Spine Examination

Introduction
- Wash hands, Introduce self, ask Patients name & DOB & what they like to be called, Explain examination and get consent
- Expose to undergarments
- General inspection: patient e.g. age, mobility, trauma, risk factors; around bed e.g. mobility aids.

Look
- Gait: walking aids, speed, phases of walking, stride length, arm swing
- Inspect from behind: posture, asymmetry, scoliosis; muscle wasting, scars, redness; soft tissue abnormalities (lipoma, hair growth (spina bifida), pigmentation, Café-au-lait spots (neurofibromatosis))
- Inspect from side (stand against wall): normal cervical lordosis, thoracic kyphosis, lumbar lordosis (lost in spondylolysis)

Feel
- Check pain first.
- Temperature down spine
- Spinal processes and over sacroiliac joints for alignment and tenderness.
- Paraspinal muscles for tenderness and increased tone.
- Then lightly percuss lumbar spine with fist and note tenderness

Move
- Lateral flexion "slide your hands down you leg"
- Lumbar flexion (10-20°) and extension: flexion “touch your toes “ and extension “lean back as far as you can”
- Cervical spine movements: flexion/extension “touch chin to chest”, rotation “look over shoulder”, deviation “touch ear to shoulder”
- Thoracic rotation “rotate chest while sitting with arms crossed” + passively push

SPECIAL TESTS
- Shober’s test: mark 10cm above dimples of venus and 5cm below, then re-measure in flexion (should be >5cm more)
- Chest circumference expansion (7cm expansion normal) (<5cm expansion suggests ankylosing spondylitis)
- Femoral nerve stretch test: with patient prone, passively flex knee and extend hip (anterior thigh pain = femoral nerve irritation due to L2-4 disc herniation)
- Straight leg raise (sciatic nerve stretch test): lift a leg to full flexion or until significant leg pain, then depress it slightly and passively dorsiflex foot (leg pain radiating down below knee = sciatic nerve irritation due to L4-S1 disc herniation)
- Gaenslen’s sacro-iliac stress test: ask patient to flex one hip, then passively push that knee into the patient’s chest and push other thigh into the bed (pain = sacroiliac joint pathology)

Function
- (Gait: already seen)
- Full lower limb neurological exam: see lower limb neurological exam

To complete
- “To complete my examination I would examine the joint above and joint below, and also do a full neurovascular exam distal to the joint – would you like me to do this now?”
- Summarise and suggest further investigations you would do after a full history