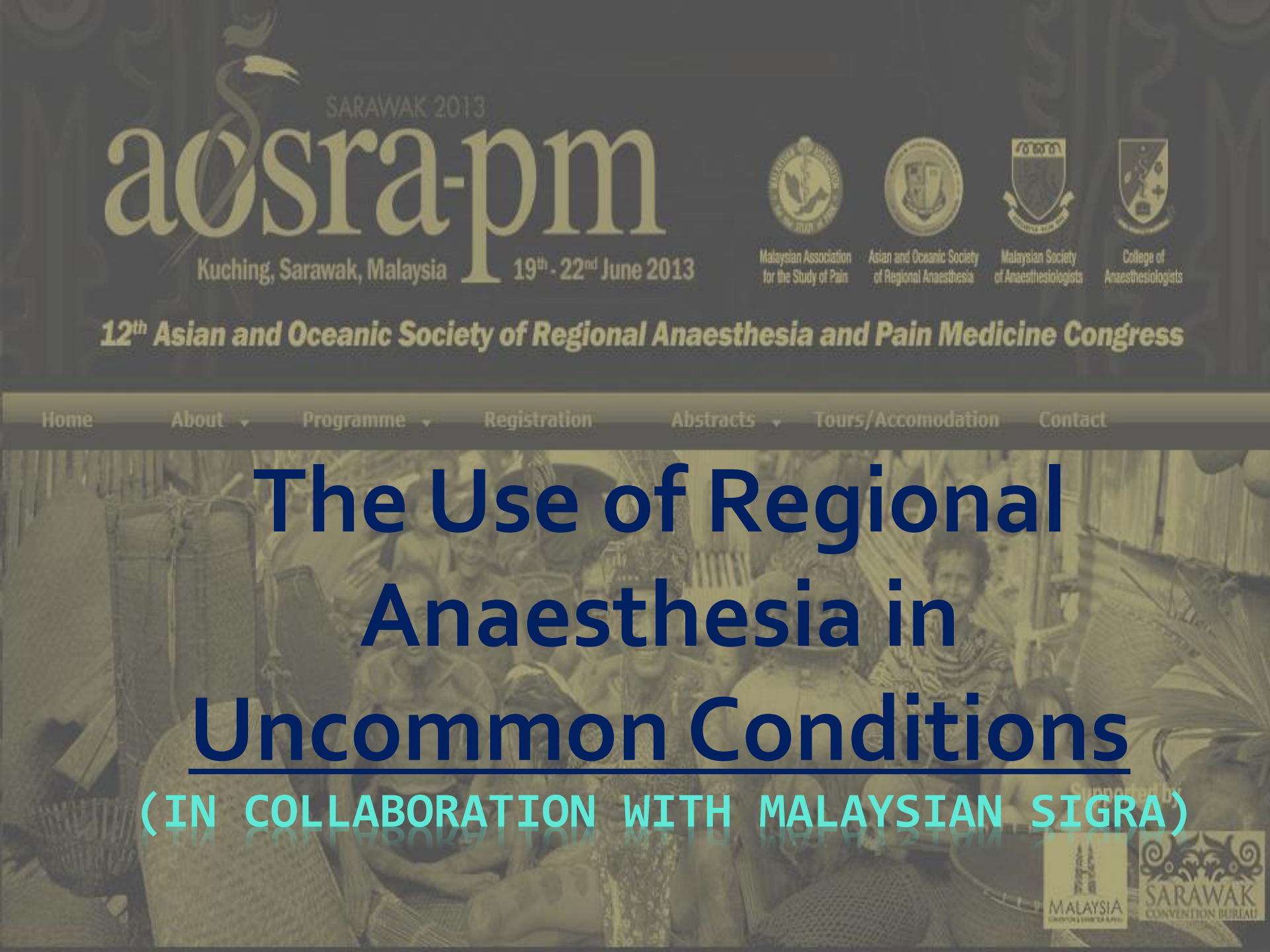
SARAWAK 2013
aosra-pm
Kuching, Sarawak, Malaysia
19th - 22nd June 2013
Malaysian Association for the Study of Pain
Asian and Oceanic Society of Regional Anaesthesia
Malaysian Society of Anaesthesiologists
College of Anaesthesiologists
12th Asian and Oceanic Society of Regional Anaesthesia and Pain Medicine Congress
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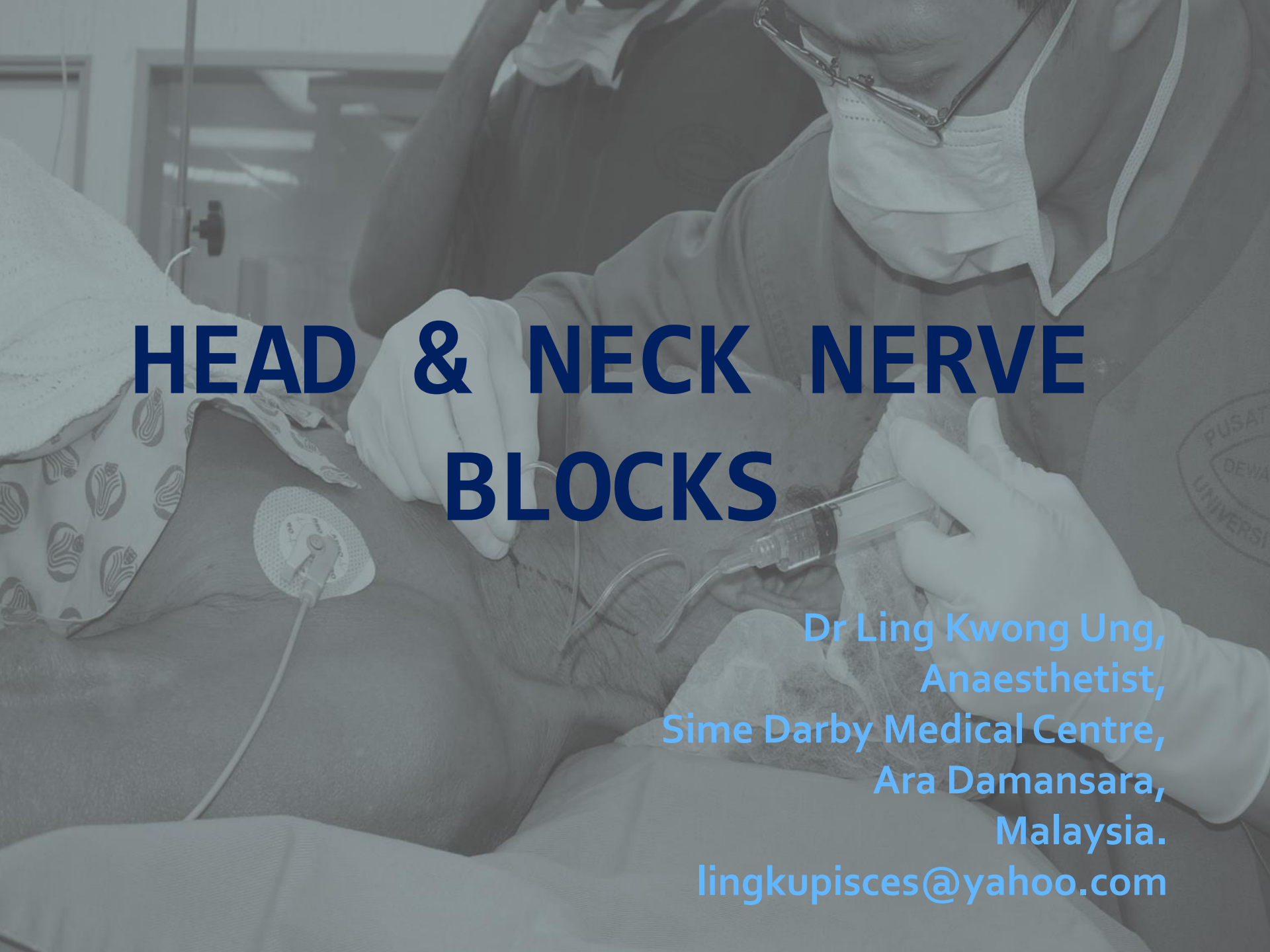
The Use of Regional Anaesthesia in Uncommon Conditions
(IN COLLABORATION WITH MALAYSIAN SIGRA)
MALAYSIA
SARAWAK
CONVENTION BUREAU



HEAD & NECK NERVE BLOCKS

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Head & Neck Nerve Block

- 3 cases of dental/submandibular abscess
- 2cases of LN biopsy(paediatric)
- 2 cases of parathyroidectomy
- 2 cases of scalp surgery
- 4 cases of burr hole
- 1 case of facial surgery

PERIPHERAL NERVE BLOCK FOR DRAINAGE OF DENTAL ABSCESS IN ADULT WITH DIFFICULT AIRWAY – 3 CASES REPORT

Case 1

- 31/ Lady
- right lower molar tooth infection and submandibular abscess X 1 week
- limited mouth opening < 5mm
- Nasal endoscopy was normal
- Airway was patent
- For I&D

Case 1

- Regional Block:

  -right superficial cervical plexus
  (10 ml L.A.)

  -right auriculotemporal n. block
  (5 ml L.A.)

