

KEDARURATAN T.H.T.BKL

TONSIL, ABSES LEHER DALAM, ABSES BEZOLD
ASPIRASI BENDA ASING
TRAKEOSTOMI

dr. Ibnu Harris Fadillah, Sp.THTBKL, Subsp.Onk (K)

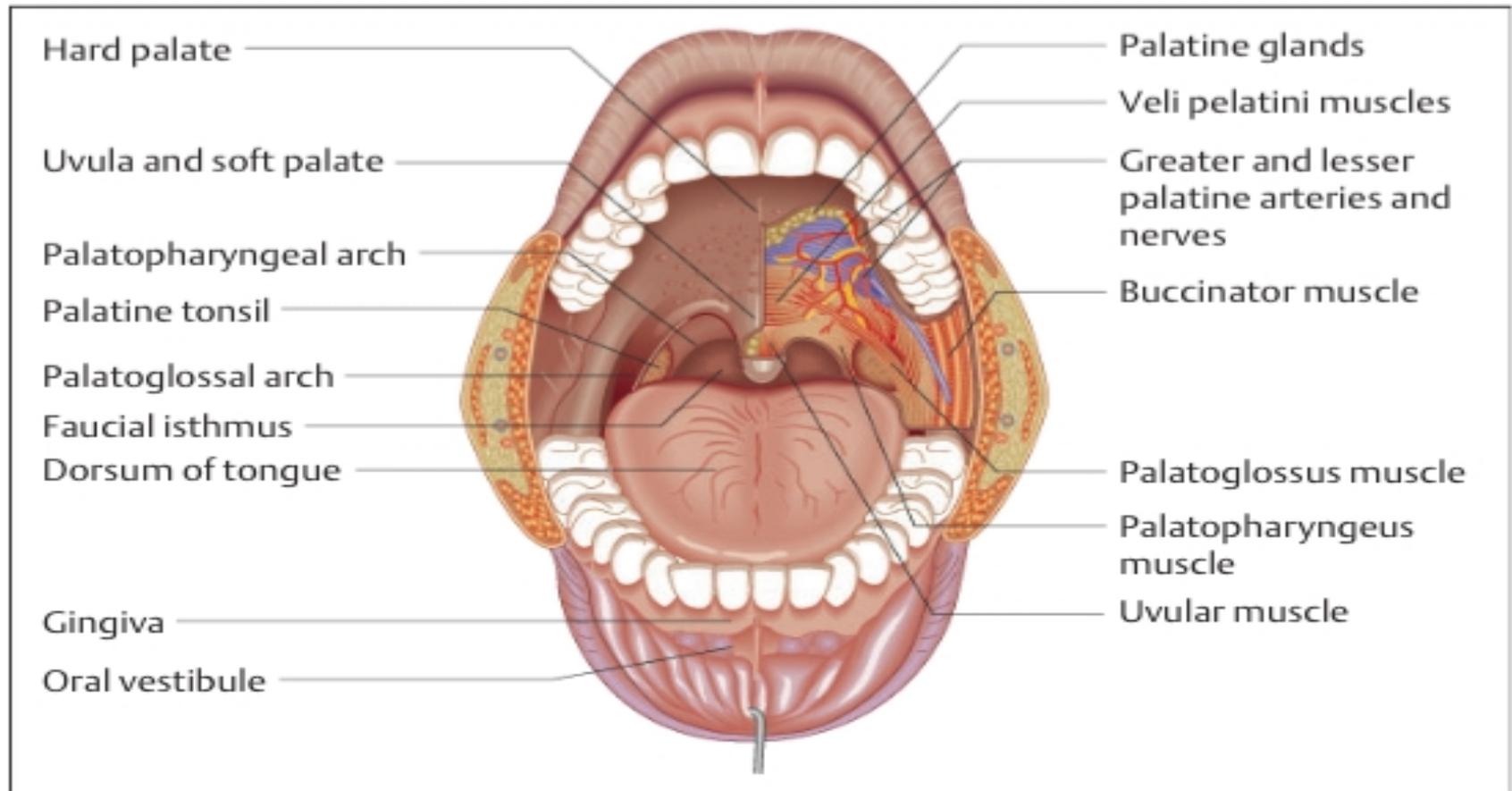
Departemen THTBKL
Fakultas Kedokteran Universitas Trisakti

Learning Objective

- Memahami Struktur anatomi Leher & Tenggorok
- Memahami konsep jalan nafas atas.
- Mampu menentukan sikap untuk tatalaksana selanjutnya kasus kedaruratan di bidang THT -KL (Abses Leher Dalam, Aspirasi BA, Trakeostomi)

MULUT & TENGGOROK

Fig. Anatomy of the lips, oral vestibule and oral cavity



Pembagian Faring

Sites of obstruction		Causes of obstruction
Nose/nasopharynx		Nasal polyps Grossly deflected nasal septum Adenoids
Oropharynx/velopharynx		Macroglossia (absolute or relative) Soft palate Tonsils
Laryngotrachea		Obstructive lesions (e.g. tumour, cysts)

Fig. 3.65 Potential sites and causes of narrowing that may result in snoring and obstructive sleep apnoea.

Acute Pharyngitis

- Iritasi/Inflamasi (***sore throat***) atau infeksi di area faring yang dapat disebabkan oleh infeksi virus, bakteri (*grup A streptococcus*), atau penyebab lain seperti allergy, trauma dan toxin.

