
- Fibularis Brevis

Deep fibular

Anterior compartment

- Tibialis anterior
- extensor Digitorum longus
- Extensor Hallucis longus

Tibial nerve

Posterior

Superficial

- Gastrocnemius
- Plantaris
- Soleus

Deep

- Popliteal
- Tibialis Posterior
- Flexor Digitorum longus
- Flexor Hallucis longus

opposite of flex

Upper Arm 2 compartments

Anterior compartment

- Coraco brachialis
- Anterior brachialis
- biceps brachii

Posterior Compartment

- 3 Triceps Brachii
- medial
 - lateral
 - long head

Forearm

Dorsal (posterior)

- All extensors Except

- Abductor Pollicis longus

Posterior interosseous nerve

Branch of radial

Henry's mobile wad compartment

- Extensor Carpi Radialis Longus

- // // // Brevis

- Brachioradialis

Superficial radial nerve

4 compartments

Volar (Anterior)

Superficial ^{median & ulnar}

- Flexor Carpi Ulnaris
- Palmaris longus
- Flexor digitorum Superficial
- Flexor carpi radialis
- Pronator Teres

Deep ^{Anterior interosseus}

- Flexor digitorum Profundus
- Flexor Palmaris Longus
- Flexor Pollicis Longus
- Quadratus Teres

** Note: These forms are not fixed, sometimes they change a point in the form, so you must study the Orthopedic Examination Summary to be safer.

A form

Right Median Nerve Examination
Golfer Elbow Examination
collateral ligament of the Knee

B form

Impingement test for the Right shoulder
Right foot sensation
Right hip flexion contracture
De- Quirivane test

C form

Anterior interosseous nerve of the right hand.
Limb Length Discrepancy (true and apparent)
Examination of patellofemoral joint

D form

Right Biceps tendon Examination
Tennis elbow Examination
Trendelenberg gait Examination
Cruciate Ligaments Examination

E form

Examine the function of the Ulnar nerve
Finger Flexors examination (hand)
patella for effusion
Sensory examination of the foot and ankle

Form A

Median Nerve

- Muscle wasting on thenar eminence,
 - Cut wound,
- Look**
- Deformities (*ape* hand and *pointing* sign),
 - Ulcers,
 - Skin & Scars
-
- Feel**
- 2-point discrimination on tip of the fingers (5 mm is normal)
-
- Motor**
- Thumb Abduction (Against resistance – The Abductor Pollicis Brevis APB)
-
- Special Test**
- **Anterior Interosseous Nerve:**
 - *OK Sign*
 - FPL – Flexor pollicis longus – Flexion of the thumb
 - FDP – Flexor digitorum profundus – Flex hand and both interphalangeal joints
 - **Carpal tunnel syndrome:**
 - *Tinel's* Test
 - *Phalen's* Test

Golfers Elbow

- Look**
- No deformities
-
- Feel**
- Local tenderness on the medial epicondyle
-
- Move**
- Flexion against resistance on the wrist & fingers (on PIP) then passive stretching (extension)

Collateral Ligaments

- Look**
- No deformities, scars
-
- Feel**
- For local tenderness
-
- Move**
- on full extension: varus & valgus on joint line (to determine the joint line by doing flexion of the knee, locate the joint line then do extension). If the patient was tense, put leg under your armpit
-
- Special Test**
- **Stress Tests:** *Varus* and *Valgus*: on 30 degrees flexion
 - **Faber Test** – *Figure of 4*: leg on the other leg and do varus force to check for lateral collateral (my feel it as a cord like)

Form B

Impingement Test for the Right Shoulder

Look • Muscle wasting, deformities

Feel • Tenderness

Move • **3 Tests for Supraspinatus Muscle:**

a. *Painful arch*: pain on abduction, 60-120 degrees

b. *Impingement sign*: abduction, flexion and internal rotation

c. *Impingement test*: if positive, inject lidocaine into the joint if it got better then it's a tendon problem