  [LA= 0.75% Ropivacaine +1% lignocaine]

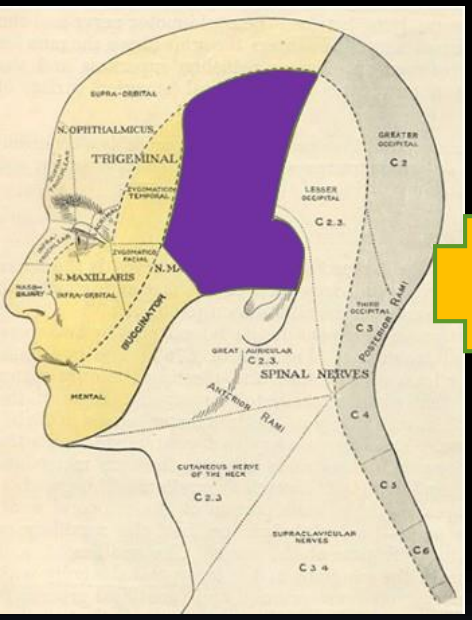
- Sedation:

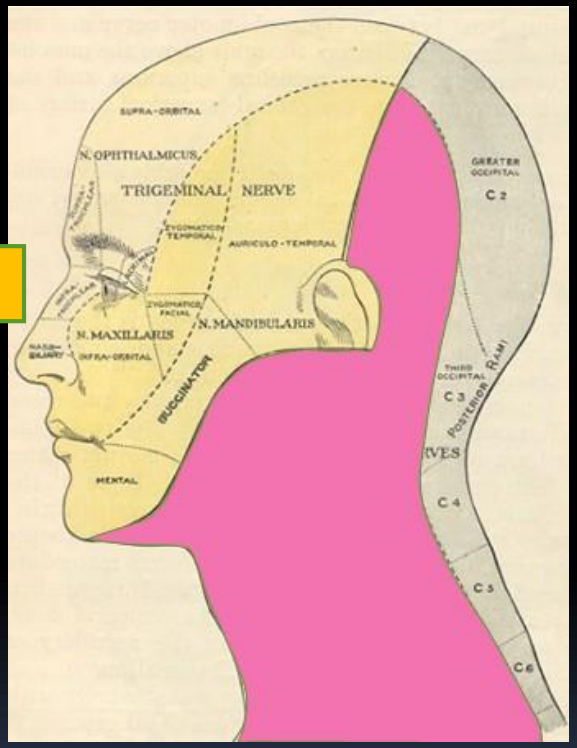
  -i.v. fentanyl 50 mcg

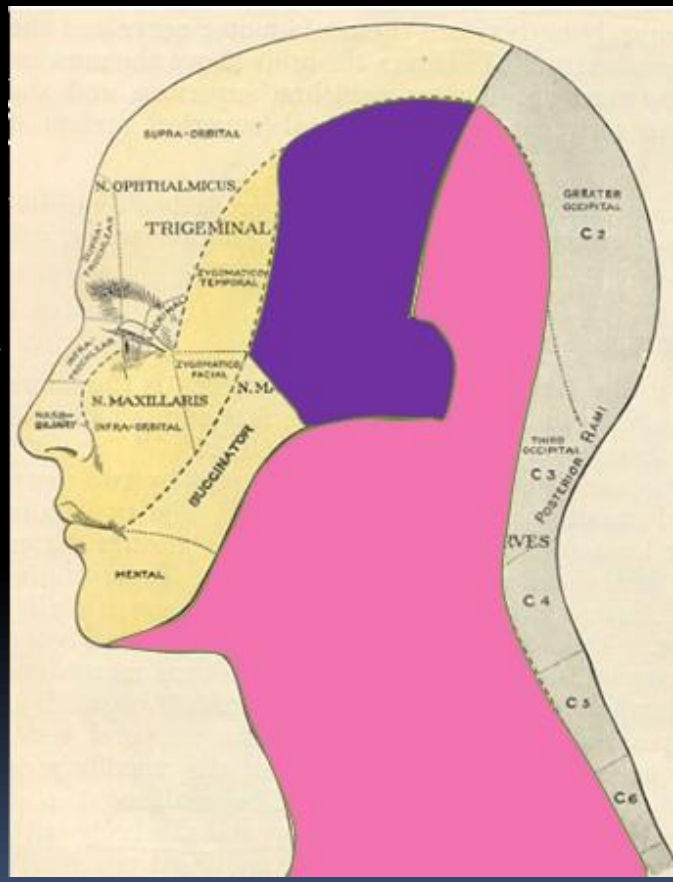
  -i.v. midazolam 1mg

Auriculotemporal N block

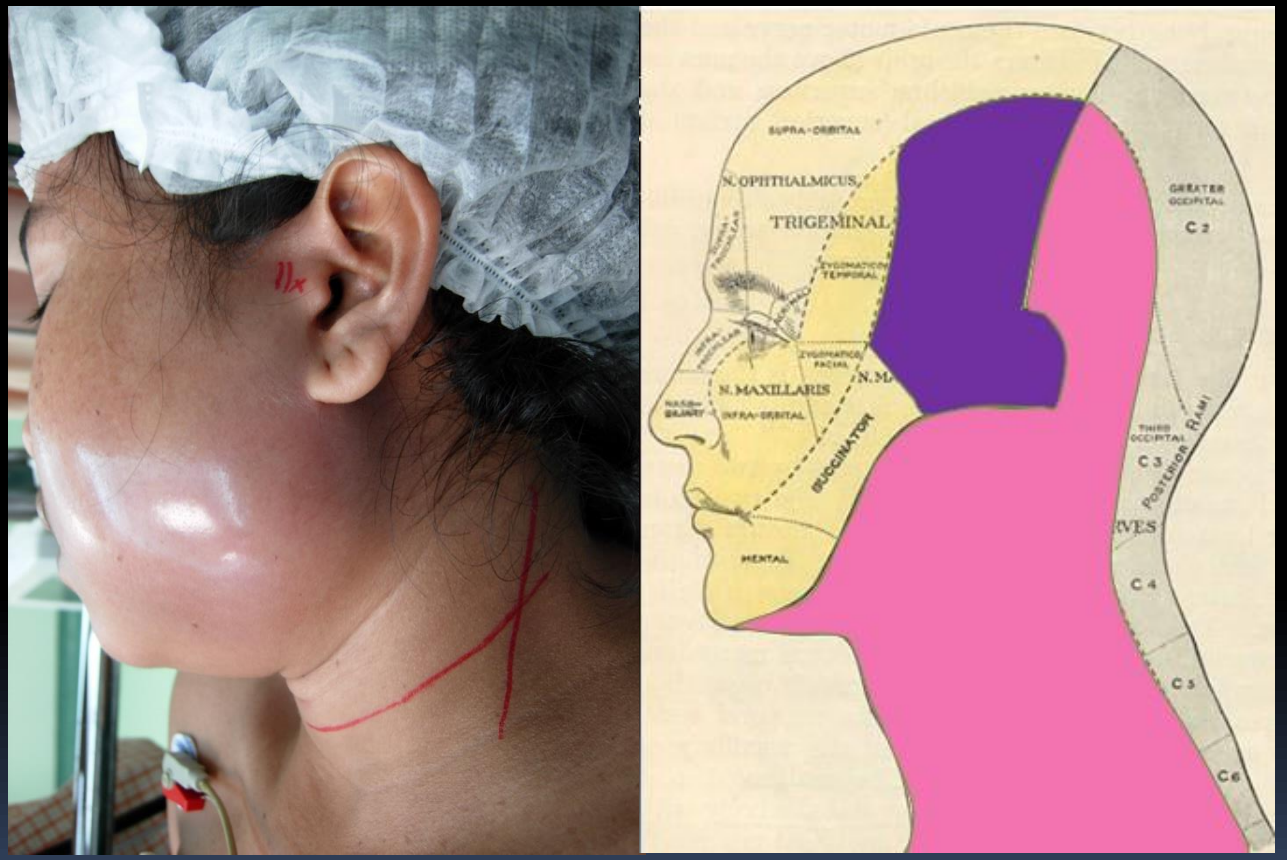
SCPB







Auriculotemporal+ SCPB



Case 1

- Surgery:

  -started 15 min. after the block

  -2cm submandibular skin incision

  -dissect down to subplatysmal layer & toward the right submandibular fossa

  -20ml pus

I&D Of Submandibular Abscess

VIDEO

Case 2

- 28/ lady
- left lower wisdom toothache X 1 month
- CT scan-submasseteric abscess
- mouth opening 0.5cm
- Planned for I&D

Case 2

- Regional Block:
  -left superficial cervical plexus block
  (10 ml L.A.)
  -left auriculotemporal nerve block
  (5 ml L.A.)
  [LA= 0.75% Ropivacaine +1% lignocaine]
- Sedation:
  -i.v. fentanyl 50 mcg
  -i.v. midazolam 1 mg
  -careful titration

Case 2

- Surgery:

  -started 15 min after the block

  -2.5 cm skin incision at the submandibular region

  -tunneled towards the submasseteric space

  -20 ml pus

VIDEO

Case 3

- 25/Lady
- C/O-fever X 2 days

  -pain & swelling of the oral cavity & neck

  -limited mouth opening

  -dysphagia & odynophagia

Case 3

- O/E-marked swelling over the right submandibular & submental spaces

  -elevated tongue

  -tender++

  -mouth opening 1.5cm

  -Temp. 37.5 C

  -TWC- 27,800/mm

Case 3

- CT contrast- collection of 4.5 X 1.6 X 1.5 cm
  in the parapharyngeal space
  extending to the
  retropharyngeal space
  -Ludwig's angina

- Need I&D

Case 3

- Regional Block:

  -right superficial cervical plexus block

  10 ml of 0.5% levobupivacaine

- Sedation:

  -i.v. fentanyl 50 mcg

  -i.v. midazolam 1 mg , titrated carefully

Case 3

- Surgery;
  - -started 20 min after the block
  - -2cm skin incision below the submandibular gland
  - -dissect deep to the submandibular gland
  - -pus was drained

Anaesth Intensive Care. 2009 Jan;37(1):124-6.

Superficial cervical plexus block combined with auriculotemporal nerve block for drainage of dental abscess in adults with difficult airways.

Ling KU, Hasan MS, Ha KO, Wang CY.

Department ofAnaesthesia, Faculty of Medicine, University Malaya, Lembah Pantai, Kuala Lumpur, Malaysia.

Abstract

We report our use of a superficial cervical plexus block to manage three adults who presented for drainage of dental abscesses. All patients had difficult airways related to severe trismus (preoperative inter-incisor distance < or = 1.5 cm). The first two patients, whose abcesses involved both the submandibular and submasseteric spaces, were managed with combined superficial cervical plexus and auriculotemporal nerve block. In a third patient, a superficial cervical plexus block alone was sufficient because the abscess was confined to the submandibular region. The blocks were successful in all three cases with minimal requirement for supplemental analgesia. We recommend the consideration of superficial cervical plexus block, and if necessary an auriculotemporal nerve block, for the management of selected patients with difficult airways who present for drainage of dental abcesses.

