DEEP CERVICAL FASCIA

• Invests & fills up the gap
• Three layers
  - Investing
  - Pretracheal
    - Visceral co.
  - Prevertebral

Carotid sheath
INVESTING LAYER OF DEEP CERVICAL FASCIA

**Attachments**

- Vertical
  - post.-lig. Nuchae, cer. spine
- Ant. – cont. with other side
  - attached to hyoid
- Horizontal
- Above-ext. occ. pro.
  - symp. Menti
- Below-spine & acromian pro.
  - of scapula, upp. sur. of clavicle,
    supra sternal notch
INVESTING LAYER OF DEEP CERVICAL FASCIA

- **TRACINGS**
- **Horizontal extent**-
  - trapezius,
  - sternocleidomastoid
- **Vertical extent**-
  - Above- submandibular & parotid glands
  - Below- suprasternal & supraclavicular spaces
• **Horizontal extent**
  Arising from fascia under cover of stcd muscle > ant. Wall carotid sheath > splits to enclose thyroid & infront of trachea
  Lig. Of berry- bet. thyroid lob & cricoid cartilage
  Thyroid fascia (post. Sur) illdefined, Enlargment > dysphagia

**Vertical extent**

Above - Hyoid in mid line > oblique line of thyroid car.(thy. Moves up & down during deglutition
  Below- blends with apex of fibrous pericardium also cont. with supra pleural membrane
**Horizontal extent**
- forming post. wall of carotid sheath, covers cerv. vertebrae & prevertebral muscles (post. triangle of neck)
- 4 s/f br. of cerv. & br. Plexus pierces before they become cutaneous
- axillary sheath between sca & scm

**Vertical extent**
**Above** - base of skull
**Below** - fascia splits
ant. - alar fascia blends with buccopharyngeal fascia
post – enters thorax & blends with ant. long. lig. opp. upp. 3 thoracic vertebrae
CAROTID SHEATH

- Envelops neurovascular bundle-CCA, ICA IJV,X

- **Ant. Wall** - attached to fascia under cover of sternocleidomastoide muscle, embedded in it is ansa cervicalis (pretracheal)

- **post. Wall** – loose areolar tissue separate prevertebral fascia (prevertebral)

- **Str. Piercing the carotid sheath**- ECA, tri. Of IJV,IX, XI, XII, Cerv. Br. Of X

- **Applied**- exposed in block dissection of neck
RETPHARYNGEAL SPACE

- Potential/dead space behind pharynx acts as bursae, allow expansion of pharynx
- Boundaries
- Contents
  - Retro LN and loose areolar tissue
  - Pharyngeal plexus of nerves and vessels
CERVICAL PLEXUS

- Supplies – skin and muscles of neck, diaphragm
- Loops beneath prevertebral fascia
- On S med, L scapulae under cover of sternocleido mastoid muscle
- Actually not lies in posterior triangle
- VPR of C1-4 in series with brachial plexus
- Each formation ramus divides into upper and lower branch except C1
CERVICAL PLEXUS

BRANCHES

• S/F cutaneous three ascending
  – Lessor occipital (C2)
  – Great auricular (C2, 3)
  – Transverse cervical nerve (C2, 3)
    Descending branch
    – Supraclavicular nerve (C3, 4)

• Deep branches
  – Muscular and divide into medial and lateral series
  – Medial: RCL, C1; RCA – C1, 2; Longus Capitis – C1 – C4; Longus colli – C2-C4; inferior root of ansa cervicalis – C2,3; phrenic Nerve – C3, 4, 5
  – Lateral: Sternocleidomastoid – C2; Trapezius – C3,4; L scapulae- C3, 4; S.M. – C3, 4

• Communicating branches
  – Sympathetic – Gray rami (superior cervical ganglion)
  – With 12th cranial nerve