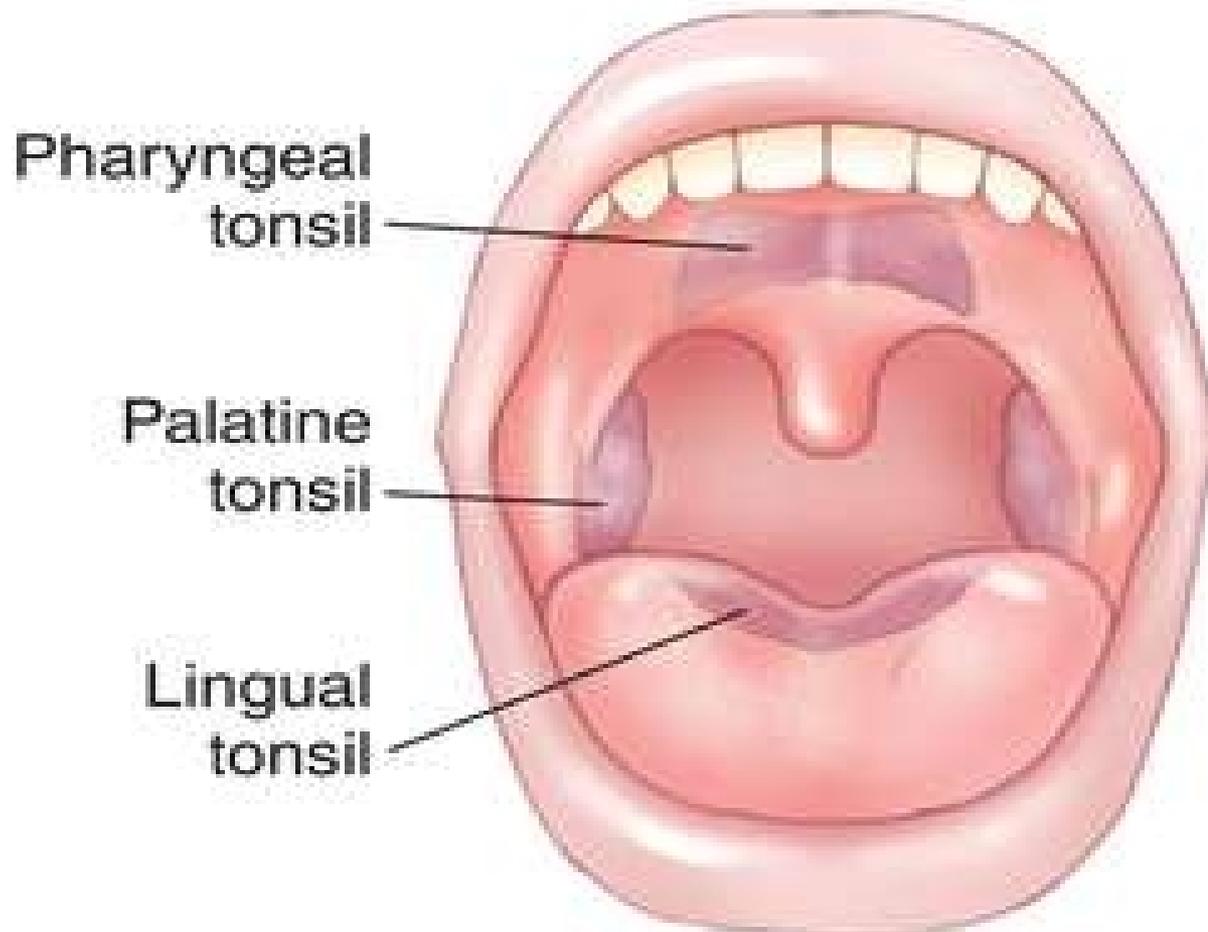


Figure 8.1 Sore throat secondary to fungal infection (Candida confirmed on throat swab).

Acute Pharyngitis

- Dapat sembuh sendiri (*self-limiting*) dengan perawatan konservatif analgetic, kumur saline , istirahat.
- Beberapa memerlukan antibiotic, namun tidak disarankan sebagai terapi rutin.

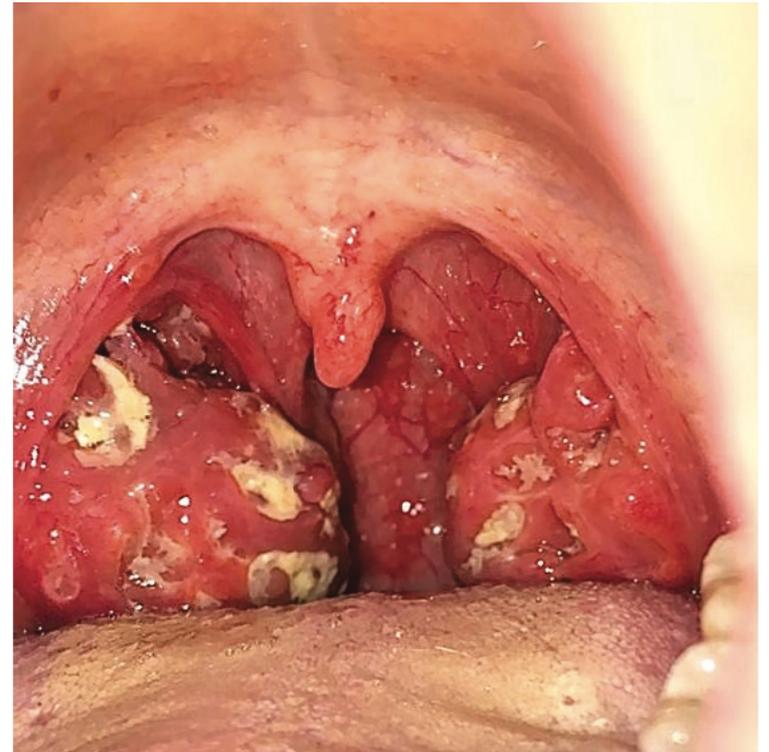
TONSIL



ACUTE TONSILITIS

- Penyebab tersering Grup A *betahemolyticus streptococcus pyogens*
- Gejala klinis : sakit tenggorok (*sore troath*), nyeri menelan (*odynophagia*), sulit menelan (*dysphagia*), mulut berbau (*foul breath*), pembengkakan KGB leher, dan demam.

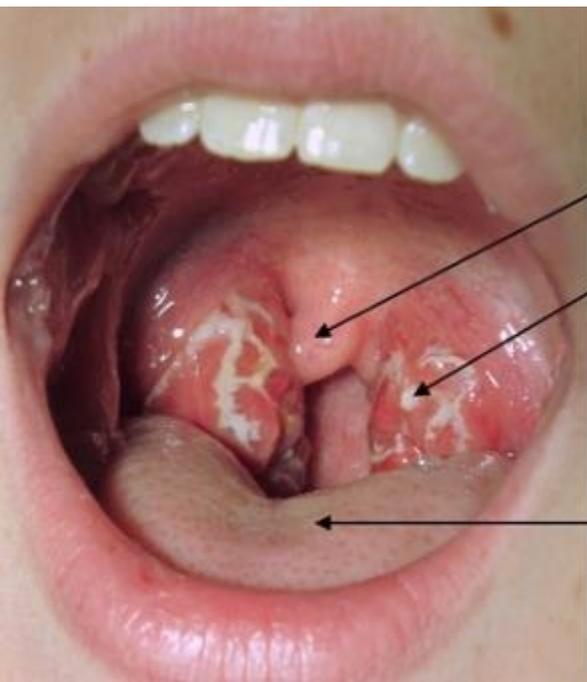
ACUTE TONSILITIS



ACUTE TONSILITIS

- Tatalaksana : memperbaiki oral hydration, analgetic, dan antibiotic.
- Jika pasien tidak bisa mendapatkan oral intake yang adekuat, maka perlu dilakukan perawatan di RS untuk mendapatkan IV hydration, analgetic dan antibiotic.

BAKTERIAL VS VIRAL



Bacterial tonsillitis

Viral tonsillitis

- Swollen uvula
- Whitish spots
- Red swollen tonsils
- Throat redness
- Gray furry tongue

