SUPERFICIAL ANATOMY OF THE BACK (8/28/07)

Major Palpable Structures for clinical assessment

-External Occipital Protuberance
-CVII
-Scapula (Medial border, spine, Angles)
-Iliac crest
-Muscles (trapezius, latissimus dorsi, erector spinae)

Identification of relative location of Muscles and Organs Based on Superficial Anatomy

-Superficial muscles
  Trapezius
  Latissimus dorsi
  Levator scapulae
  Rhomboids (major and minor)
  Serratus Posterior (superior and inferior)

-Lungs
  Right
  Left

NERVE AND BLOOD SUPPLY TO THE SUPERFICIAL MUSCLES OF THE BACK

Trapezius

Innervation
-Motor (Spinal accessory nerve; CN XI)
  Arises from motor neurons in the upper five segments of the cervical spinal cord
  Fibers ascend and enter the cranial cavity through the foramen magnum
  Exits through the jugular foramen and descends to the sternocleidomastoid and trapezius m.
-Sensory (C3 and C4)

Clinical Correlate
-Since the nerve crosses the posterior triangle of the neck it is extremely vulnerable to injury
-Accessory nerve syndromes
  Medial winged scapula
  Droopy shoulder
  Inability to raise shoulder or arm above the head

Blood Supply
-Superficial branch of the transverse cervical artery

Latissimus Dorsi

Innervation
-Thoracodorsal n.
  Posterior cord of the brachial plexus (C6-C8)
Clinical Correlate
-Injury to the thoracodorsal n. diminishes the ability to pull the body upward during climbing

Blood Supply
-Thoracodorsal artery

Levator Scapulae and Rhomboids

Innervation
-Dorsal scapular n.
  Brachial plexus (C4-C5)

Clinical Correlate
-Injury to the dorsal scapular n. is very rare

Blood Supply
-Transverse cervical artery
-Deep transverse cervical artery

SUBOCcipital TRIANGLE

Suboccipital muscles
  Rectus capitis posterior major
  Rectus capitis posterior minor
  Obliquus capitis inferior
  Obliquus capitis superior

Borders
  Rectus capitis posterior major (medial)
  Obliquus capitis superior (lateral)
  Obliquus capitis inferior (inferior)

Innervation
  Suboccipital n. (C1) - innervates suboccipital muscles
  Greater occipital (C2) - supplies posterior scalp
  C3 - supplies small area of lower scalp

Blood Supply
  Occipital Artery
  Vertebral Artery

Clinical Correlate
The vertebral artery bends radically as it approaches and enters the suboccipital triangle. Therefore, it is very susceptible to dissection (aneurysm) in this area and is a major cause of stroke in people under the age of 45.