Superficial Cervical Plexus Block

Root:

--Ant. Rami

C_2C_3&C_4

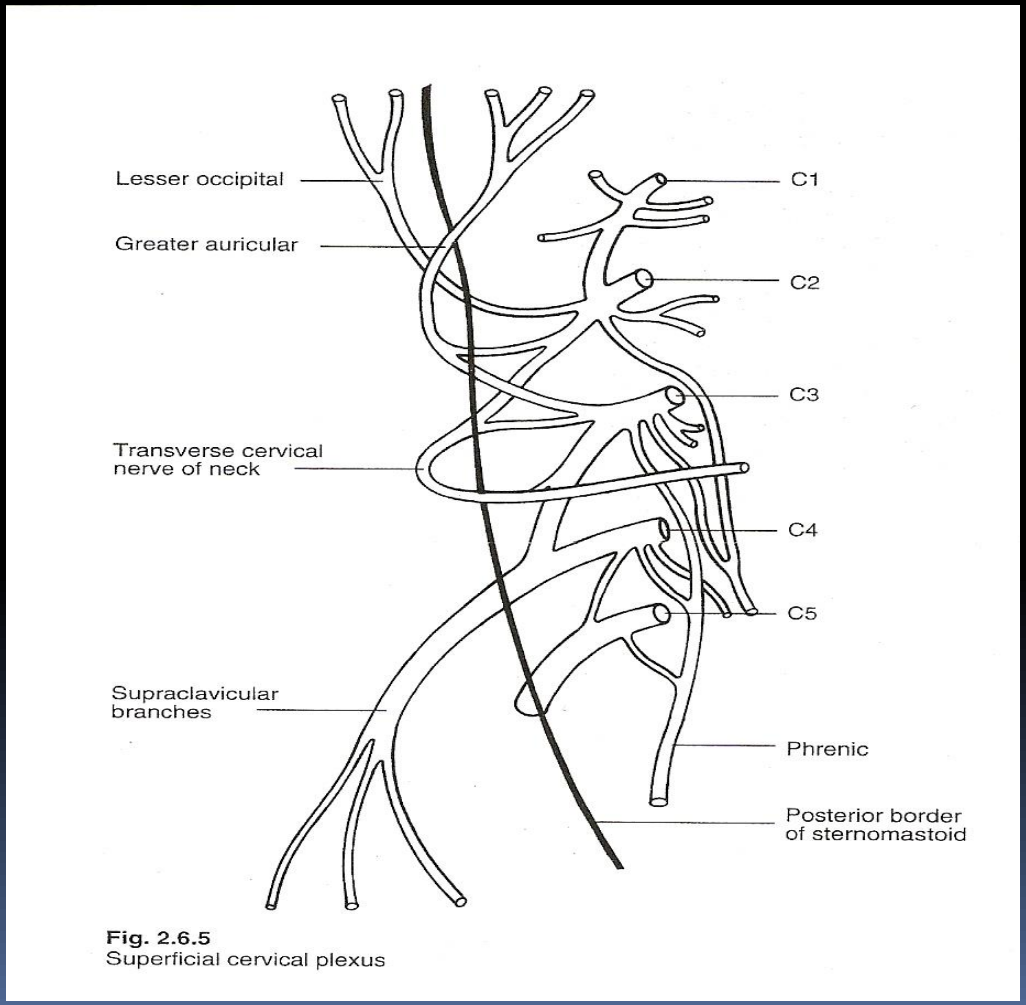
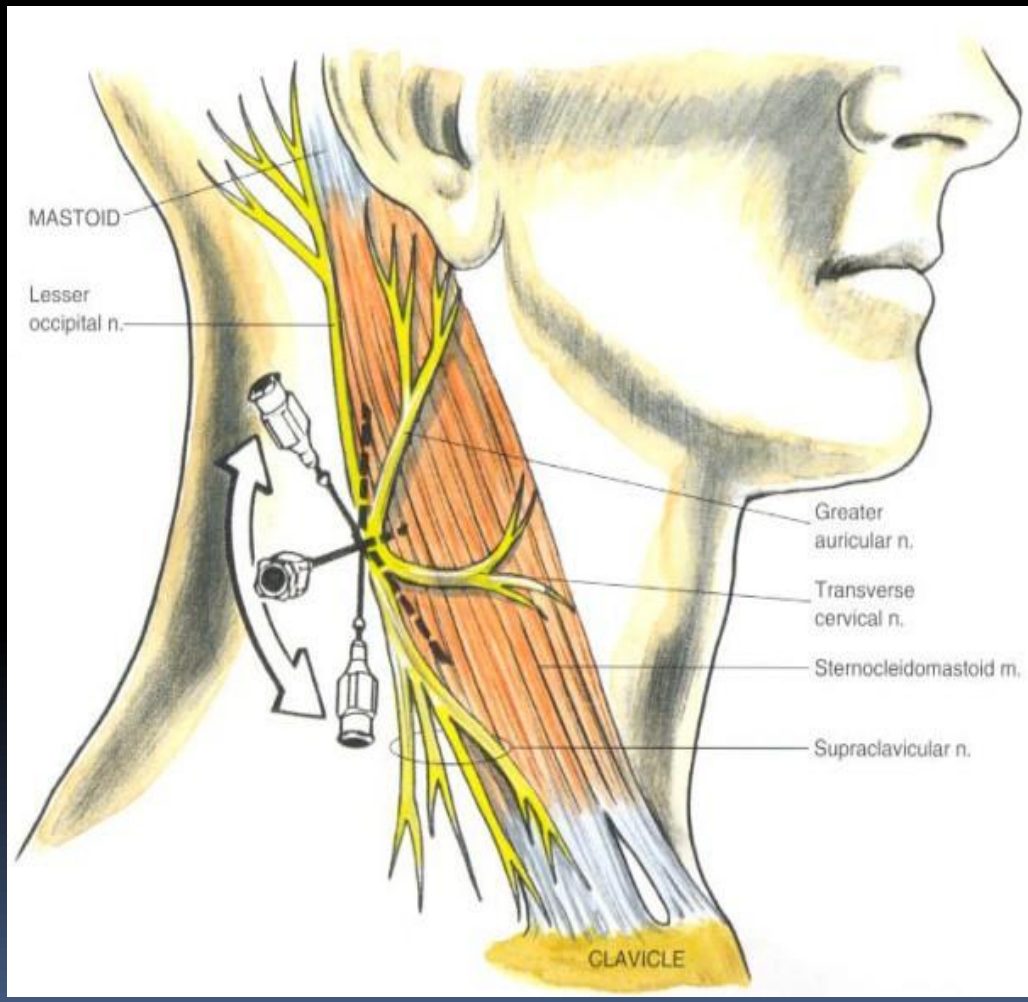


Fig. 2.6.5
Superficial cervical plexus

Superficial Cervical Plexus Block

Nerves:

1) Lesser Occipital n.
2) Greater Auricular n.
3) Transverse cervical n.
4) The ant. Cut. N.
5) Supraclavicular n.
   Nerves



Superficial Cervical Plexus Block

- **Area supplied:**

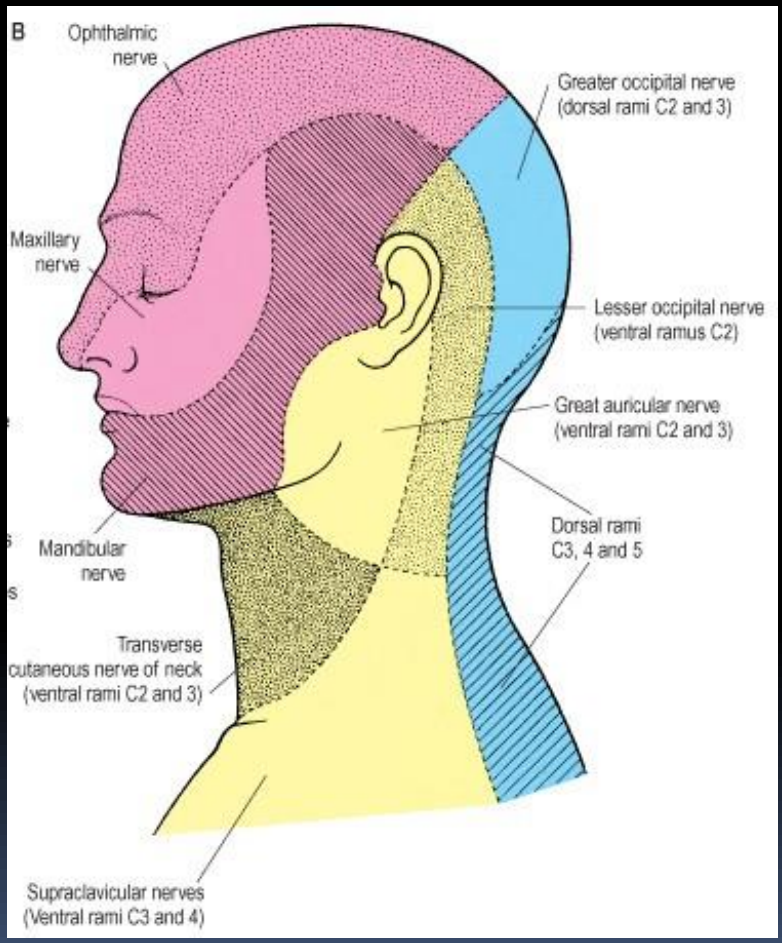
  --ear & surrounding skin of the scalp & face

  --submandibular area

  --neck

  --cape of shoulder

  --upper chest



Superficial Cervical Plexus Block

- ***Surgery:***

  --superficial surg.

  --tracheostomy & thyroidectomy (B/L block)

  --L.N. Bx

  --T & S, I & D

  --carotid endarterectomy

  --CVL

  --ear surg.(+ auriculotemporal n. block)

Superficial Cervical Plexus Block

- ***Complication***

  --phrenic n. block

  --intrathecal or iv inj.

  --vagus / recc. Laryngeal n. block(aphonia)

  --cervical symp. N. block & Horner's synd.

Superficial Cervical Plexus Block

TECHNIQUE

- ***Position:***

  --supine, head turned to opp. side

- ***Landmark:***

  --draw a line laterally fr. the cricoid cart., cross the post. border of the SCM ms.

Superficial Cervical Plexus Block

TECHNIQUE

- ***Needle Puncture:***

  --at this crossing pt. insert a short bevel needle 1", perpendicular to the skin until it 'pop' through the cervical fascia

- ***Dosage:***

  --10 ml of L.A., this will flow up & down the post. Border of the SCM ms.