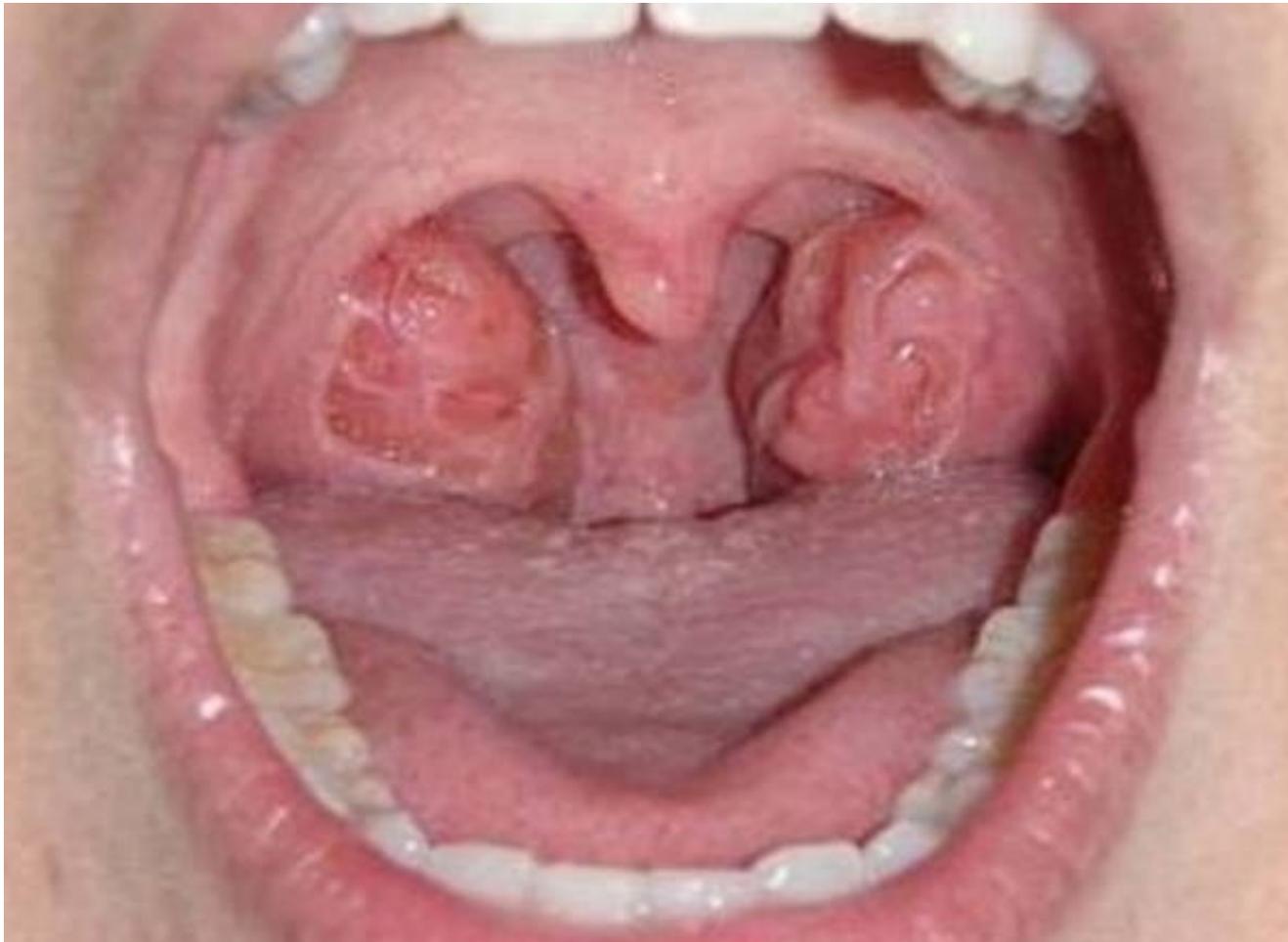
- Red swollen tonsils
- Throat redness



ACUTE TONSILITIS

- Kompilikasi terbagi menjadi Suppuratif dan Non-Suppuratif
- Suppuratif : abses peritonsil, abses parafaring, abses leher dalam lain
- Non-Suppuratif : endotoxin dari streptococcus betahemolitycus → peningkatan titer ASO/ASTO (*anti streptolysin O*) >200 yang dapat mengakibatkan rheumatic fever pada myocardium dan kerusakan nefron pada glomerulonephritis.

CHRONIC TONSILITIS



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PERITONSILAR CELLULITIS

- Akut tonsilitis yang memberat pada satu sisi, gejala nyeri tenggorok yang meluas ke telinga (otalgia), kemerahan pada satu sisi palatum, tidak ada abses, tidak ada trismus.



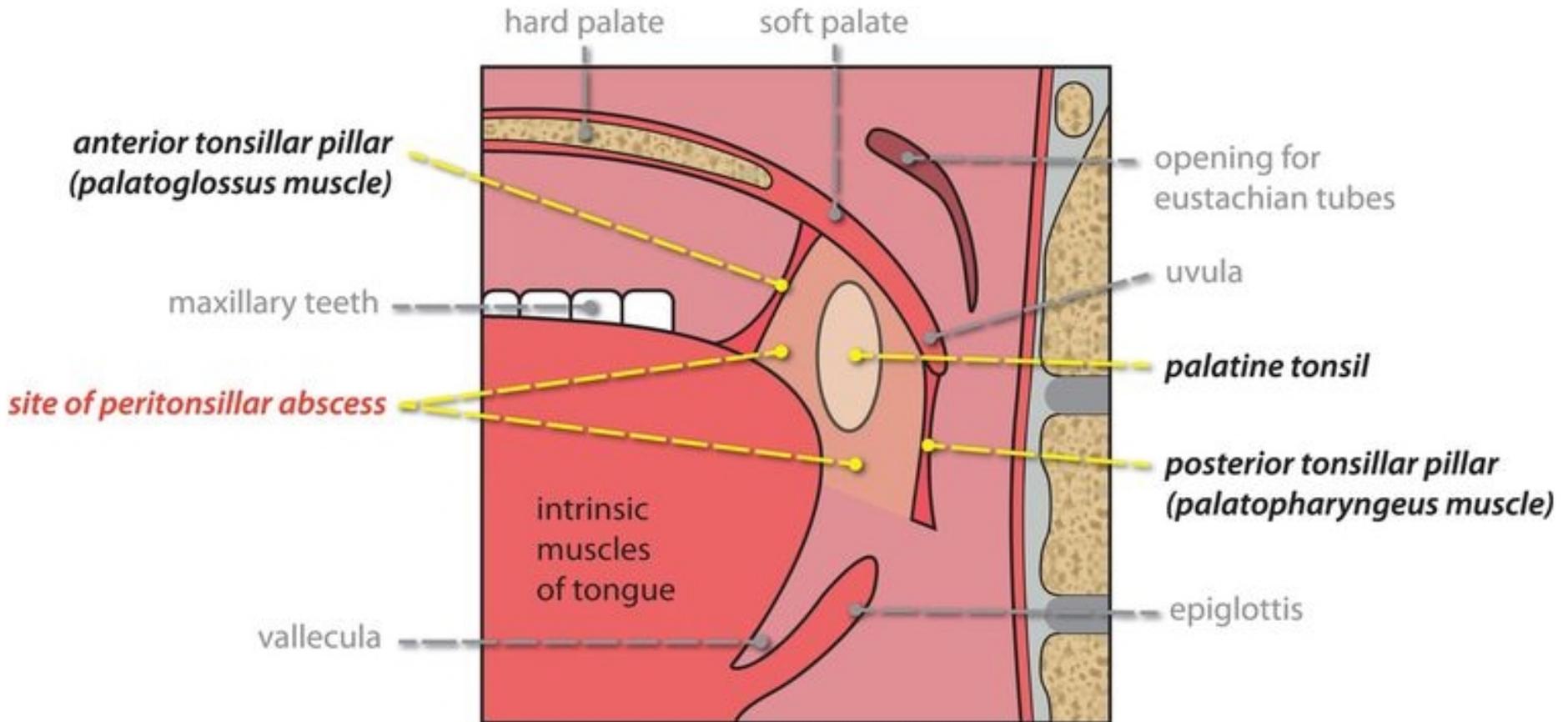
Figure 8.3 Right peritonsillar cellulitis. Note absence of trismus.

ABSES PERITONSIL (QUINCY)

Terkumpulnya abses pada ruang diantara kapsul tonsil dan m. konstriktor faringeal superior (ruang peritonsil)

- MERUPAKAN KOMPLIKASI DARI TONSILITIS
- TERKUMPULNYA ABSES PADA RUANG PERITONSIL
- UNILATERAL
- DEWASA MUDA

RUANG PERITOSIL



PERITONSILAR ABSES

- Gejala pasien seperti tonsilitis akut yang berat ditambah dengan otalgia, drooling/hipersalivasi, 'hot potato voice', dan trismus.

