Musculoskeletal Physical Examination Check List

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Hands https://youtu.be/sypBEG9F6uU

1-10 points

2-Look

Dorsum of the hands: Symmetrical, No scar , No Swelling, No color changes, No rash , No muscle wasting, No masses, No deformities like swan neck- boutonnière- mallet- Z thumb- ulnar deviation, No sausage fingers, No heberden- Bouchard Nodules
Ask the patient to make a fist to comment about present of hill valley aspect

Nails: No pitting nails, No onycolysis, No telengectesia, No clubbing, No Calcinosis, No finger tip scar, No arachynodactyly

Palm: No dupuytrens contracture, No palmar erythema, No thenar or hypothenar wasting, No scar , No swelling

Elbow: No rheumatoid nodule, no psoriatic plaque, No scars

3-Feel

Don't forget to take a permission, ask about pain, warm your hands and keep eye to eye contact

Temperature
Tenderness and Swelling in each joint. Wrist (press with both thumbs on dorsal aspect, fluctuate to assess sponginess (synovial inflammation) and notice tenderness). Assess MCPs using both thumbs for tenderness and sponginess (you can use the thumb and the index for the 2nd MCP).
Press the PIPs and DIPs between your thumb and index to assess sponginess and tenderness.
MCP squeeze test Squeeze all MCPs (except first MCP) at once with your grip with out thumb to assess tenderness
Power Grip يشد على أصابعك بأقوى ما عنده
Crepitus ask the patient to move the wrist while you are palpating the joint using your thumb and index
Capillary Refill
Trigger fingers ask the patient to flex and extend their fingers
Palpate flexor tendon sheath (flexor digitorum profundus, flexor digitorum superficialis)
De Quervaine's tenosynovitis: Frinkelstein's test; ask the patient to place their thumb in their palm and close the fist on it, and medially deviate the wrest with your hand.
Positive test: pain above the radial styloid. This can cause discomfort in people who write with a pen often.

💎***Comments***:
Symmetrical bilateral warm dry hands, No tenderness, No swelling, No sponginess, good intact power 5/5 , No crepitus, No tigger finger, Normal capillary refill, negative Frinkelstein

4-Move

Active Then passive Then Against resistance

Performed by:
• Make a fist then extend fingers
• FDP (ask the patient to flex DIP while you hold PIP extended)
• FDS (hold all fingers extended but one, ask to flex the PIP of the tested finger)
• Extensor digitorum (extend fingers with the wrist in neutral position)
• Flexor and extensor pollicis longus (hold the proximal phalanx and ask to flex and extend the IP joint of thumb)
• Extensor pollicis longus (extend thumb with palm flat on surface)
• Thumb opposition, abduction, adduction
• Wrist: Flexion, extension, supination, pronation, ulnar deviation and radial deviation

💎***Comments***:
Normal Intact power, full range of motion

5-Carpel tunnel Syndrome

-Carpal Compression test: most accurate test. Compress with your thumb on the point proximal to the distal wrest crease for 1 minute.
Positive test: numbness, paresthesia or pain in the lateral 3 ½ fingers.

- Tinel's test: tab with your finger on the same point for 1 minute.
Positive test: numbness or paresthesia on the lateral 3 ½.

- Phalen's test: flex the patients wrest for 1-2 minutes.
Positive test: numbness, paresthesia or pain in the lateral 3 ½ fingers. You also can use the reverse prayer sign for this test.

6-Peripheral Nerve

• Median (carpal tunnel)
-opposition سبّح
-Thumb abduction (resist)
-Finger flexion (stone)
-Anterior interosseous nerve (Ok sign, resist)
-Sensor: assess sensation in the pulp of index finger (median nerve supplies lateral three and a half fingers).

• Radial
-motor: extension of MCPs (Paper), and ask the patient to move him to move his hand up and down (wrist drop)
-Sensory: assess sensation on the dorsum of first interosseous muscle.

• Ulnar
-motor: finger adduction and abduction(Scissors) and put the paper between fingers and ask him to resist the pulling of paper (Adduction power)
-Sensory: assess sensation in the pulp of little finger

Knee https://youtu.be/17ZKya9yR2Y

1- 10 points

2- Look

Gait: no antalgic gait.
Standing: No deformities(valgus, varus), No swelling, No muscle wasting, No scars, No discoloration, No sinuses, No redness, No rash, Normal hair distribution, No posterior swelling (Baker cyst), No patellar hollow, No visible pulsation.
Supine: No wasting, No scars, No discoloration, No flexion deformity, No LL length discrepancy.

3-Feel

-Temperature using the dorsum of the hand- medially andlaterally around the joint
-While knee is FLEXED palpate for tenderness and sponginess:
*Joint lines
*Tibial tuberosity
*Tibial epicondyle
*Head of fibula
*Femur condyles
*Patella

💎***Comments***:
Symmetrical bilateral warm, No tenderness, No sponginess

4-Move

Range of motion: start with active motion, than passive.
- Flexion/extension: range is usually 0-140 degrees, the extent of flexion varies according to the mass of thigh muscles (can reach 160 degrees in the lean, and less than 140 in the obese or body builders).
-Abnormal range of flexion is when the movement stops before the calf touches the thigh.
- Extension: full extension is to 0 degrees. In men it is normal to reach up to 10 degrees (slight flexion), while in women it is normal to reach -10 degrees (slight hyperextension) due to laxity of joints.
- Listen for crepitus (usually in osteoarthrosis).
- Ask the patient to extend his leg and try to hold it in the air to assess extensor weakness.