SCPB VIDEO

Auriculotemporal Nerve Block

VIDEO

CHILDREN WITH ANTERIOR MEDIASTINAL MASS:

procedural sedation with dexmedetomidine combined with superficial cervical plexus block (SCPB)

- 2 case report

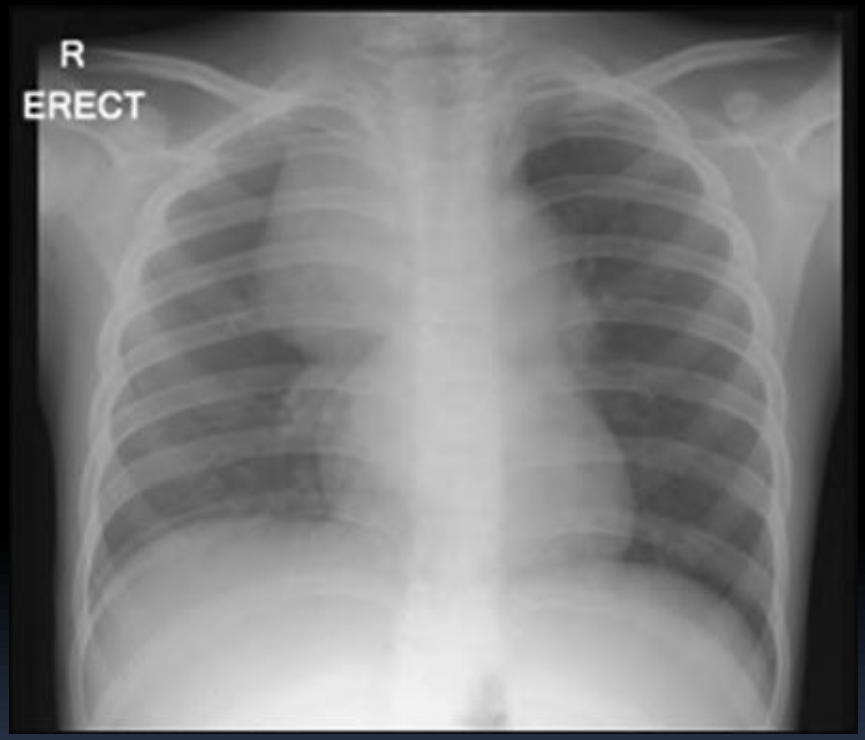
Case 1

- 10yr boy, 19kg
- h/o- chronic fever, weak, multiple cervical LN, gross hepatosplenomegaly & severe anaemia.
- CXR- large mediastinal mass
- CT scan- a large soft tissue mass within the anterior and middle mediastinum completely encasing the trachea without trachea compression & also encasing the arch of aorta, left and right pulmonary artery & SVC.
- Need cervical LN biopsy

- Sedated with dexmedetomidine, 1μkg^{-1} over 10 min, the maintain with 0.5-1.0μkg^{-1} per hour.
- USG SCPB, 5ml 0.5% levobupivacaine
- 24G, 25mm short bevel needle (plexufix, Bbraun)
- 15 min later surgeon excised 3 cervical LN
- Diagnosis: Hodgkin's disease
- 10 days later patient come back for subcutaneous venous port insertion for chemotherapy
- Procedure done under same anaesthesia technique as above.

Case 2

- 12yr boy, 24 kg
- k/c of non Hodgkin's lymphoma
- h/o- cough x 3/7, chest discomfort, facial swelling & distended veins over the chest
- CXR- huge mediastinal mass
- CT scan- large heterogenous mass at the anterior mediastinum encasing the left brachiocephalic vein with SVC compression. The trachea was compressed & displaced posteroinferiorly


R
ERECT

- Planned for subcutaneous venous port insertion
- Sedated with dexmedetomidine & ketamine 0.5mg/kg combined with USG SCPB, 5 ml 0.5% levobupivacaine
- Procedure completed uneventfully

Correspondence

European Journal of Anaesthesiology 2011, 28:813–816

Children with anterior mediastinal mass: procedural sedation with dexmedetomidine

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Published online 5 October 2011

Introduction

Anaesthetic considerations for children with anterior mediastinal mass are problematic and challenging. This group of children, who may present with little or no symptoms from cardiovascular and respiratory compromise, is at high risk for sudden airway obstruction, cardiovascular collapse and death on the operating table.

We report two children with anterior mediastinal mass who underwent biopsy and venous port insertion under superficial cervical plexus block (SCPB) and dexmedetomidine sedation. Patients' permission was obtained to publish this case report.

approach, 5 ml of 0.5% levobupivacaine was deposited in the fascial plane just below the midpoint of the posterior border of the sternocleidomastoid muscle using a 24G, 25 mm short-bevel needle (Plexufix, B Braun, Melsungen, Germany).[1] After 15 min, the surgeon was able to excise three cervical lymph nodes situated posterior to the sternocleidomastoid muscle.

Biopsy result revealed Hodgkin's disease. For administration of chemotherapy, a subcutaneous venous port was implanted 10 days later under dexmedetomidine sedation, using a similar regime as described above. This enabled the successful performance of a SCPB and port implantation.

In both procedures, performed at separate times, the patient breathed spontaneously with oxygen supplementation via nasal prongs. There was no untoward event in the perioperative period. His respiratory rate was 15–20 min^{-1}. Reduction in blood pressure (BP) and heart rate (HR) was less than 15% from baseline.

Case 2

A 12-year-old boy weighing 24 kg presented with 3 days history of cough, chest discomfort, facial swelling and distended veins over the chest. There was no history of

TOTAL PARATHYROIDECTOMY IN ESRF PATIENT UNDER B/L SCPB

- 2 cases

CASE 1

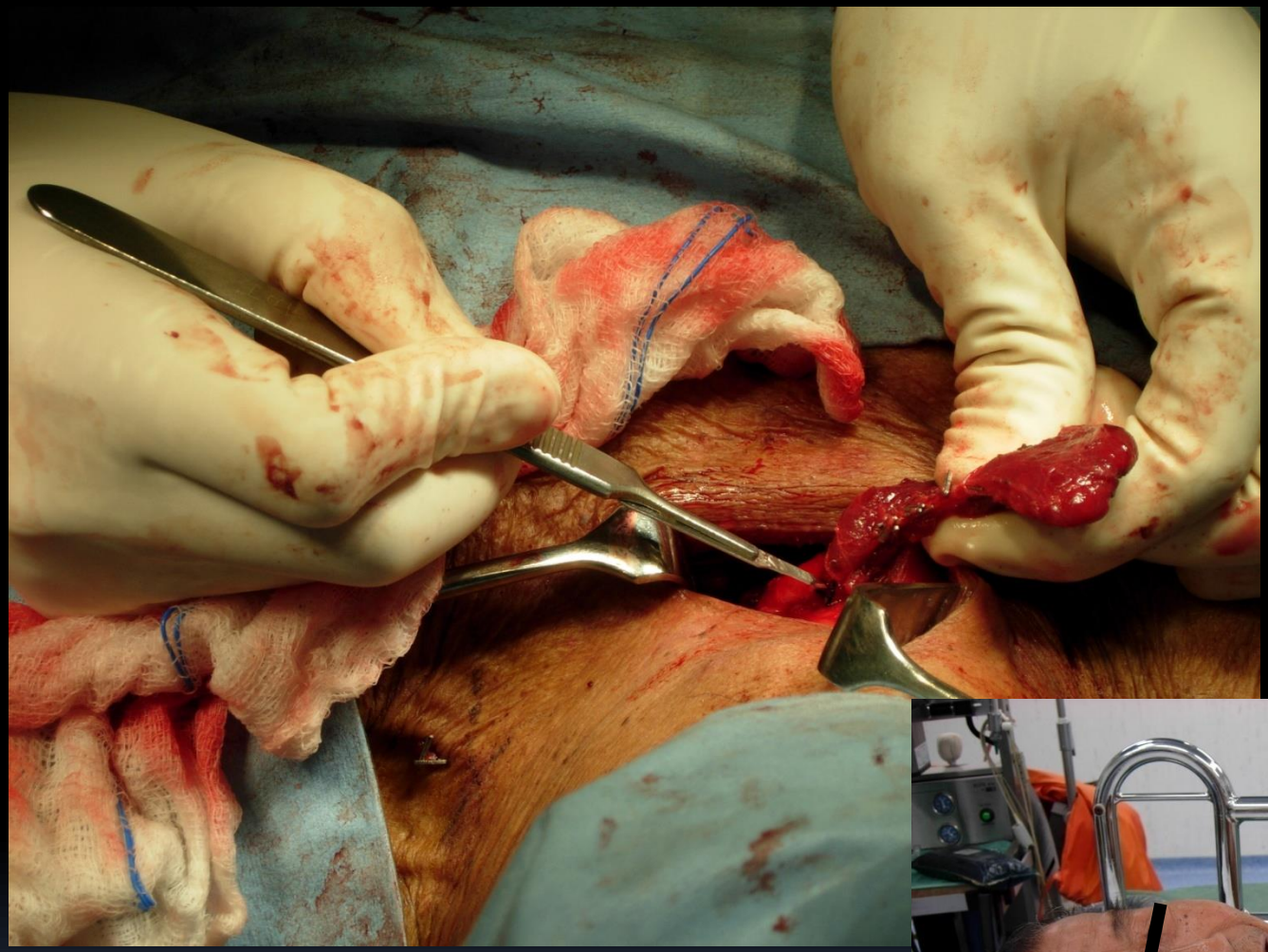
- An elderly man with ESRF on long term HD
- Planned for total parathyroidectomy