PERITONSILAR ABSES

palatopharyngeal
arch

=posterior pillar

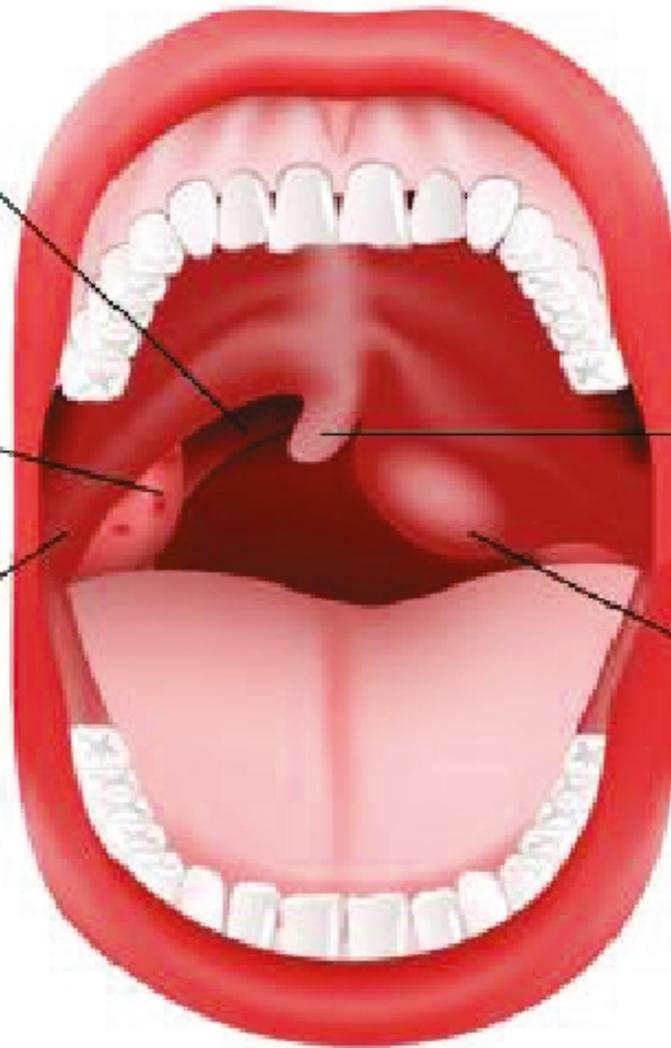
palatine tonsil

palatoglossal
arch

=anterior pillar

uvula

peritonsillar
abscess

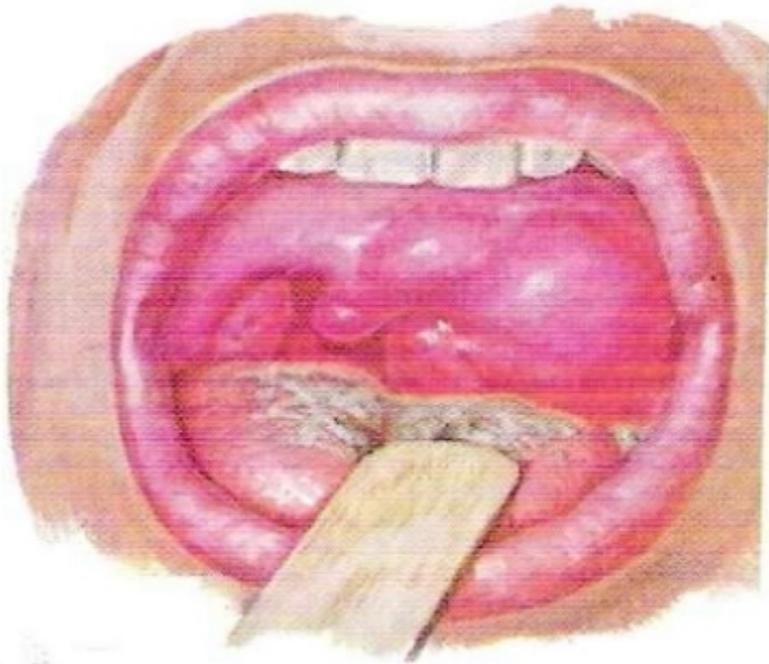


ABSES PERITONSIL (QUINCY)

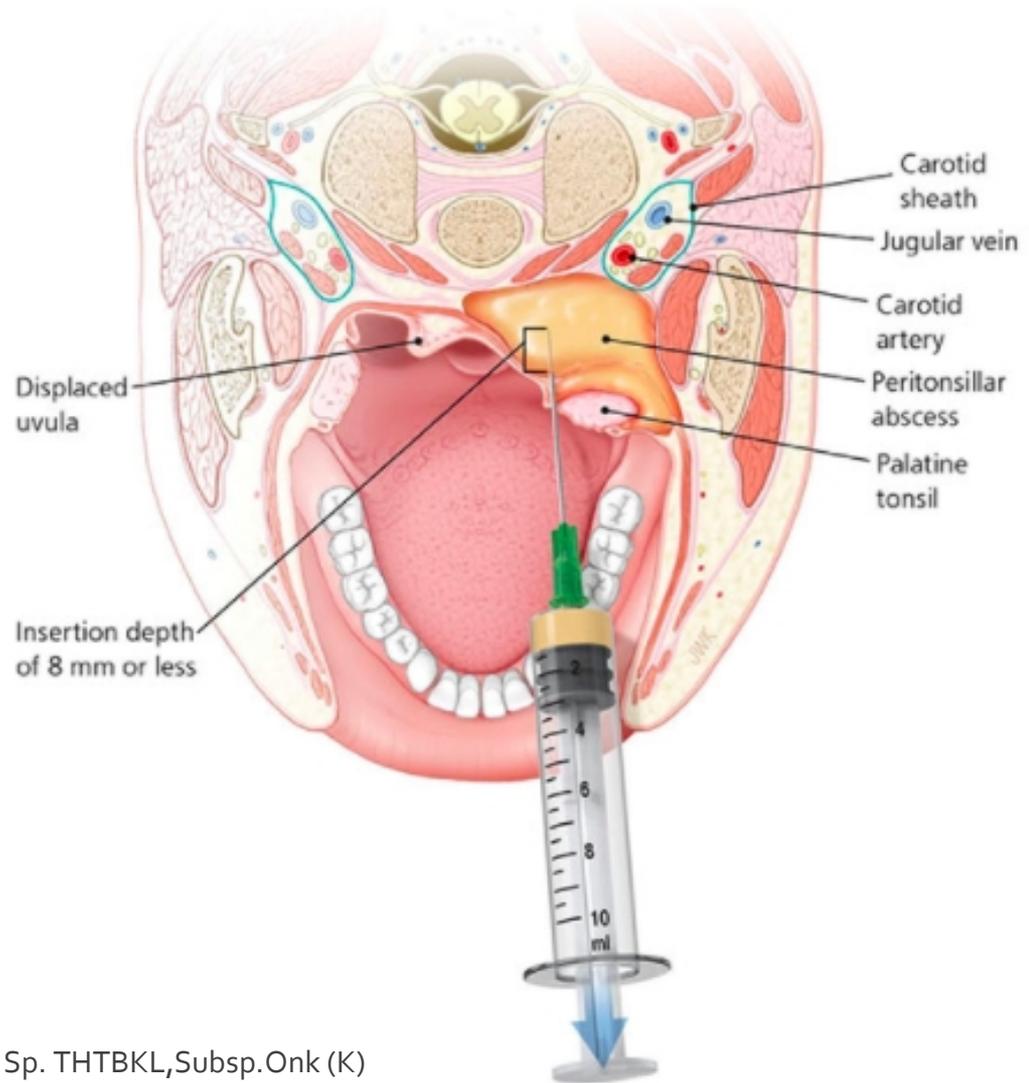
PATOGENESIS:

- DIAWALI STADIUM INFILTRAT → HIPEREMIS, INFILTRASI INFEKSI PADA FOSA TONSILARIS
- UVULA TERDORONG KE SALAH SATU SISI
- IRITASI PADA M. PTERIGOID INTERNA → TRISMUS

