

Posterior Triangle

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- Triangular space on side of neck behind sternocleidomastoid muscle.

Boundaries:

- * Anterior: posterior border of SCM muscle.
- * posterior: Anterior border of trapezius muscle.
- * inferior: superior aspect of middle 1/3rd of clavicle.
- * superior: meeting point of SCM & trapezius at superior nuchal line of occipital bone.

* Floor (Muscular layer).

formed: above downwards by

- 1) semispinalis capitis
- 2) splenius capitis
- 3) levator scapulae
- 4) scalenus medius
- 5) scalenus posterior

* Roof.

by investing layer of deep cervical fascia b/w the 2 muscles (SCM & trapezius)

superficial fascia over roof contains

- * platysma (lies in superficial fascia)
- * ext & post jugular veins
- * cutaneous nerves and vessels

→ structures piercing roof:

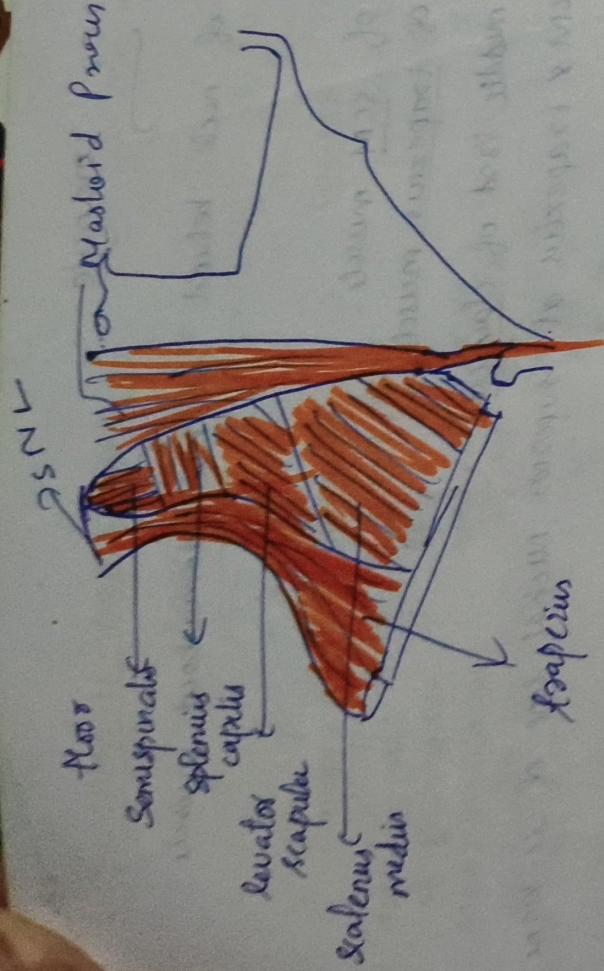
- 1) 4 cutaneous branches of cervical plexus.

- a) Lesser occipital nerve (C2)
- b) greater auricular nerve (C2, C3)
- c) Transverse cervical nerve (C2, C3)
- d) supraclavicular nerves (C3, C4)

} pierces roof near middle of post border of sternocleidomastoid

- 2) External jugular vein.

It begins just below angle of mandible, runs downwards & backwards crossing SCM obliquely and under the cover of platysma.



- Fascial carpet → Muscular floor is covered by a Prevertebral layer of deep cervical fascia (which forms the fascial carpet of floor of posterior triangle) ×.
- > Lower part of post triangle is crossed by inferior belly of omohyoid.

• Subdivisions

↳ Divided: by inferior belly of omohyoid (which crosses the lower part of ΔΔ obliquely upwards and forwards) ×.

- (i) Large upper → occipital ΔΔ } named so as contain
- (ii) Small lower: subclavian or } occipital & subclavian arteries

- Contents: (i) In the occipital ΔΔ (above omohyoid)
 - a) spinal accessory nerve
 - b) 3rd & 4th cerv nerves providing branch to levator scapulae & trapezius.
 - c) dorsal scapular nerve
 - d) 1st cut branch of cervical plexus
 - e) superficial transverse cervical artery
 - f) Occipital artery

2) in the subclavian / supraclavicular (below omohyoid)

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- a) 3rd part of subclavian artery
- b) subclavian vein
- c) terminal part of ext jugular vein
- d) trunks of BP.