B/L SCPB

10ml LA to each side

20 min apart

CAUTIOUS:
may cause B/L phrenic nerve block

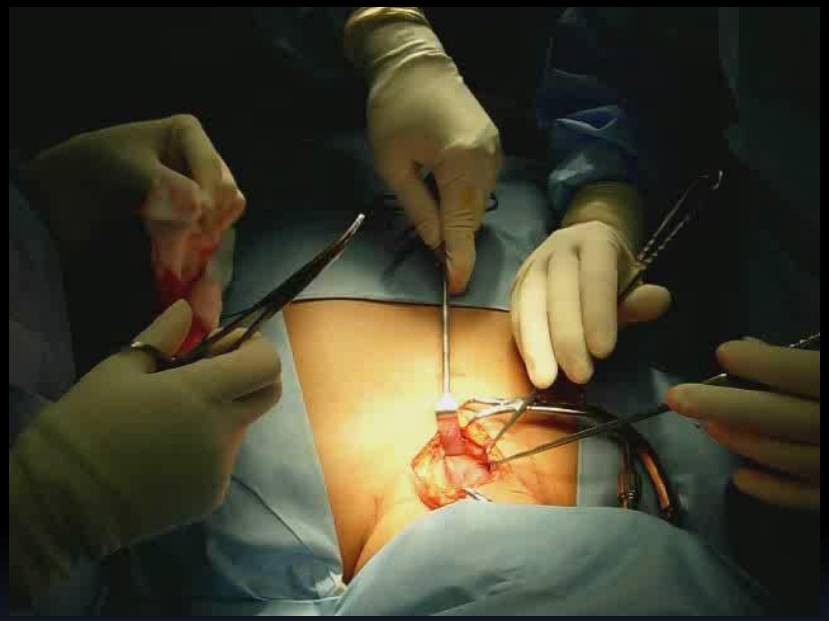


CASE 2

- A 32 yr man, ESRF on long term HD
- For Total Parathyroidectomy

B/L SCPB

Parathyroidectomy

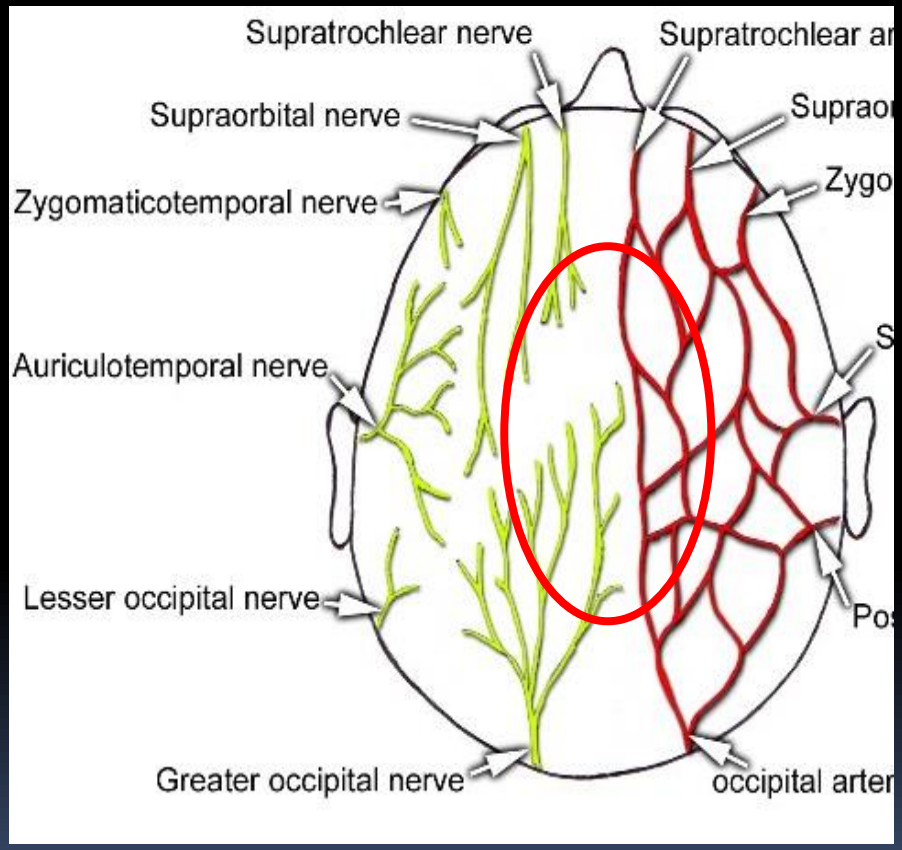


SCALP SURGERY DONE UNDER NERVE BLOCK

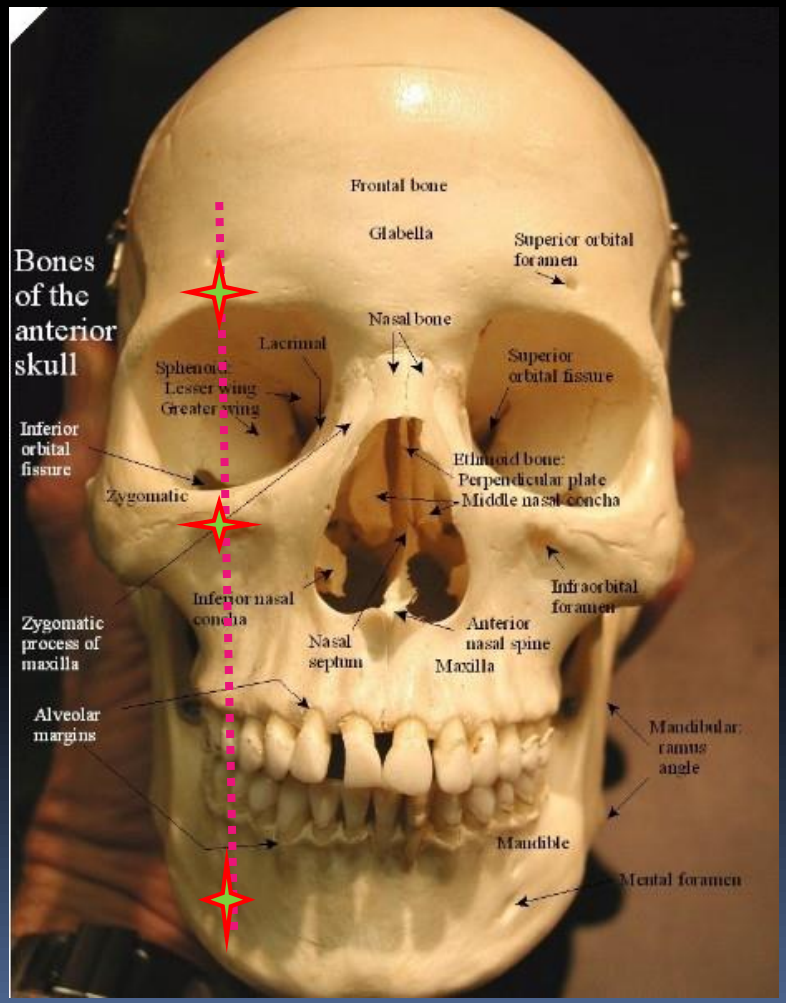
- 2 cases

Case 1

- 83/ man
- pmH: DM,HTN, CAD, AF, CCF
- Δ: melanoma at the veltex
- Ope: wide excision + SSG
- RA: -B/L supraorbital & supratrochlear N block
  -B/L GON & LON block
  -Femoral N block

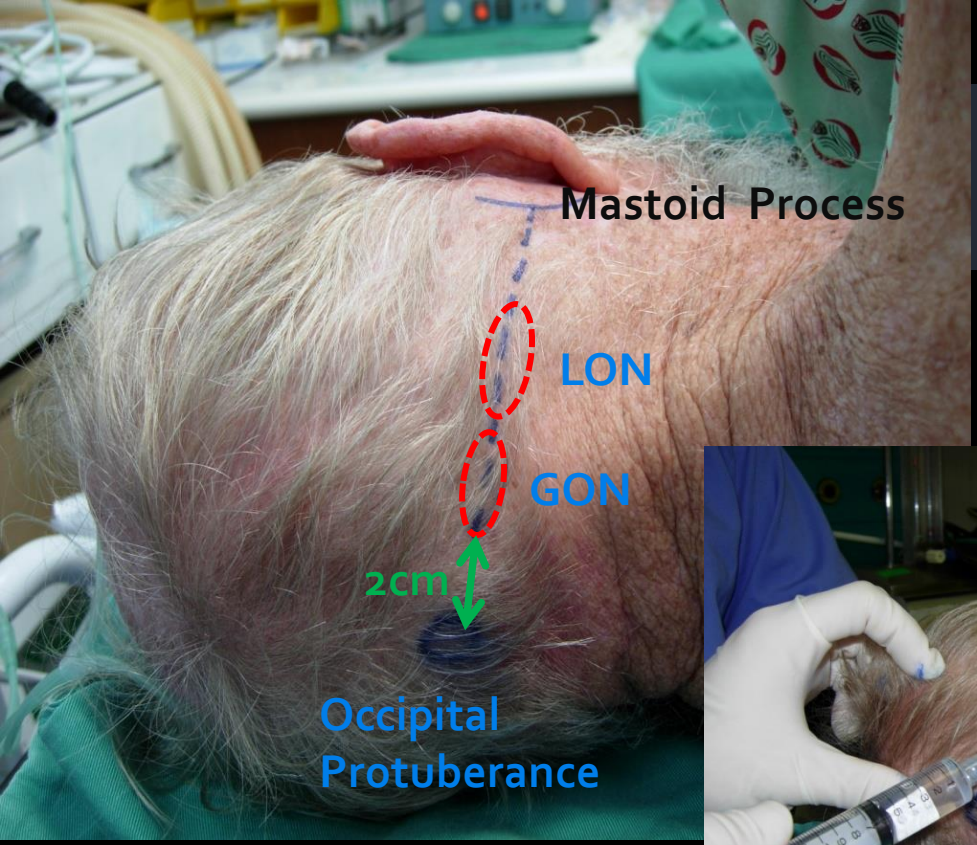

Supratrochlear nerve
Supraorbital nerve
Zygomaticotemporal nerve
Auriculotemporal nerve
Lesser occipital nerve
Greater occipital nerve