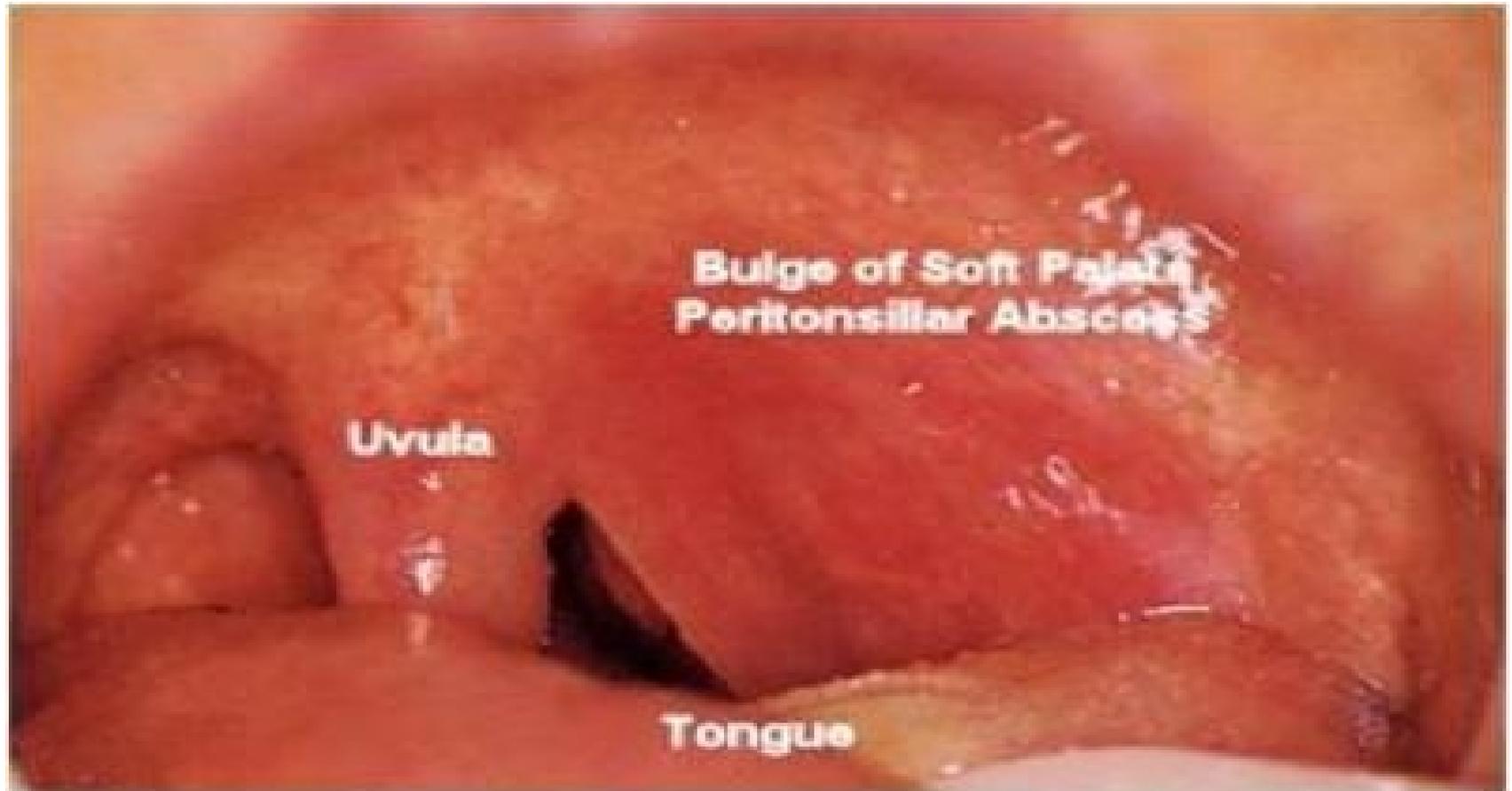
ABSES PERITONSIL (QUINCY)



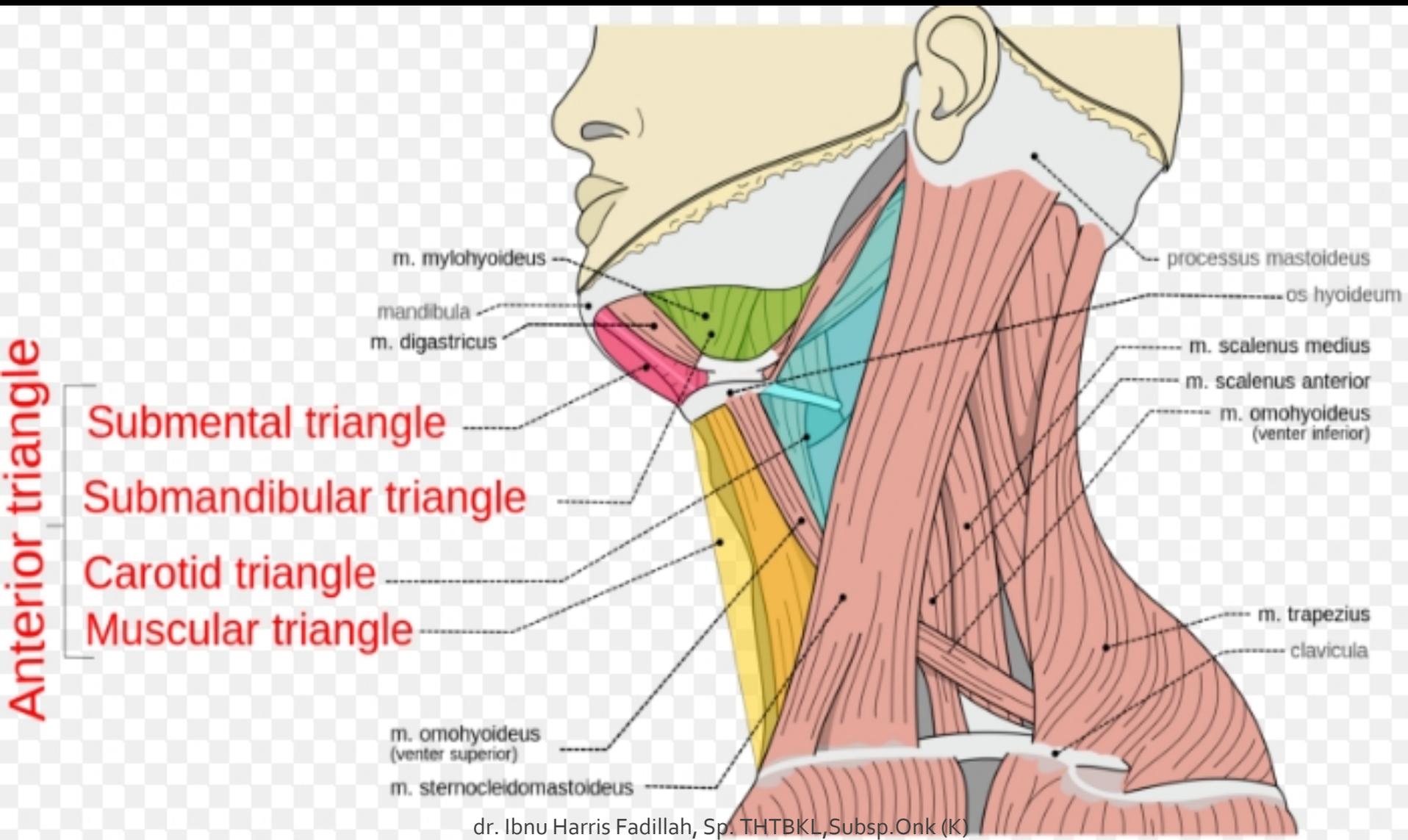
Abses peritonsilar



PERITONSILLAR ABSSES



Leher



Abses Leher Dalam

- Abses yang terbentuk di ruang potensial dan fasia leher dalam.
- Perluasan infeksi (gigi, mulut, sinusparanasal dan leher)
- Kuman : Streptococcus, Staphylococcus,
Anaerob : Bacteriodes dan campuran

Abses Leher Dalam

- **Fascia:** merupakan kondensasi/pemadatan dari jaringan penghubung (connective tissue) diantara otot.
- **Deep Neck Space:** ruang diantara fascia yang berisi jaringan adiposa, pembuluh darah dan limfatik.
- **Deep Neck Infection** terjadi bila mikroorganisme berkembang di ruang potensial ini