• **1 Test for Infraspinatus and Teres Minor:**

- External rotation – against resistance

• **2 Test for Subscapularis:**

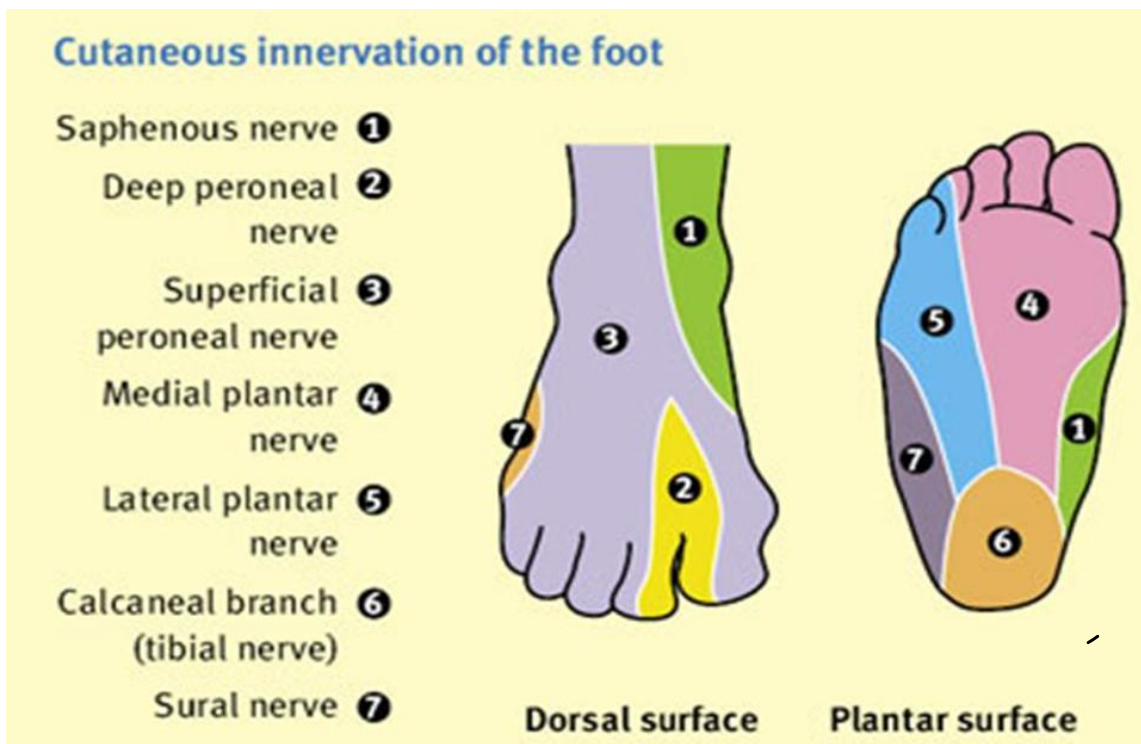
a. *Left off test*

b. *Resisted left off test*

Right Foot Sensation

Look • For muscle wasting

Feel • Sensation as depicted



Right Hip Flexure Contracture (Thomas Test)

- Look** • Any deformities, scars, abnormal skin changes
-
- Move** • Can be done in 2 ways: do it bilaterally:
- Put your hand under the spine of the patient and ask the patient to flex the thighs, then ask the patient to extend on thigh. The patient can't extend the leg completely, so there's flexion contracture
 - Put your hand under the spine and ask the patient to flex one leg, the lordosis will disappear and the other limb will raise (flex)

Deqervain Disease

- Look** • Any deformities, scars
-
- Feel** • Tenderness on the styloid process of radius
-
- Special Test** • Fienkelstien test: thumb in fist and do ulnar deviation of the wrist
-