Supraorbital Foramen



Supraorbital & Supratrochlear N Block

GON & LON BLOCK



GON & LON Block VIDEO

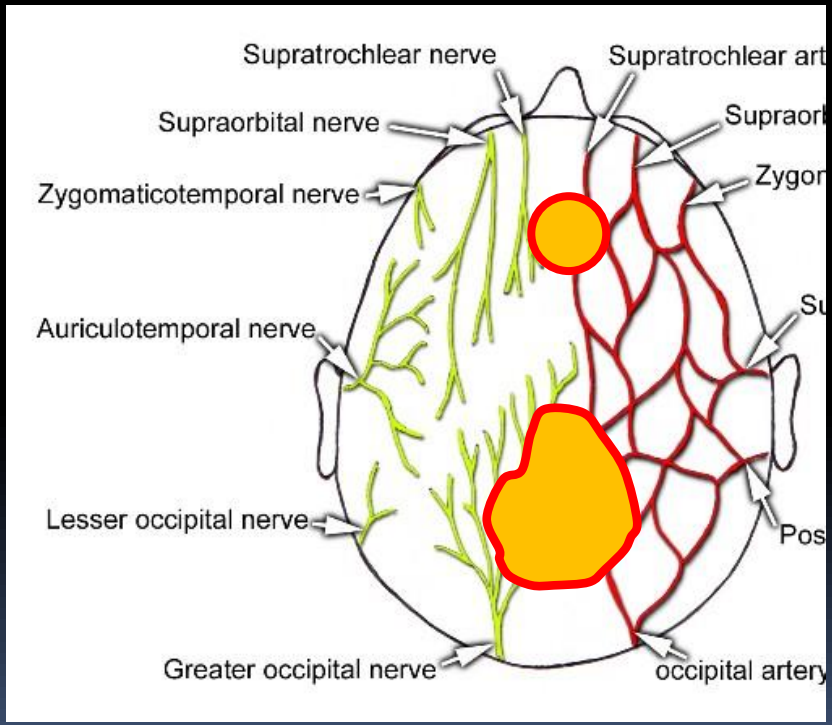
Scalp Surgery VIDEO

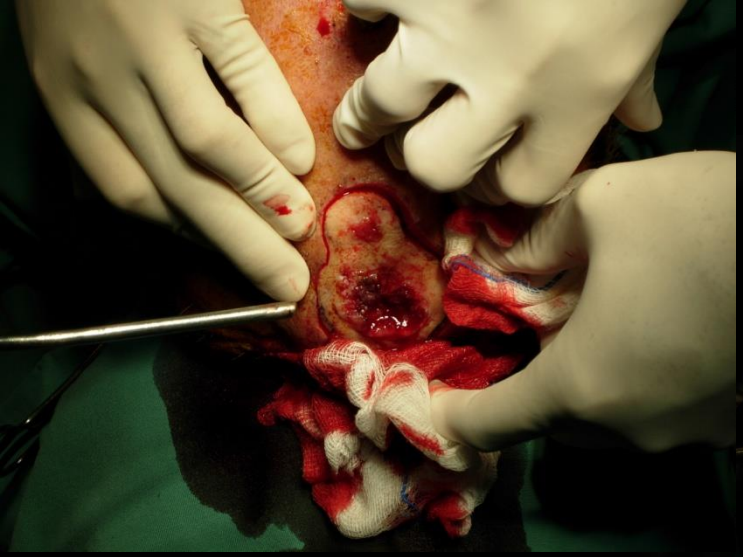
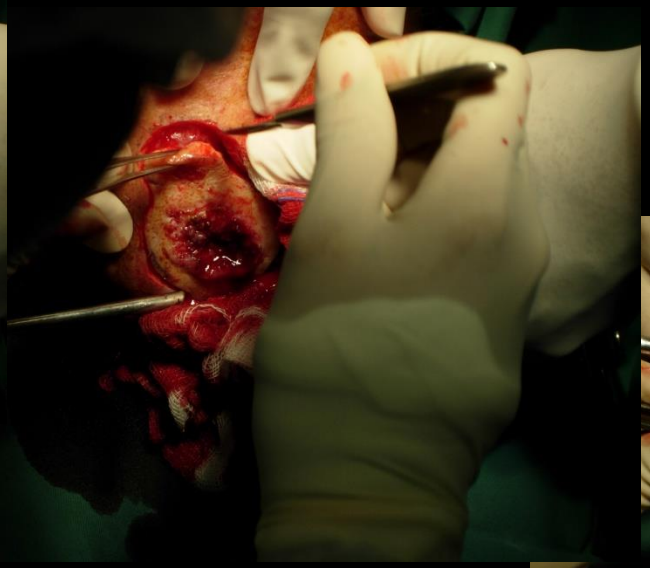
Scalp Surgery

-case 2

- 87 man
- pmH: DM, HTN & CAD
- Δ: SCC at the vertex
- Ope: wide excision + SSG
- R.A: - B/L supraorbital & supratrochlear N block + B/L GON block

  - Femoral N block for SSG


Supratrochlear nerve
Supraorbital nerve
Zygomaticotemporal nerve
Auriculotemporal nerve
Lesser occipital nerve
Greater occipital nerve
occipital artery

Burr Hole Drainage of CSDH under R.A.

- 4 cases

Burr Hole done under RA

Case 1

- 71/man
- pmH: HTN, CAD, dilated cardiomyopathy
- Δ: acute on CSDH of left fronto-parietal occipital region
- Ope: left frontal & left parietal burr hole drainage
- GCS: 10/15
- RA: - left supraorbital & supratrochlear N block
  -left auriculotemporal N block
  - left GON & LON block
- L.A: 3ml of 0.5% L-bupivacaine to each of the nerve

Burr Hole done under RA

Case 2

- 61/man
- pmH: HTN, DM,ESRF, cardiomyopathy
- Δ: CSDH over his right fronto-parietal-occipital region
- Ope: Right frontal and right parietal burr hole drainage
- GCS: 10/15
- RA: same as case 1

Burr Hole done under RA

Case 3

- 77/ lady
- pmH: DM, old stroke
- Δ: Pneumonia & CSDH over right fronto-temporal-parietal region
- Ope: Right frontal & right parietal burr hole drainage
- GCS: 12/15
- RA: same as case 1

Burr Hole done under RA

Case 4

- 93/ man
- pmH: HTN, DM
- Δ: CSDH over B/L fronto-temporal- parietal region
- GCS: 12/15
- Ope: B/L frontal burr hole drainage
- RA: B/L supraorbital & supratrochlear N block
- LA: total 5ml of 0.5% L-bupivacaine was given on each side.

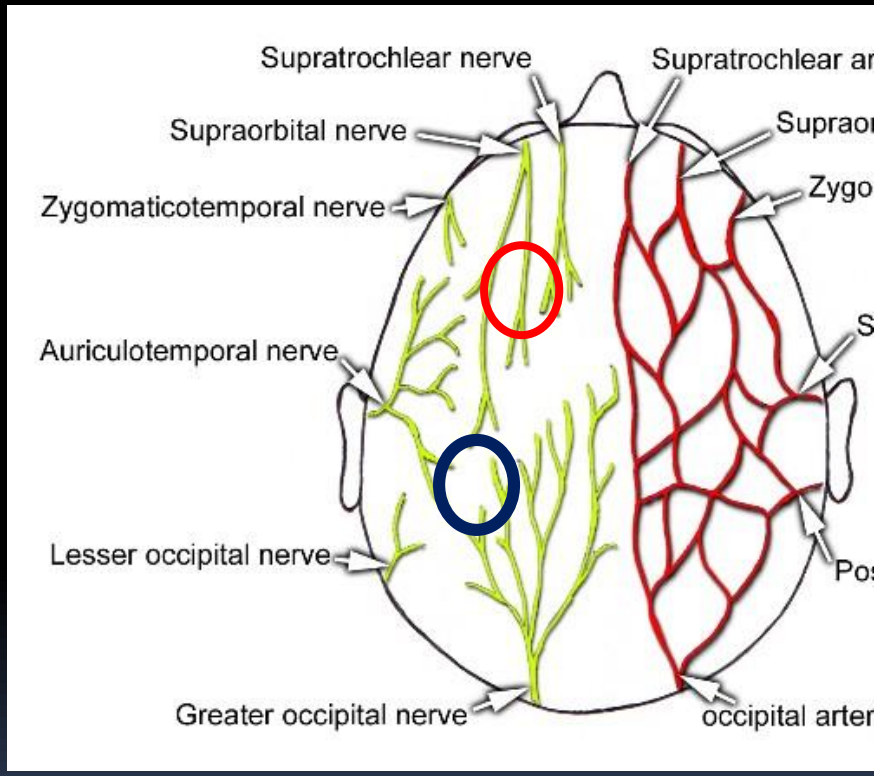
Burr Hole done under RA

- **Frontal burr hole**

1. Supraorbital N block
2. Supratrochlear N block

- **Parietal burr hole**

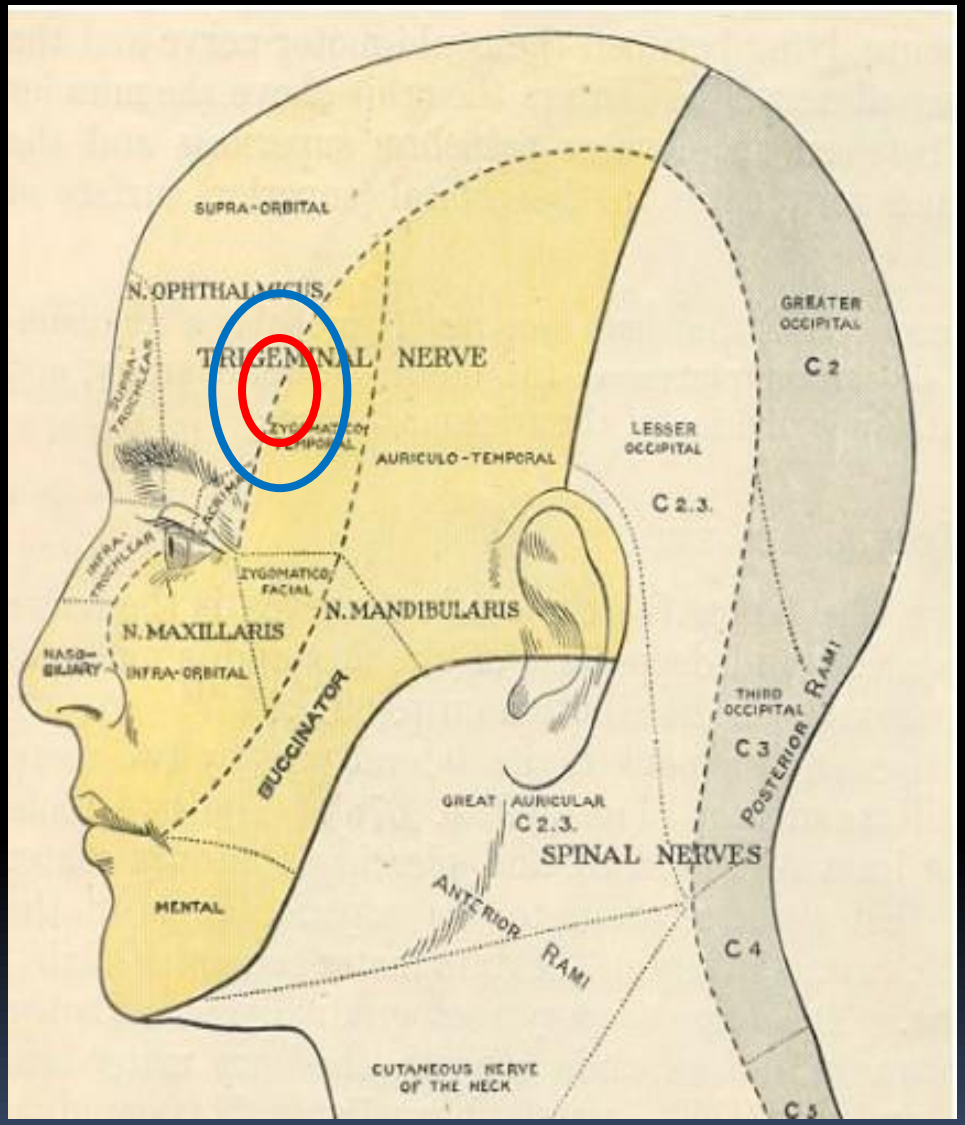
1. Supraorbital N block
2. Auriculotemporal N block
3. LON & GON block