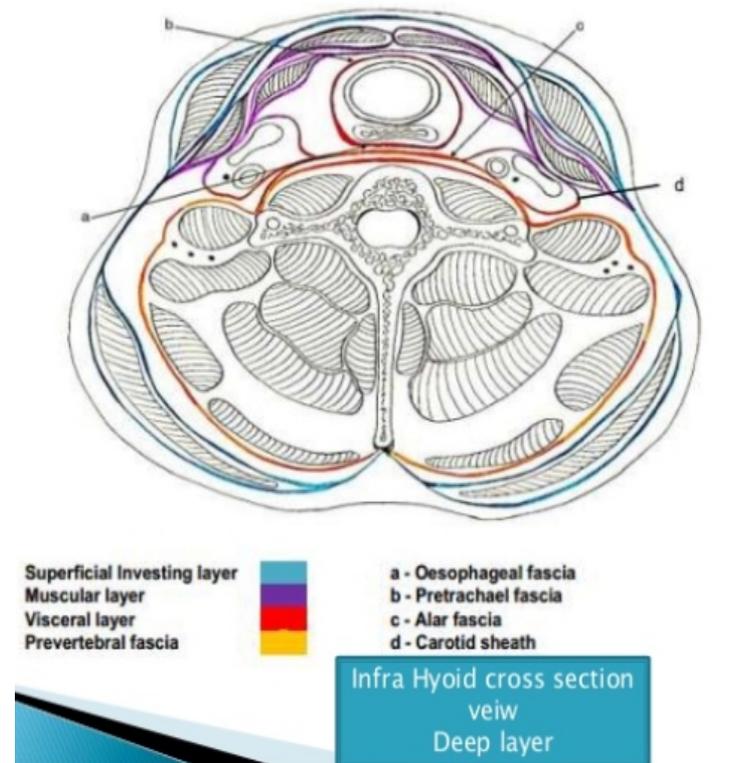
Abses Leher Dalam

- *Infeksi leher dalam* : harus dapat dibedakan dari infeksi kulit dan struktur superfisial leher.
- Pemahaman ttg anatomi otot leher, fascia yang membentuk ruang, dan potensi perluasannya menjadi penting.

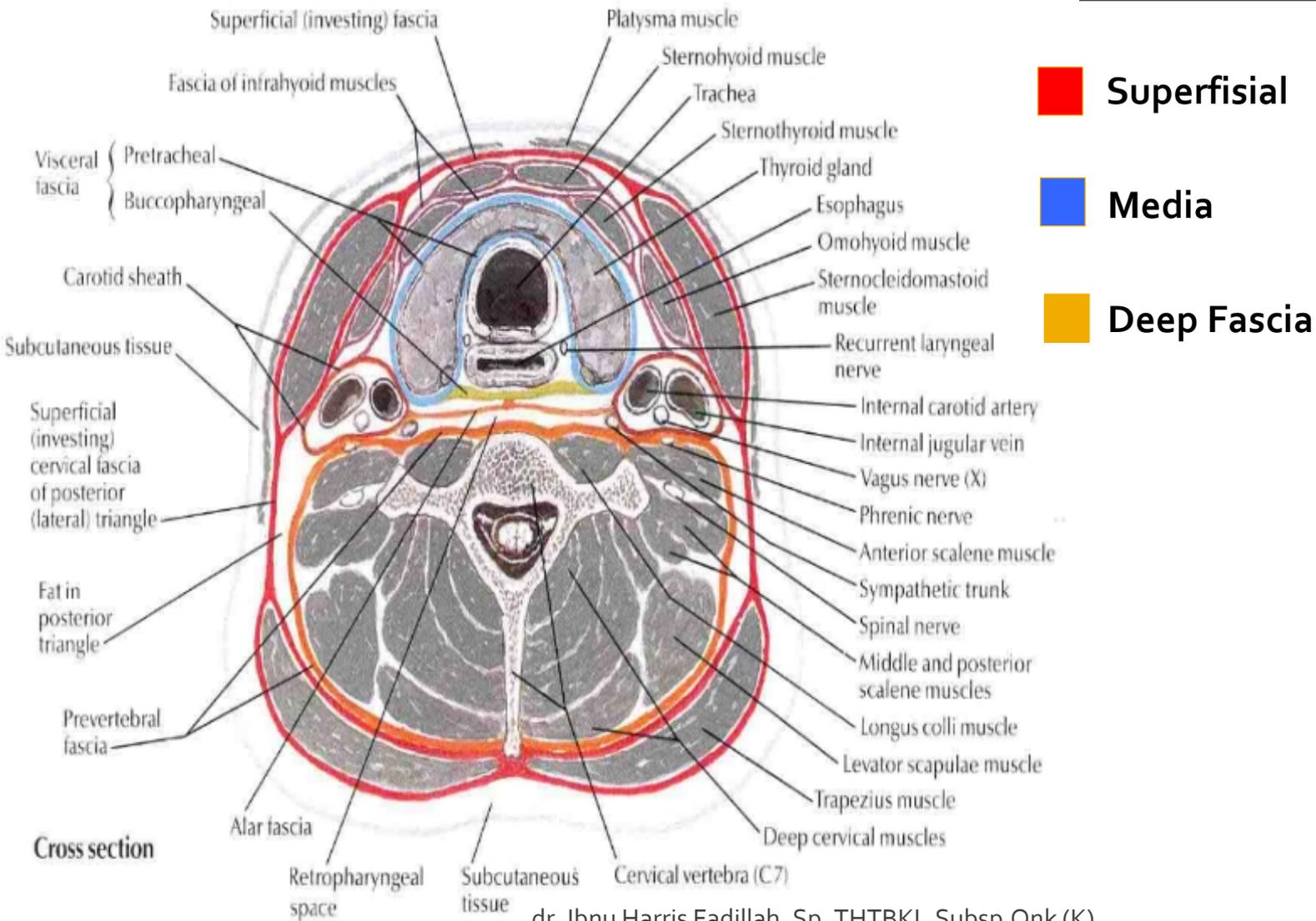
FASIA LEHER

○ Fasia leher superfisial
cutaneus nerve, platysma, superfisial limf node.

- Fasia leher dalam
- * Superfisial layer (investing)
 - * Middle layer:
 - Muscular layer
 - Visceral layer
 - * Deep layer :
 - Alar fascia
 - Pre-Vertebral fascia



Fascia Otot Leher



RUANG POTENSIAL LEHER

○ RUANG SUPRAHYOID

1. Ruang Parafaring
2. Ruang Submandibula
3. Ruang peritonsil
4. Ruang Mastikator
5. Ruang Parotis
6. Ruang temporal

○ RUANG YANG DIBATASI PANJANG LEHER

1. Ruang Retrofaring
2. Dangerous space
3. Ruang visceral/vaskular

Abses Leher Dalam

- Penyebaran bakteri yang paling sering melalui Hematogen dan jalur limfatik menuju limf node.
- Komplikasi infeksi leher dalam : obstruksi airway, keterlibatan vaskular, pseudoaneurysme/rupture, thrombosis, tissue necrosis, dan sepsis.