-e) superficial cervical, suprascapular and dorsal scapular arteries

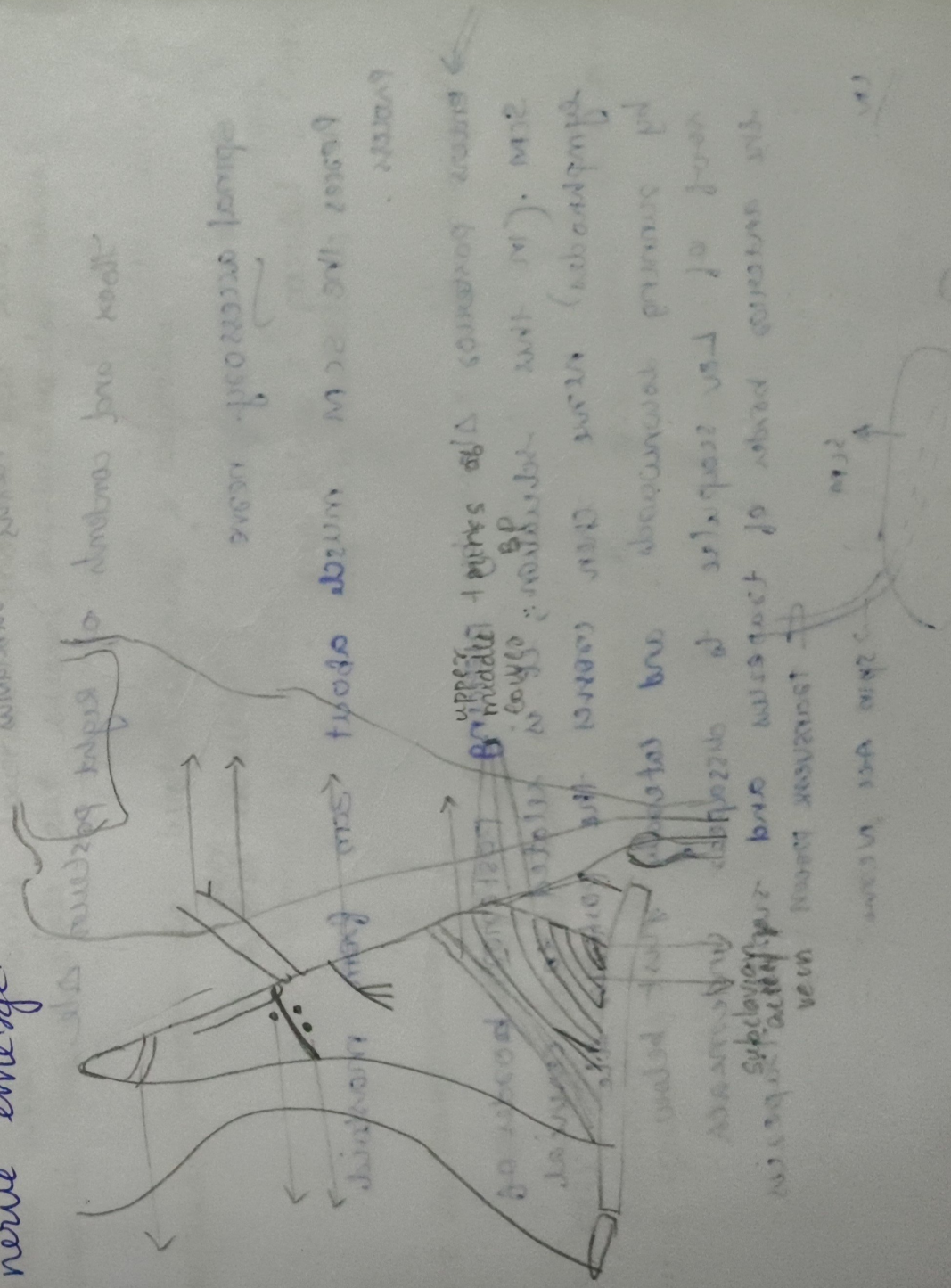
b) lymph nodes.

