Kinetic Anatomy - Chapters 8-10 Spine & Pelvis, Thorax, Nerves and Blood Vessels

Study Guide

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SPINE

Joint actions of spine and pelvis – Flexion, extension, hyperextension, lateral flexion, lateral tilt, anterior and posterior tilt.

Lordosis, kyphosis and scoliosis – what type of curve predominates

Number of vertebrae total and in each section – cervical, thoracic, lumbar, sacral, coccyx

Main functions of thoracic, lumbar, sacral and coccyx regions

Names and functions of C1 and C2

Landmarks: spinal process, transverse process,

Bulging and herniated discs, causes and symptoms, where?

Muscles:

Know the location and main action of the following:

Anterior (flexion and / other movements)

SCM, prevertebrals, scaleni, (anterior)

Abdominals (anterior) know linea alba and know action and location of each abdominal muscle.

Rectus Abdominus, External and Internal Obliques, Transverse Abdominus

Posterior (extension and ? other movements)

Levator, trapezius and rhomboids (posterior shoulder girdle)

Vertical muscles that run along the spine: erector spinae, spinalis group, multifidus

PELVIS

Innominate bones, coxal bone

Difference between pelvis and pelvic girdle

Difference between a man and a woman’s pelvis (woman’s pelvis is larger and broader, also the sacrum is wider, shorter and less curved). Why?

Major landmarks – ASIS, PSIS, iliac crest, ischial tuberosities, sciatic notch, greater foramen, acetabulum, pubic symphysis, obturator foramen

Thorax

Diaphragm function, central tendon

What and where is costal cartilage?

Difference between relaxed and forced inspiration/expiration

Ribs – number and differences in regular, floating, false and attachments at both ends

Parts of the sternum

Muscles

Pectorals, Serratus Anterior, Internal, external intercostals

NERVES and VEINS

Lumbosacral plexis – what does it innervate? Cervical plexus - ? Brachial plexus?

Ascending, descending and common carotid, abdominal aorta

Superior and inferior vena cava

Femoral artery