💎***Comments***:
Good power 5/5
Normal range of motion
Normal leg rising
No crepitation

5-Special tests

1- McMurray's test: for medial and lateral menisci
- Flex the knee to 90 degrees, feel the joint lines with your lei nana (between femoral condyles and tibial head), and hold the foot with your right hand (the foot not the leg).
- To examine the medial meniscus: extend the knee, then flex while externally rotating it and place it in a valaus position. A sensation of a clunk on the medial side of the joint line is a positive test.
- To examine the lateral meniscus: extend the knee, then flex while internally rotating it and place it in a varus position. A clunk laterally is a positive test.
- For both, repeat the extension-flexion cycles a number of times, each time reducing the degree of flexion. (Extend the knee then flex it to 90 degrees, then extend it back and flex it to 60 degrees for example and so on).

💎***Comments*** :
No pain , no popping sounds , negative McMurray test

2- Medial and Lateral Collaterals Test:the medial collateral ligaments prevents valgus deformity and the lateral collateral prevents varus deformity in the normal knee.
-Extend the knee fully, and hold the foot and place it between your elbow and waist. Place one hand on the lateral joint line and the other hand on the medial line.
-Move your body to force a valgus position, feel an opening of the medial joint line, this indicates failure of anterior cruciate ligament (ACL), posterior cruciate (PCL) and the medial collateral ligament (all of them).
- Repeat for a varus position, opening of the lateral crease indicates failure of ACL, PCL and the lateral collateral (all of them).
-If the test was negative on full extension of the knee, repeat while flexing it at 30 degrees. This, however, indicates failure of the lateral or medial collaterals, it does not indicate anything regarding the cruciate ligaments.
-It is normal to have lateral crease opening at 30 degrees flexion, up to 1-2mm is normal and not failure of lateral collateral.

💎***Comments***:
Negative valgus and varus test

3- Drawer's test: for ACL and PCL.
- Flex the knee at 30 degrees, prevent the foot from rotating to relax the hamstring muscles by sitting on it, place both hands behind tibia (thumbs on tibial tuberosity and fingers along lower popliteal fossa).
- Posterior Drawer test: move tibia away from you, any translocation indicates PCL rupture. Always perform the posterior test before the anterior test, PCL rupture can mimic a positive anterior test.
- Anterior Drawer test: move the tibia towards you, normal translocation is less than 5mm. +1 translocation is 5mm. +2 is more than 5 to 10mm. 3+ is above 10mm.

💎***Comment***:
Negative drawer test

4. Lachman's test: for ACL, it normally prevents anterior translocation of tibia on femur.
-Ask the patient to relax his knee, hold the distal end of femur with the left hand, hold the proximal end of tibia with the right hand, try to translocate tibia on femur anteriorly (move your right hand toward you and the left towards the floor, repeatedly). Feel for a libiu restiff end point (abrupt stiffness at maximal anterior translocation), this is normal (negative) test. Absent stiff end point (positive) indicates ACL rupture.
- To make it easier, you can place your knee under the patients flexed (30 degrees) knee (under the distal femur). Place left hand above the distal femur and move tibia with your right hand.

💎***Comment:***
Negative lachman test , the tibia is stable over the fibula

6-Knee Effusion

look:
- Medial gutter hollow sign: flex the knee to 15. degrees and notice fullness in the medial gutter posterior to the patella, any fullness is an early sign of eftusion.

Feel:
1 - Milking test(mild) : extend the knee fully, milk the medial gutter with your hand and then close the suprapatellar pouch by swiping your other hand across the thigh to the top of the patella. Fluid will shift to the lateral side. Release and press on the lateral side with your thumb to move the fluid back to the medial gutter, bulging of the medial gutter is a positive milking test. The test is negative in a massive effusion.

2-Transmitted thrill(massive): close the suprapatellar pouch with your left hand and the lower aspect of the knee with your right hand. Feel with your fingers the medial and lateral sides of the patella. Alternate between feeling fluid thrill in one side by pushing in the other side.

3 - Patellar tab(Moderate) : using the thumb or the index and middle fingers, push the patella down and release quickly, notice a rebound of the patella where it jumps back quickly on your finger, indicating a massive effusion. You can close the suprapatellar pouch to exaggerate the test.

-Patellar Apprehension: place your thumb on the lateral side of the patella and push it laterally while gradually flexing the knee, apprehension (the patient is scared of moving the patella) usually at 30 degrees of flexion indicates recurrent patellar dislocation.

💎***Comments***: No dislocation , no instability , negative Patellar Apprehension test , no resistance from the patient

-Patellofemoral joint: Grinding test: JUST MENTION
mentiosk the palient to tense quadiceps then relax it.
Place your thumb on superior pole of the patella and ask the patient to tense the muscle, notice pain. Pain indicates a pathology, however discomfort is normal.