

Spine Posture Assessment Summary

Plumb line

- ☐ Plumb line – a technique that aids in measuring the resting posture of an individual and identifies such things as structural deformities, muscle contractures, elongated muscles/weakness, and muscular atrophy due to nerve involvement
- ☐ Performed with individual wearing a minimal amount of clothing to provide maximal skin exposure for assessment (i.e. swim suit, sports bra, etc)

Views

Anterior

- ☐ Facial symmetry (line should bisect the mid line of nose, lips, chin, and eyes)
 - ☐ Shoulder heights (ac should be equidistant from line on each side; dominant shoulder may sit slightly lower)
 - ☐ Nipple heights (line should be equidistant from nipples on each side and at the same height)
 - ☐ Sternum (line should bisect sternum; look for barreling and S deformities)
 - ☐ Belly button (line should bisect belly button)
 - ☐ ASIS height (line should be equidistant from ASIS on each side and ASIS at same height; look for in/out flare)
 - ☐ Iliac crest heights (line should be equidistant from iliac crest on each side and at same height; look for in/out flares)
 - ☐ Patellar heights (line should be equidistant from patellas on both sides and patellas should be at same height; look for patella alta, baja, and rotations; note any valgus, varus)
 - ☐ Foot alignment (line should be equidistant from malleoli and foot; look for pes planus, pes cavus, forefoot or rear foot valgus and varus)
- ☐ PSIS height (line should be equidistant from PSIS on each side and PSIS at same height; look for in/out flare and unilateral rotations)
 - ☐ Iliac crest heights (line should be equidistant from iliac crest on each side and at same height; look for in/out flares)
 - ☐ Gluteal cleft orientation (line should bisect)
 - ☐ Gluteal crease symmetry (look for heights and rotations bilaterally)
 - ☐ Popliteal fossa heights and angulations (line should be equidistant from the popliteal fossa on each side and at the same height)
 - ☐ Foot alignment (line should be equidistant from malleoli and foot; look for pes planus, pes cavus, forefoot or rear foot valgus and varus)

Posterior

- ☐ Alignment of cervical, thoracic, and lumbar vertebrae (line should bisect the spinous processes of these vertebrae; look for scoliosis, facet rotations)
- ☐ scapula positions (spine should be at height of T3); look for rotations, muscle atrophy, winging of scapula; scapula should be flush with thoracic cavity (line should be equidistant from both scapulas)

Lateral

External auditory canal: Line should bisect

- ☐ through the odontoid process of axis
- ☐ through the body of the cervical vertebral
- ☐ through the shoulder joint (providing the arms hang in normal alignment in relation to thorax)
- ☐ approximately midway through the trunk
- ☐ through the bodies of the lumbar vertebra
- ☐ through the sacral promontory
- ☐ slightly posterior to the center of the hip joint
- ☐ approximately through the greater trochanter of the femur
- ☐ slightly anterior to the center of the knee joint
- ☐ slightly anterior to the midline through the knee
- ☐ through the calcaneo-cuboid joint slightly anterior to the lateral malleolus