

MUSCULOSKELETAL EXAMINATION

GENERAL INSTRUCTIONS

1. Patient should wear minimal clothing to facilitate examiner's view of muscle and joint motion. Always make sure the room is at a comfortable temperature.
2. Work in systematic order; general appearance, head and neck, extremities, spine compare symmetrical points. Measure difference in muscle or joint size or limb length with tape measure if necessary.
3. Follows the pattern – Inspection, Palpation and Range of Movement (ROM).

HEAD AND NECK (PATIENT SEATED)

1. Inspection- deformities, abnormal posture
2. Palpation- swelling, tenderness, crepitation, range.
Temporomandibular joint –swelling, tenderness. Have your Patient open and close the mouth; feel and listen for crepitations, observe ROM.
Tenderness or cervical spine, paravertebral and trapezius muscles?
ROM, Have the Patient touch chin to chest, each shoulder, touch ear to top shoulder; extend head backward.

HANDS AND WRISTS

1. Inspection- missing deformed fingers; contractures, swelling, redness, bony enlargements, nodules, atrophy.
2. Palpate all the bones in the wrist, hand and fingers for tenderness, nodules.
3. ROM- Have the Patient open and close fist; flex, extend abduct and adduct wrist. Note range pain, crepitations.

ELBOWS

1. Inspection- deformities, nodules, swelling, redness
2. Palpation- flex elbow at 90° angle, palpate the groove on either side of the olecranon for swelling, fluid, nodules, tenderness.
3. ROM- flex and extend forearm, supinate and pronate palms; note pain range and crepitations.

SHOULDERS

1. Inspection- swelling, deformity, atrophy.
2. Palpate sternoclavicular joint at sternum, acromioclavicular joint between clavicle and shoulder and grooves and head of the humerus for tenderness, nodules, fluid
3. ROM, Have the Patient raise arms over head, put hands behind small of back note, range, crepitations, pain.

FEET AND ANKLES

1. Inspect ankles, foot bones, toes; note deformities, nodules, redness, swelling, fleshy or bony growths.
2. Palpate for tenderness nodules.
3. ROM- Dorsiflexion and plantar flexion of foot; flex toes, evert and invert foot while holding the heel still invert and evert foot while holding the ankle still. Note range, tenderness, and crepitations.

KNEES (legs extended and relaxed)

1. Inspection- note inflammation, swelling, enlargement (absence of normal concavities on each side of patella); alignment deformity.
2. Palpate suprapatella pouch and downward on either side of patella; note boggiess, thickening, tenderness.
3. ROM- Extension/ flexion note range, pain, crepitations.

HIPS (Patient lying flat)

1. Inspection – is one leg longer than other or abnormally rotated?
2. Palpate along joint of tenderness.
3. ROM- Flex knee firmly onto chest (flexion of opposite thigh indicates deformity of that hip). Touch foot to opposite patella and pull knee laterally and medially to check hip rotation; note range, tenderness, crepitation

SPINE (Patient standing)

1. Inspection- observe from side to note cervical thoracic, lumbar curvature; stand behind and look for abdominal lateral curvature, check height of shoulders and iliac crest; does Patient have flat feet; knock knees or bowlegs.
2. Palpate firmly along spinous processes for tenderness muscle spasm.
3. ROM- (From behind stabilise Patients hips with your hands) – Have Patient bend forward and touch their toes, bend to each side, twist shoulders from side to side, bend backwards. Deformities to the spine frequently become more obvious during these manoeuvres. Also note range, pain on movement.