Form C

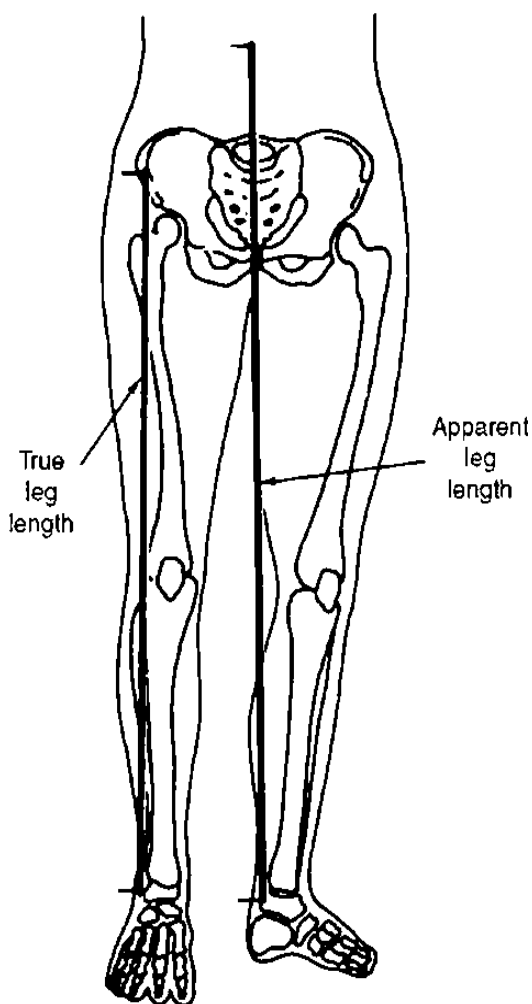
Anterior Interosseous Nerve Examination

- Look** • Muscle wasting, deformities
- Feel** • *No Feel (Pure Sensory!)*
- Move** • *FPL* – Flexor pollicis longus – Flexion of the thumb
• *FDP* – Flexor digitorum profundus – Flex hand and both interphalangeal joints (on DIP)
- Special Test** • *OK sign* (DIP must be flexed)

Limb Length Discrepancy

- Look** • Apparent Length can be examined by inspection

Types

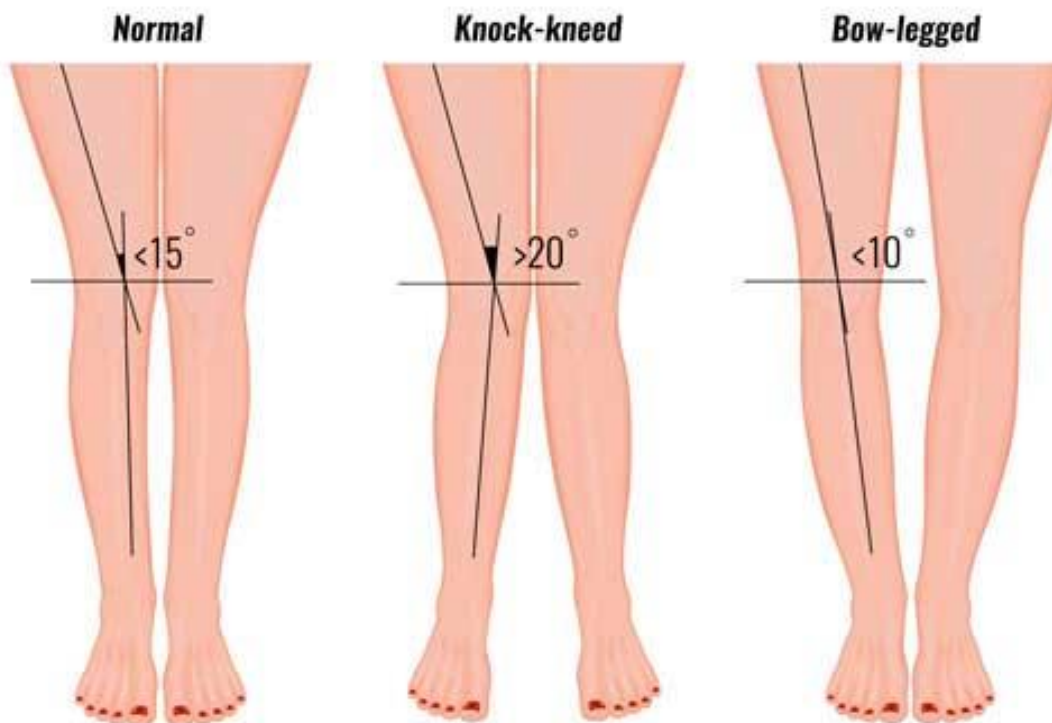


- **Apparent:** From umbilicus (or xiphisternum) to mid-point of medial malleolus
- **True:** From ASIS to mid-point of medial malleolus
- **Results:**
 - a. True abnormal, Apparent normal: Compensated limb problem
 - b. True abnormal, Apparent abnormal: Uncompensated limb problem
 - c. True normal, Apparent abnormal: Above the limb (spine: scoliosis, pelvis)
- Then we do the **Geliazzi test**: to know if the shortening is from the femur or tibia: which is done by: 45° of flexion on knee joint, the hip and feet is on same level. If the *patellas* are not at the same level > *Tibial* shortening. If the *tibial tuberosities* are not at the same level > *Femur* shortening.

