Neck: Fascia and Posterior triangle

Curricular Objectives

By the end of this session students are expected to be able to:

Practical

- 1. Identify the platysma muscle and recall its nerve supply.
- 2. Recognize different layers of deep cervical fascia
- 3. Locate the retropharyngeal and parapharyngeal spaces
- 4. Distinguish the sternocliedomastoid and trapezius muscles
- 5. Follow the boundaries of the posterior triangle
- 6. Locate the brachial plexus and the subclavian artery
- 7. Distinguish the muscles forming the floor of the triangle
- 8. Identify the 4 cutaneuos branches of the cervical plexus and the accessory nerve

<u>Theory</u>

- 1. Describe the location, attachment, nerve supply of platysma
- 2. Outline the attachment of different layers of deep cervical fascia
- 3. Summarize the communications of retro- and parapharyngeal spaces
- 4. Discuss the boundaries, roof and floor of the posterior triangle
- 5. List the content of the triangle
- 6. Describe the distribution of the accessory nerve and its course within the triangle
- 7. Outline the sensory nerves of the neck
- 8. Comprehend the superficial course and surface anatomy of external jugular vein.

<u>Check List</u>

A- Fascia of the neck

- Superficial Fascia
 - Platysma
 - External Jugular Vein
 - Anterior Jugular Vein
 - Cutaneous nerves
- Deep fascia of the neck
 - 1. Investing layer of deep cervical fascia
 - 2. Pretracheal Layer
 - 3. Prevertebral Layer (strong)
 - retropharyngeal space
 - parapharyngeal space
 - 4. Carotid Sheath
 - 5. Axillary Sheath

B- Posterior triangle of the neck

- Boundaries:
 - 1. Trapezius (supplied by Nerve)
 - 2. Sternocleidomastoid (divide the neck into and triangles)
 - 3. Clavicle
- Subdivisions by inferior belly of omohyoid
 - 1. Occipital triangle (bounded by)
 - 2. Supraclavicular triangle (bounded by)
- Roof: investing layer of deep cervical fascia
- Floor: prevertebral fascia lying on (form above down)
 - 1. Semispinalis capitis (may be seen)
 - 2. Splenius capitis
 - 3. Levator scapulae
 - 4. Scalenus medius
 - 5. Trunks of brachial plexus
 - 6. Subclavian artery (^{3rd} part)
 - 7. Scalenus anterior & 1st digitation of serratus anterior (may be seen)
- ➤ Content:
 - 1. Accessory nerve (injury, during posterior triangle surgery, causes......)
 - 2. Deep cervical Lymph nodes
 - 3. Inferior belly of omohyoid
 - 4. Transverse cervical and suprascapular vessels
 - 5. External jugular vein (can be seen just under the skin of your neck)
 - 6. Cutaneous branches of the cervical plexus
 - Lesser occipital nerve (C2) : run up along the posterior border of
 - Great auricular nerve (C2, 3, mostly 2)
 - Transverse cervical nerve (C2, 3): cross transversely superficial to.....muscle
 - Supraclavicular nerve (C3, 4, but mostly 4) : they cross superficial to the bone to reach the chest

C- Sensory nerves of the neck

- 1. Posterior ramus of C2 (Greater occipital nerve)
- 2. Posterior rami of C3,4,5
- 3. Cutaneous branches of the cervical plexus

Tricky question:

What area of skin supplied by C1 spinal nerve?