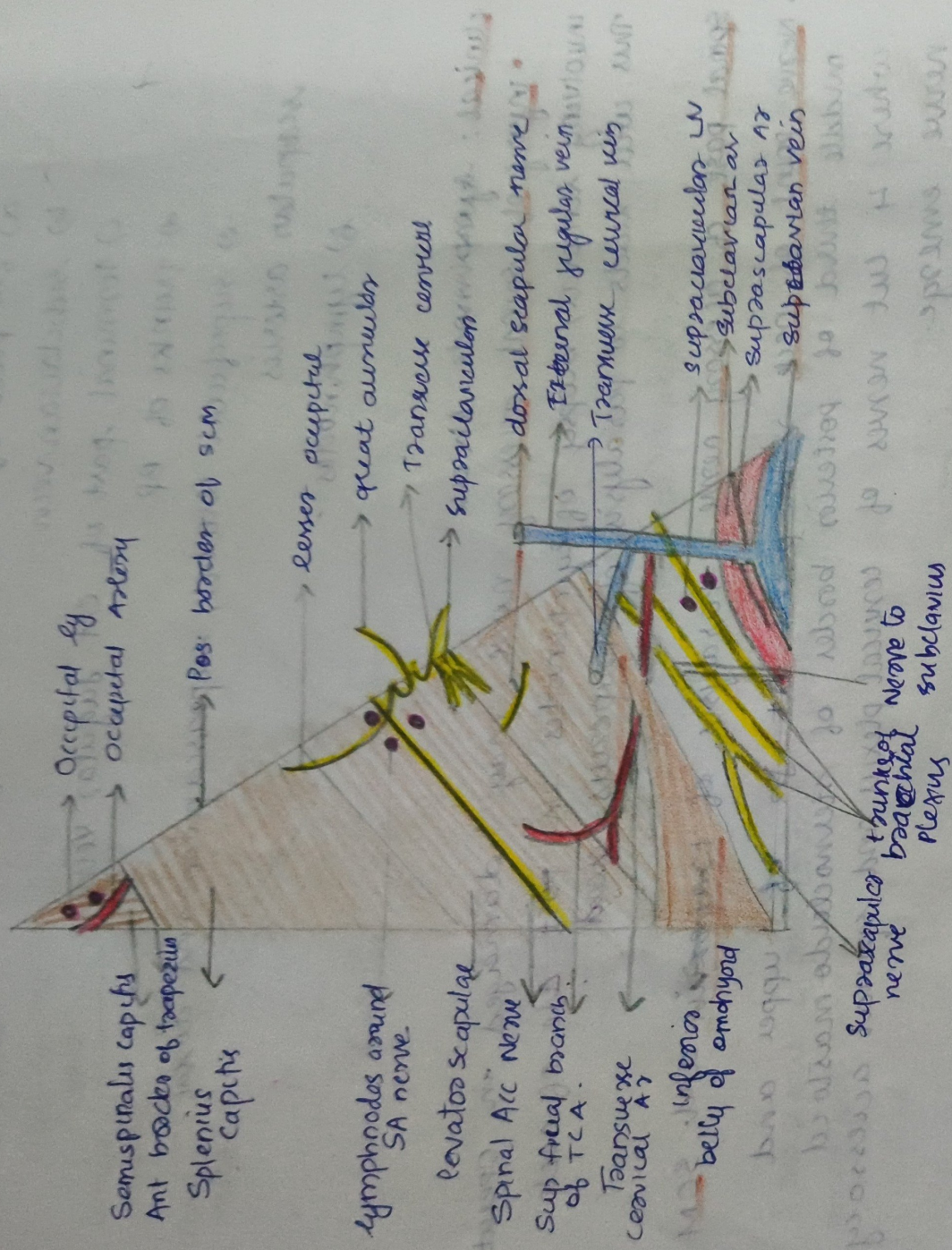
Clinical: Lymph node Abscess.

- Injury of spinal accessory nerve may be damaged in operations involving removal/biopsy of lymph nodes in post A/C of neck. This will lead to paralysis of trapezius and.

- Spinal part of accessory nerve - Paralysis of trapezius and SCM.

- Nerve point of neck → The point at J₇ of upper and middle third of posterior border of sternocleidomastoid where 4 cut nerves of cervical plexus and spinal accessory nerve emerge.





Floor and contents of Right posterior triangle

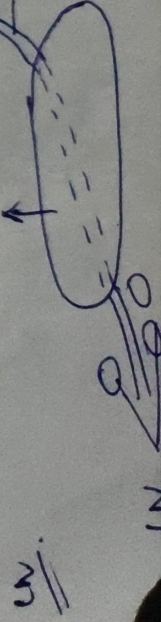
Spinal accessory nerve

Pierces the SCM muscle about 3cm from mastoid process.

→ enters posterior triangle by piercing posterior border of SCM. (in this situation; it is related to cervical lymph nodes) nerve then crosses the posterior triangle by running downwards and laterally just below roof of Lev scapulae to disappear underneath the anterior border of trapezius and supplies trapezius

Transverse process

Spinous nerve



2.4 cutaneous branches of cervical plexus

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cutaneous branches emerge at midpoint / just above midpoint of post border of SCM by piercing the deep cervical fascia

a) lesser occ. nerve hook around SAN

b) greater auricular nerve at angle of mandible divides into ant & post branches. Supplies the skin of face over angle and then skin over mastoid region and lower part of both the surfaces of auricle

c) Transverse cervical nerve passes forward across SCM deep to ext Jug vein and then divides

Ascending
Descending

Supply the skin of front of neck

d) The supraclavicular nerve arises as a common trunk which descends downwards and divides into medial, intermediate and lateral supraclavicular nerves

3) Muscular branch to levator scapulae & trapezius

soon
end in it

run below & parallel to SAN and cross middle of SAN

4) Nerve to Rhomboids

It pierces ~~post~~ scalenus medius & pass immediately below deep to levator scapulae

5) Cervical part of brachial plexus: root and trunk lies in neck

(a) Cervical part

part of SAN

part of SAN

9) Transverse cervical Ar

branch of thyrocervical trunk of 1st part of subclavian artery

1) **suprascapular Ar**: Also branch of — trunk.

Passes laterally and backwards behind clavicle to reach upper border of scapula.

2) **Dorsal scapular Ar**

deep branch of transverse cervical artery, sometimes arises from third part of subclavian Ar

3) **subclavian Ar**

Passes behind scalenus anterior over first rib. closely related to lower border of BP 1st rib

10) **subclavian vein**

passes in front of 1st rib. Ant. over first rib, behind 1st rib

11) **Terminal part of Ext Jugular vein**

Pierces the fascial roof of post ΔC1 approx 2.5 cm above clavicle to terminate in subclavian vein

12) **Lymph node**

- A chain along post border of semispinalis
- " along SAJV
- apical region of triangle - occipital lymph node.
- suprascapular part → SC LN

13) **Occipital Artery**

branch of ECA. crosses the apex of ΔC1 superficial to semispinalis capitis