Abses Leher Dalam

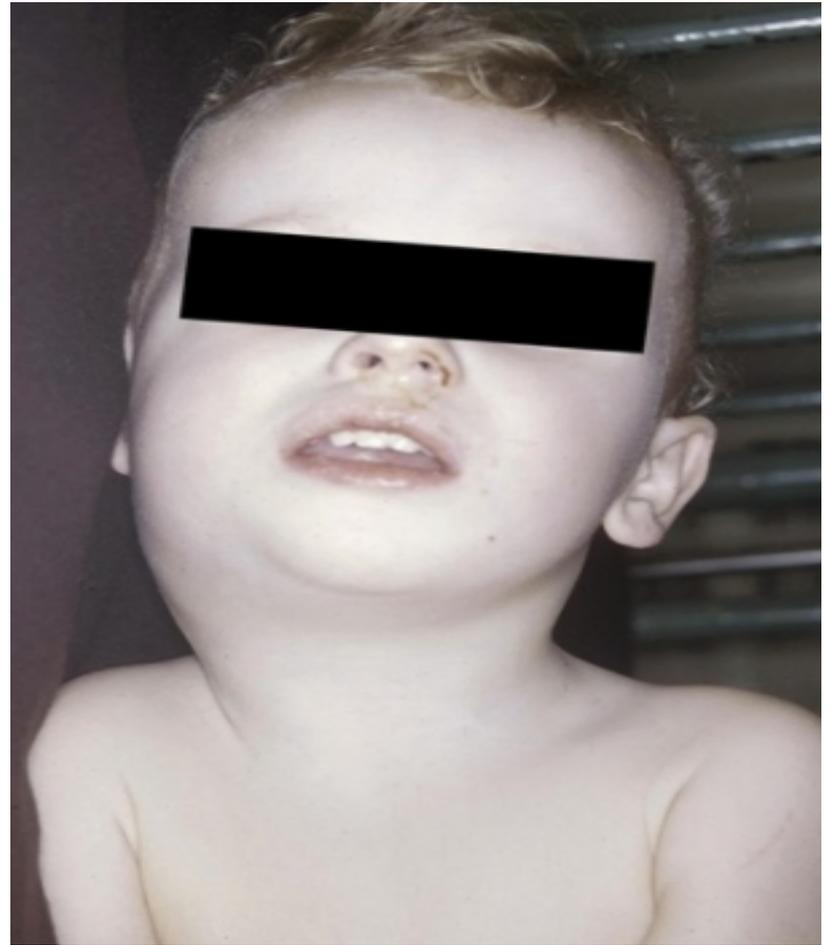
ETIOLOGI:

- INFEKSI GIGI
- ISPA
- INFEKSI KELENJAR SALIVA
- INFEKSI TELINGA TENGAH
- INFEKSI SINUS PARANASAL
- INFEKSI KELENJAR TIROID
- INFEKSI KELENJAR PAROTIS
- INFEKSI RONGGA MULUT LAIN

Gejala Umum Abses Leher

- Swelling/Pembengkakan leher
- Nyeri tekan pada area infeksi
- Hiperemis
- Masa fluktuatif
- Demam
- Leukocytosis