Patellofemoral Joint

Look	<ul style="list-style-type: none">• <i>Q Angle</i>: By inspection or goniometer• Scars, Masses, scars
Feel	<ul style="list-style-type: none">• Tibial tuberosity, patellar ligament, patella and the undersurface of patella
Move	<ul style="list-style-type: none">• Extension only: active straight leg raising test and maintain it raised• <i>Gliding</i>: move the patella proximally and distally along the intercondylar groove, crepitus or pain (positive)
Special Test	<ul style="list-style-type: none">• <i>Grinding</i>: displace the patella downward and ask the patient to contract quadriceps• <i>Apprehension test</i>: push the patella laterally with flexion, the patient will contract the quadriceps to return the patella to basic position

Q Angle of the Knee



Form D

Right Biceps Tendon Examination

Look	<ul style="list-style-type: none">• Muscle wasting, deformities, scars
Feel	<ul style="list-style-type: none">• Feel the biceps tendon (anterolateral upper arm)
Move	<ul style="list-style-type: none">• Flexion of forearm and supination
Special Test	<ul style="list-style-type: none">• <i>Speed's Test</i>: Flexion of the arm against resistance• <i>Yergason's Test</i>: Supination against resistance (with arms next to trunk)

Tennis Elbow

Look	<ul style="list-style-type: none">• Any deformities, scars, wasting
Feel	<ul style="list-style-type: none">• Tenderness on the lateral epicondyle
Move	<ul style="list-style-type: none">• Extension of wrist and middle finger against resistance and then passive flexion

Trendelenberg Test

Position	<ul style="list-style-type: none">• Standing
Exposure	<ul style="list-style-type: none">• Xiphisternum down to knee
Look	<ul style="list-style-type: none">• Look at the pelvis: steady or tilted
Technique	<ul style="list-style-type: none">• Ask the patient to stand on one leg, with your hand on the iliac crest, check to see if there's any tilting of hip on the opposite side and trunk (spine) tilting to the same side• Problem: with the abductors or superior gluteal nerve (Gluteus medius, minimus)

Cruciate Tests

Look	<ul style="list-style-type: none">• Abnormalities, scars, swellings• <i>Tibial Sagging test</i>: with 90 degrees flexion, look if there's any posterior dropping, which indicate PCL injury
Feel	<ul style="list-style-type: none">• Tenderness
Special Test	<ul style="list-style-type: none">• <i>Anterior drawer test</i> (for ACL): on 90 degrees flexion, sit on the patient foot, your hands on the joint line (Tibia) and push anteriorly• <i>Posterior drawer test</i> (for PCL): same test but push posteriorly• <i>Lachman test</i> (for ACL): on 30 degrees flexion, your leg under the patients leg (to elevate) and fix the femur from the middle of the femur and elevate the tibia

Form E

Ulnar Nerve

Look	<ul style="list-style-type: none">• Hypothenar Atrophy, Interosseous atrophy (metacarpals protruded) and first interosseous• <i>Ulnar Claw Hand</i>
Feel	<ul style="list-style-type: none">• Sensation from medial 1 and a half fingers by the 2-point discrimination
Move	<ul style="list-style-type: none">• Abduction (against resistance) and adduction (with paper)
Special Test	<ul style="list-style-type: none">• <i>Forament test</i>: for adductor pollicis with hand facing up (one hand at a time – don't do it for both hands together), positive if weak or if there's flexion of the thumb• Resisted abduction of small fingers: collapse of finger indicate a problem in that finger

Flexors of the Hand

Look	<ul style="list-style-type: none">• Muscle wasting, scars
Feel	<ul style="list-style-type: none">• Tenderness
Move	<ul style="list-style-type: none">• Without resistance: Flexor digitorum profundus (FDP) – Distal interphalangeal Joint (DIP), Flexor digitorum superficialis (FDS) – Proximal interphalangeal Joint (PIP) – with other fingers passively extended• Also examine lumbricals metacarpophalangeal joints (MCP) and flexion of the thumb