FACIAL SURGERY
DONE UNDER
R.A.
24 8 2006

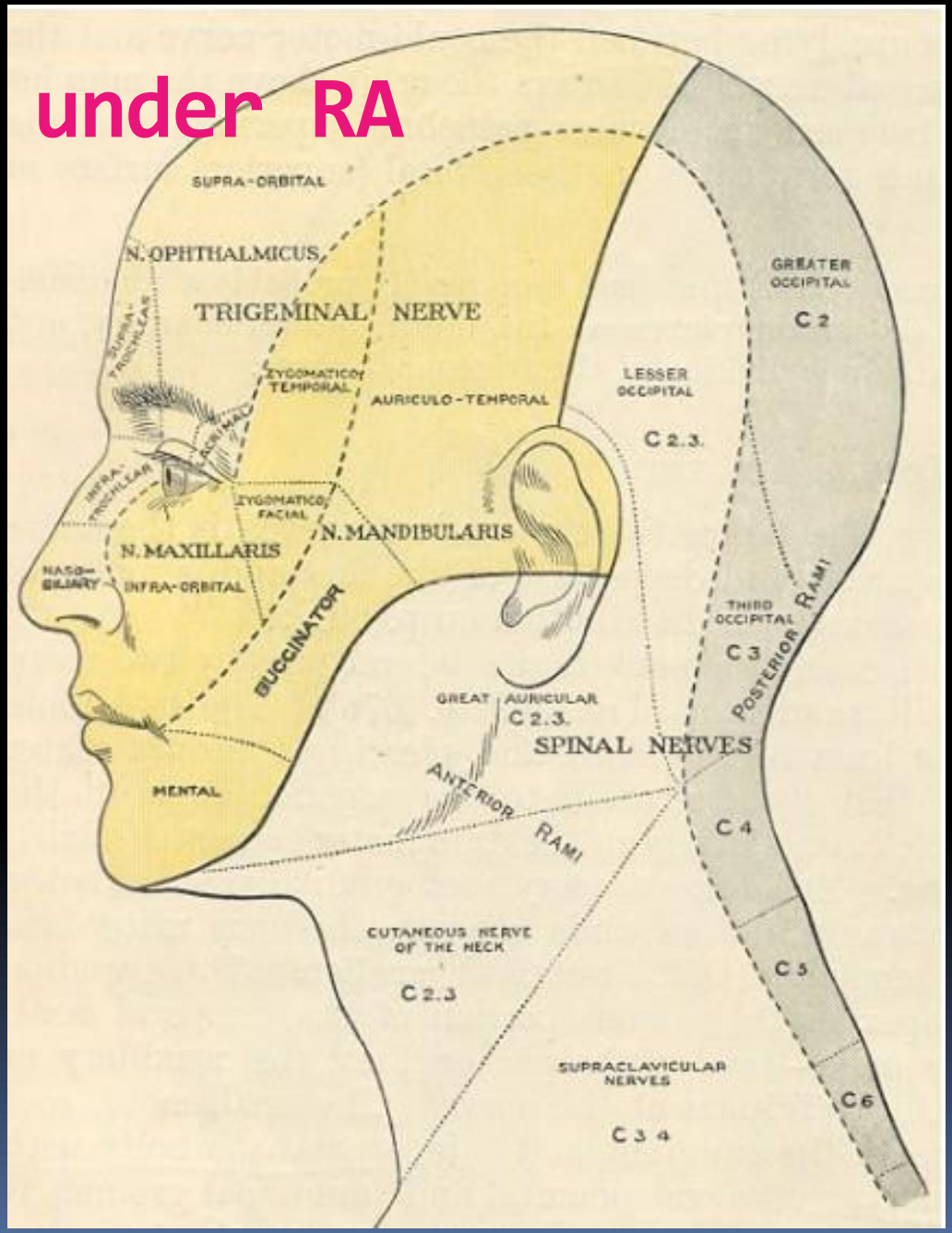
- 87 man, HTN
- BCC on the left frontal-temporal region
- Need wide excision surgery
- H/O severe PONV, requested RA.