Patellar Effusion

Look	<ul style="list-style-type: none">• <i>Juxtrapatellar hollow sign</i>: a groove seen on the medial side and then flex 90 degrees and check on the lateral side
Special Test	<ul style="list-style-type: none">• <i>Patellar tap</i>: collect fluid from suprapatellar pouch then compress the patella, when there's effusion we feel resistance & fluctuation and once we stop compressing, our fingers will return (rebound)

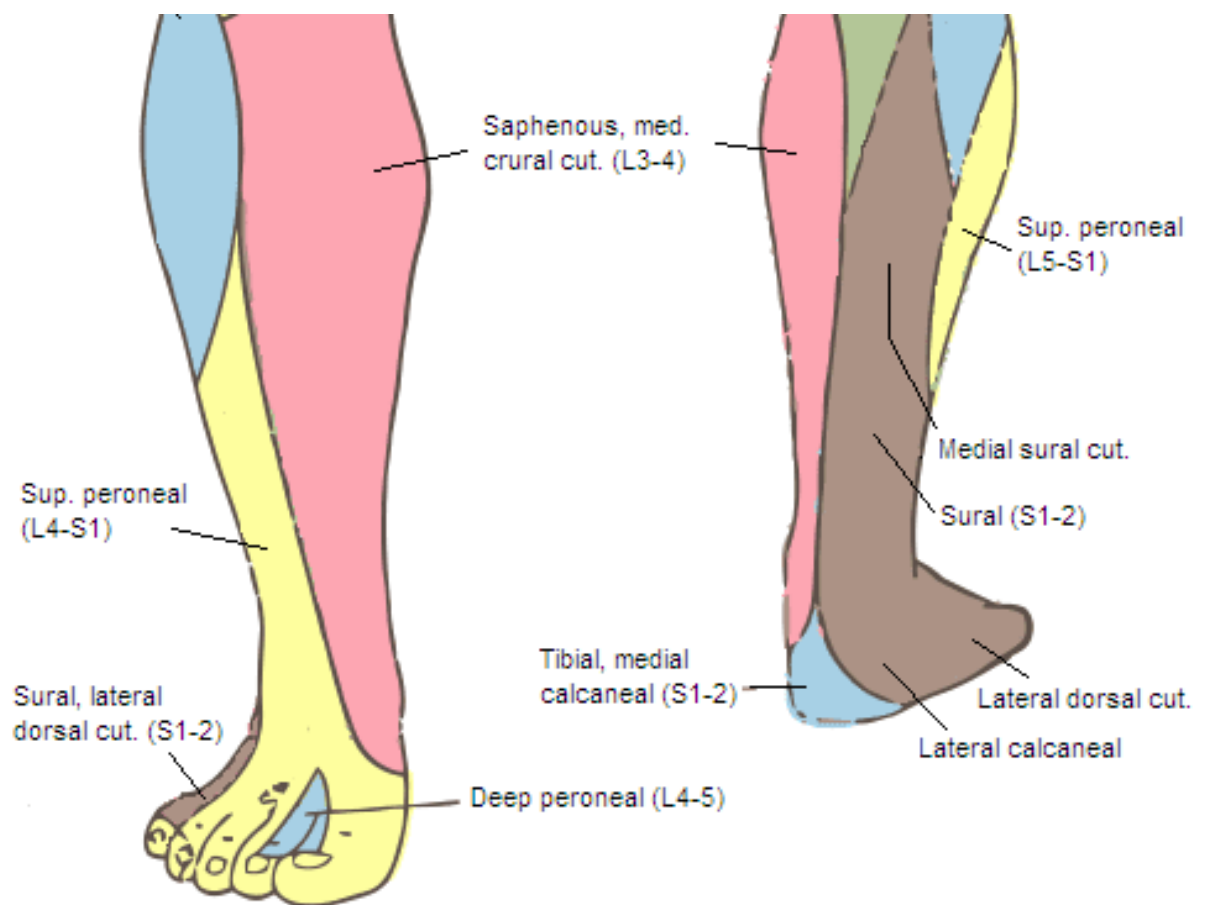
- *Ripple test* (Milking, stroke, cross fluctuation test):
 - Milk the medial side
 - Compress suprapatellar pouch: all fluid collected in lateral compartment
 - Stroke on the lateral side
 - Check to see if there's a bugle on the medial side

Sensory Examination of Feet and Ankle

Feet

- Seen in Form B

Ankle





BEST WISHES