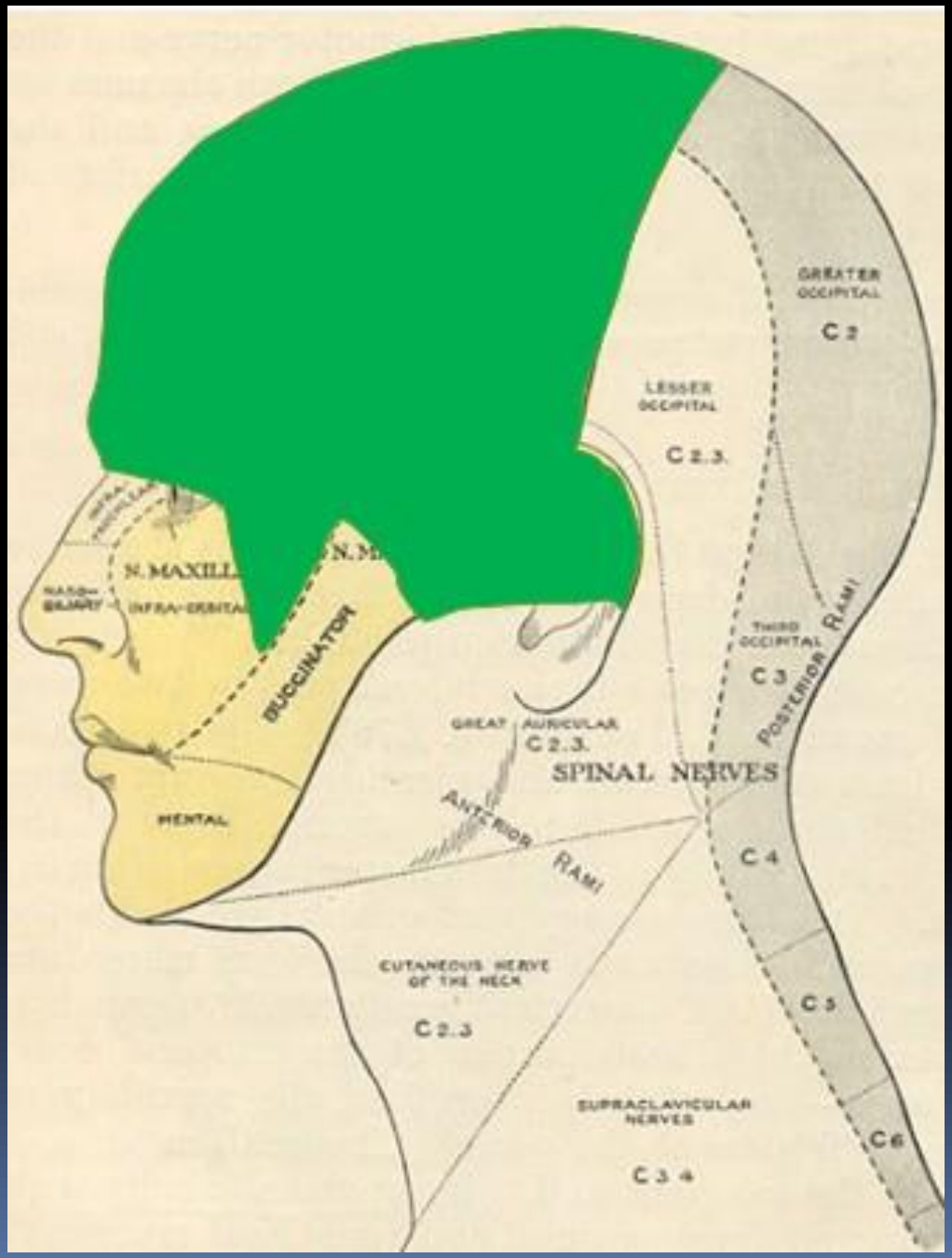
24 8 2006

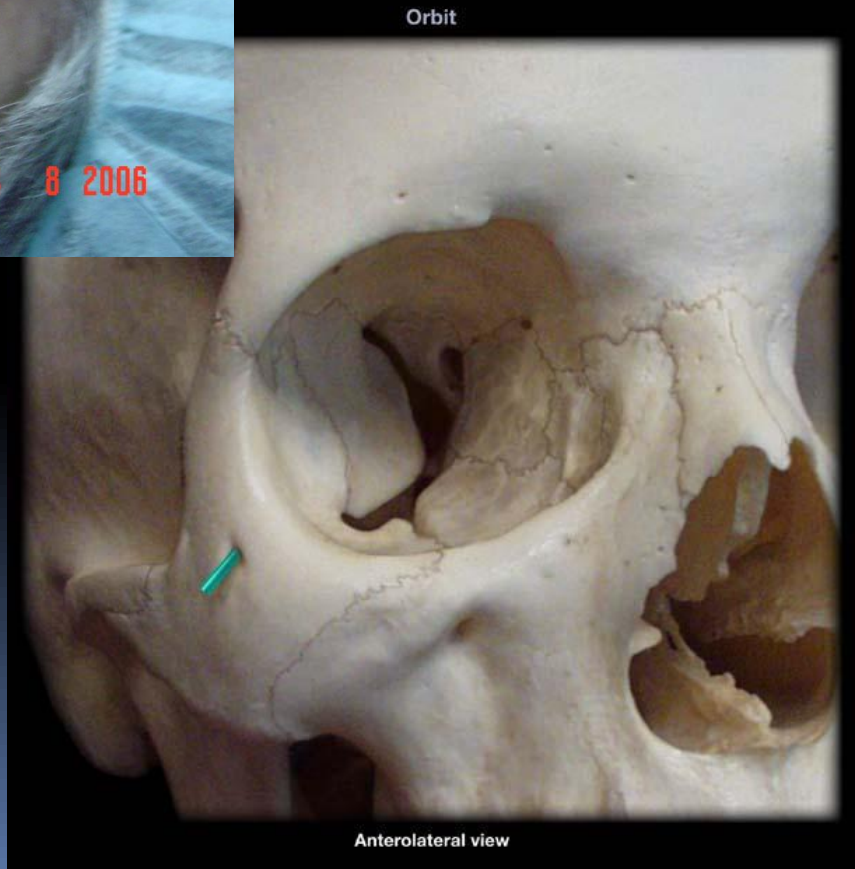

SUPRA-ORBITAL
N. OPHTHALMICUS
TRIGEMINAL NERVE
SUPRA-TROCHLEAR
LACRIM.
AURICULO-TEMPORAL
INFRA-TROCHLEAR
ZYGOMATICO-FACIAL
N. MAXILLARIS
N. MANDIBULARIS
NASO-CILIARY
INFRA-ORBITAL
BUCCINATOR
MENTAL
GREATER OCCIPITAL
C 2
LESSER OCCIPITAL
C 2.3.
THIRD OCCIPITAL
C 3
POSTERIOR RAMI
GREAT AURICULAR
C 2.3.
SPINAL NERVES
ANTERIOR RAMI
C 4
CUTANEOUS NERVE OF THE NECK
C 5

Facial surgery under RA

1. Zygomaticotemporal N
2. Zygomaticofacial N
3. Supraorbital N
4. Supratrochlear N
5. Auriculotemporal N




GREATER OCCIPITAL
C 2
LESSER OCCIPITAL
C 2.3.
THIRD OCCIPITAL
C 3
POSTERIOR RAMI
GREAT AURICULAR
C 2.3.
SPINAL NERVES
BUCCINATOR
MENTAL
ANTERIOR RAMI
C 4
CUTANEOUS NERVE OF THE NECK
C 2.3
C 5
SUPRACLAVICULAR NERVES
C 3 4
C 6



Zygomaticofacial Foramen

Zygomaticofacial N block

Zygomaticotemporal N block

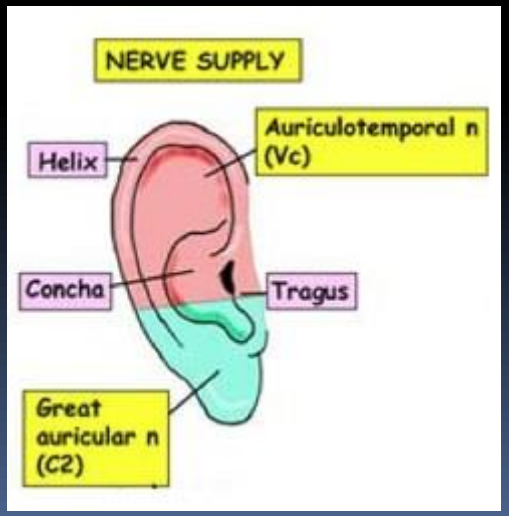
Supraorbital N block

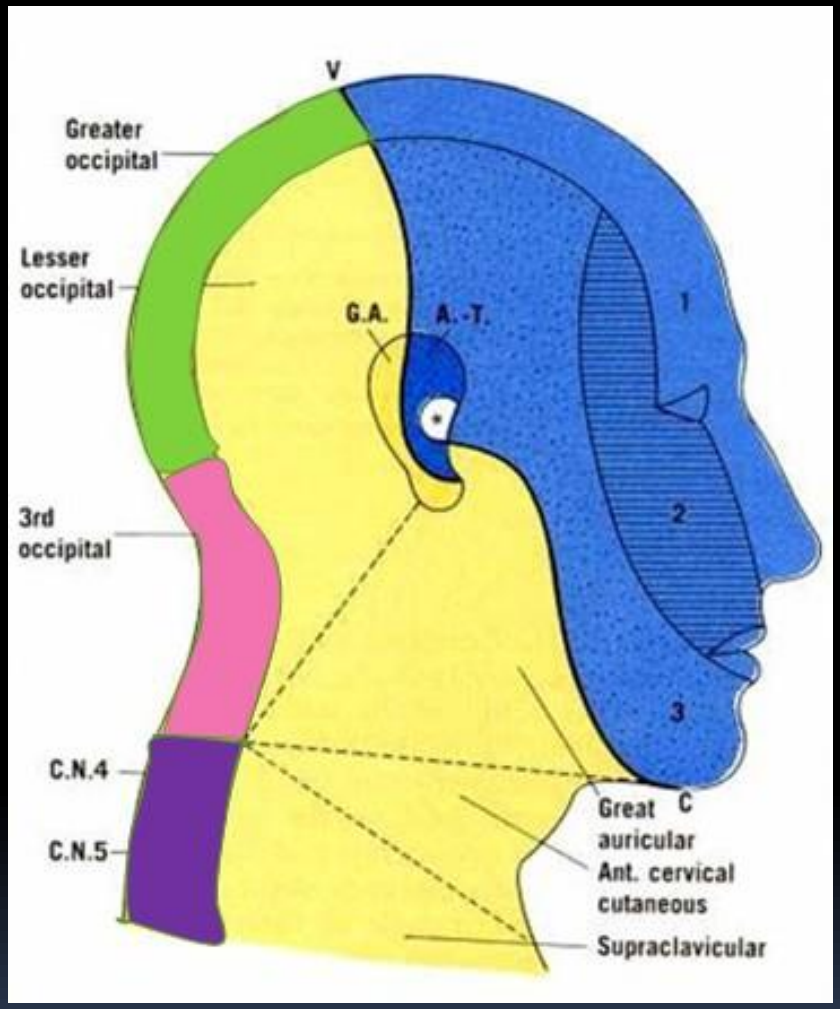
Supratrochlear N block

Auriculotemporal N Block

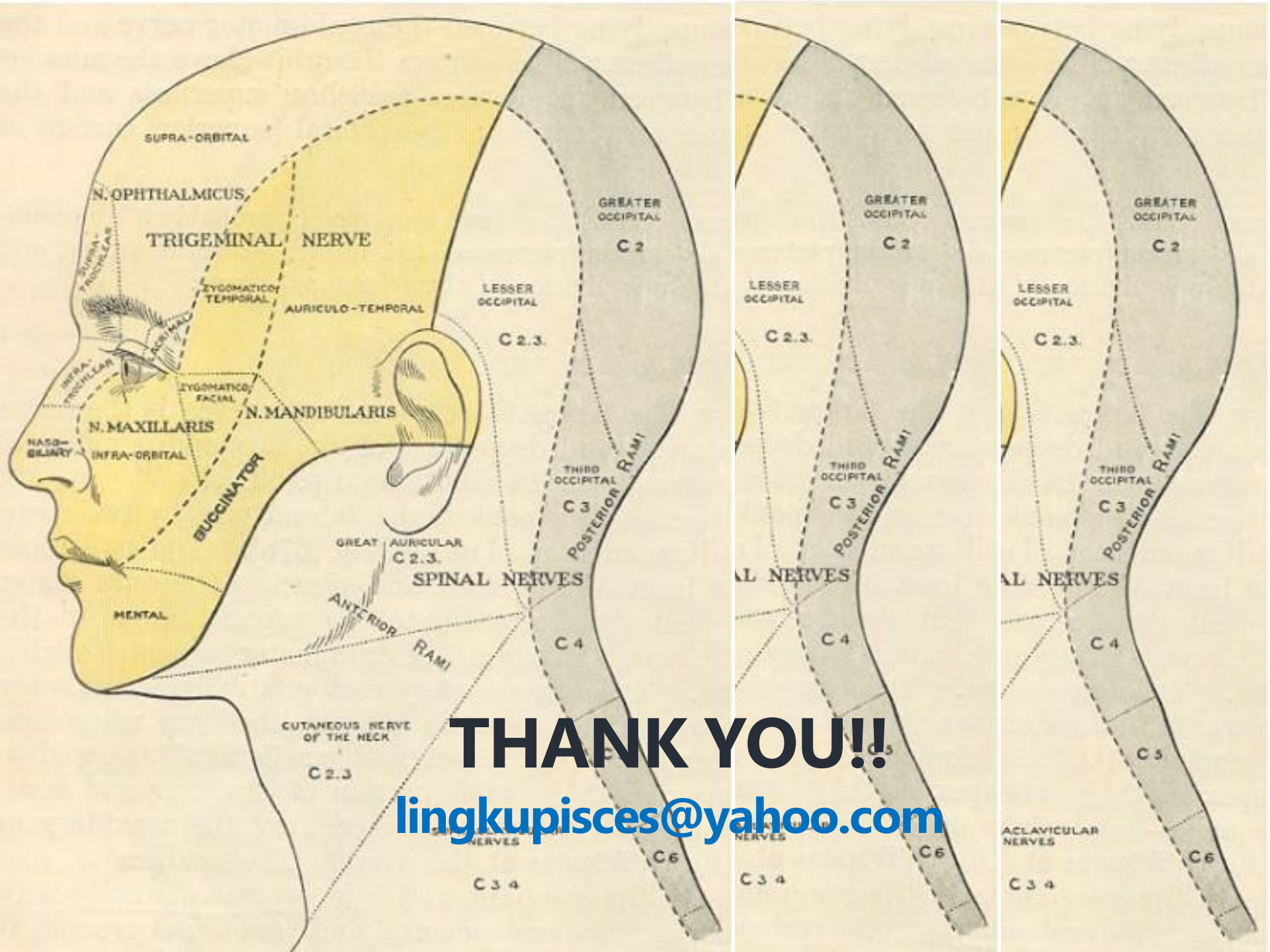
24 8 2006

HEAD & NECK BLOCK





Head & Neck Block is……
…….Easy!!



THANK YOU!!

lingkupisces@yahoo.com