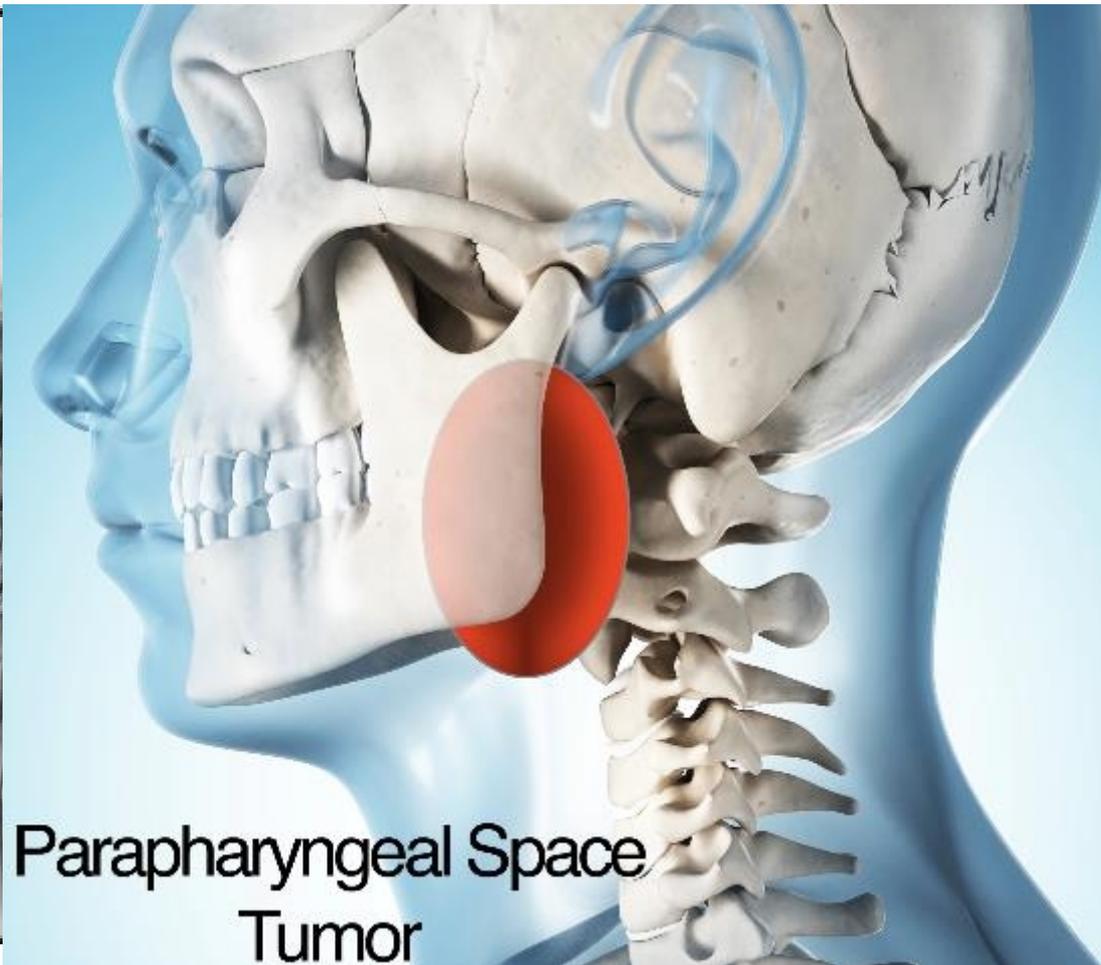
ABSES PARAFARING



RUANG PARAFARING

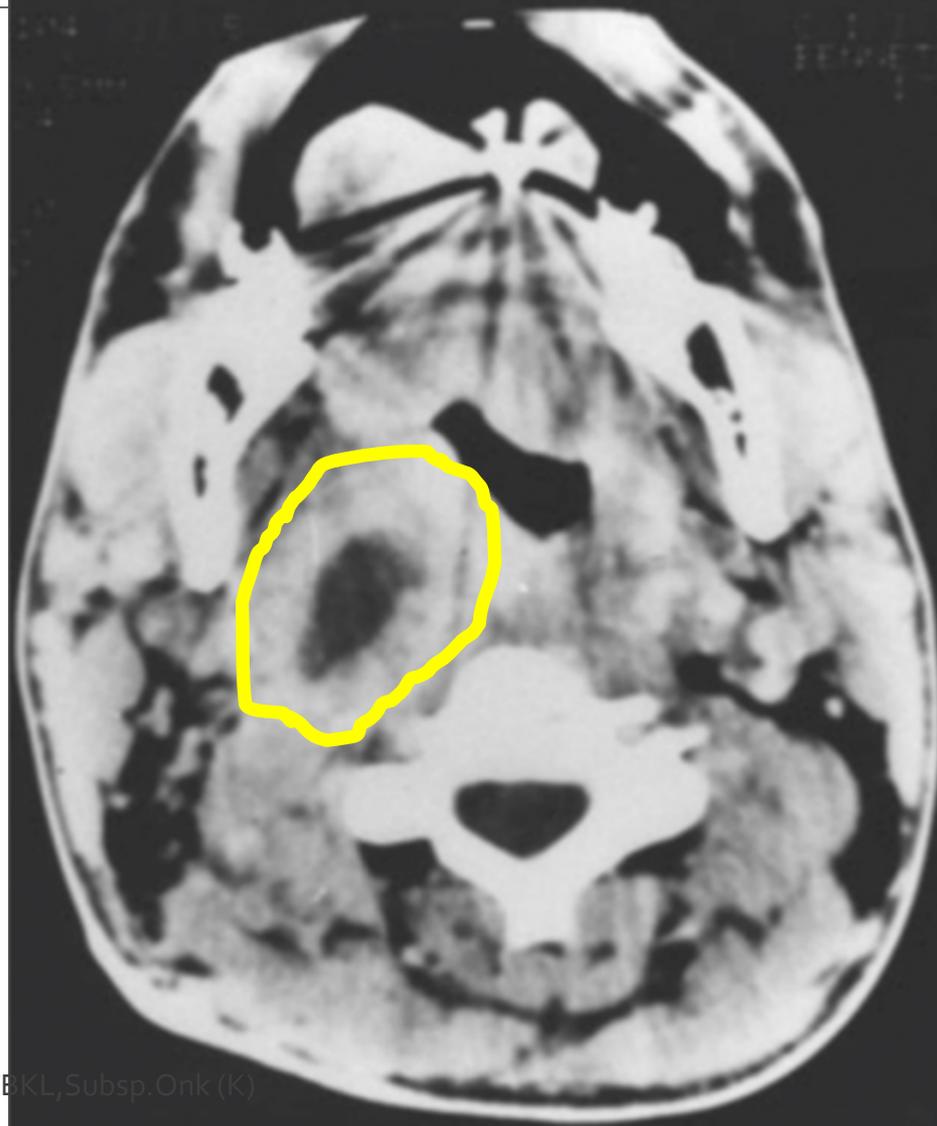
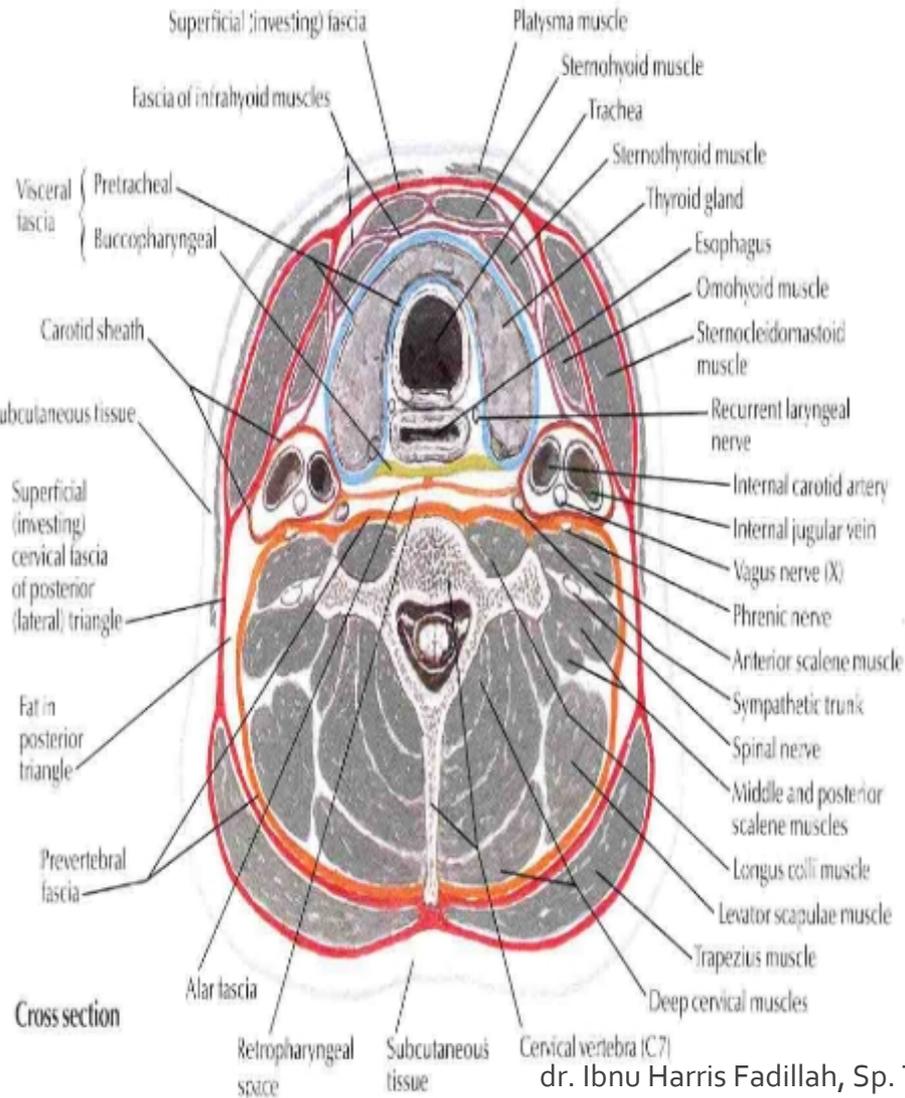
- BERBENTUK PIRAMIDA TERBALIK
- DASARNYA BASIS KRANII DAN PUNCAKNYA KORNU MAYUS OS. HYOID
- TERBAGI ATAS RUANG **PRE STYLOID** DAN **POST STYLOID**

RUANG PARAFARING



Parapharyngeal Space
Tumor

Parapharyngeal space



Parapharyngeal Space

○ *Parapharyngeal Space Infection :*

Merupakan infeksi sekunder Tonsil dan gigi

Gejala : trismus, pain, dysphagia, kaku leher,
“Hot Potato Voice”

Batasan : anterior dari carotid sheath
medial dari m. pterygoid
lateral dari tonsil
basisnya pada skull base
apex pada Hyoid bone

ABSES PARAFARING

TATALAKSANA :

- MEDIKAMENTOSA : ANTIBIOTIK
CEFALOSPORIN + METRONIDAZOL
- INSISI ABSES : MOSHER INSISI

KOMPLIKASI :

- PERLUASAN INFEKSI SELUBUNG KAROTIS
→ MEDIASTINUM
- RUPTUR KAROTIS

Parapharyngeal space

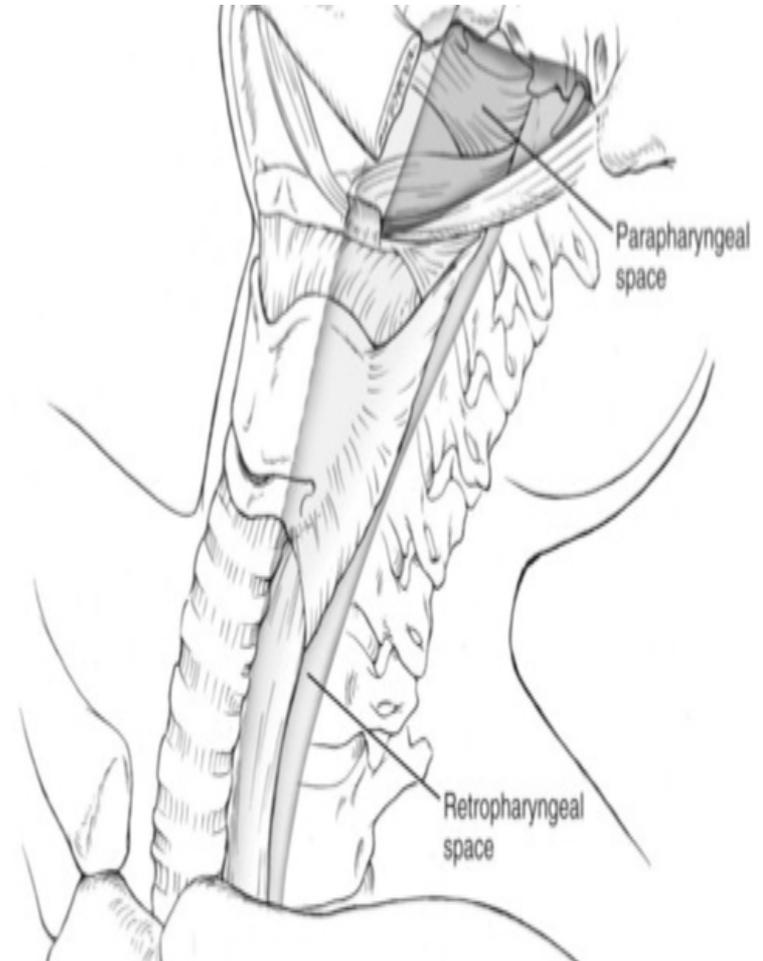
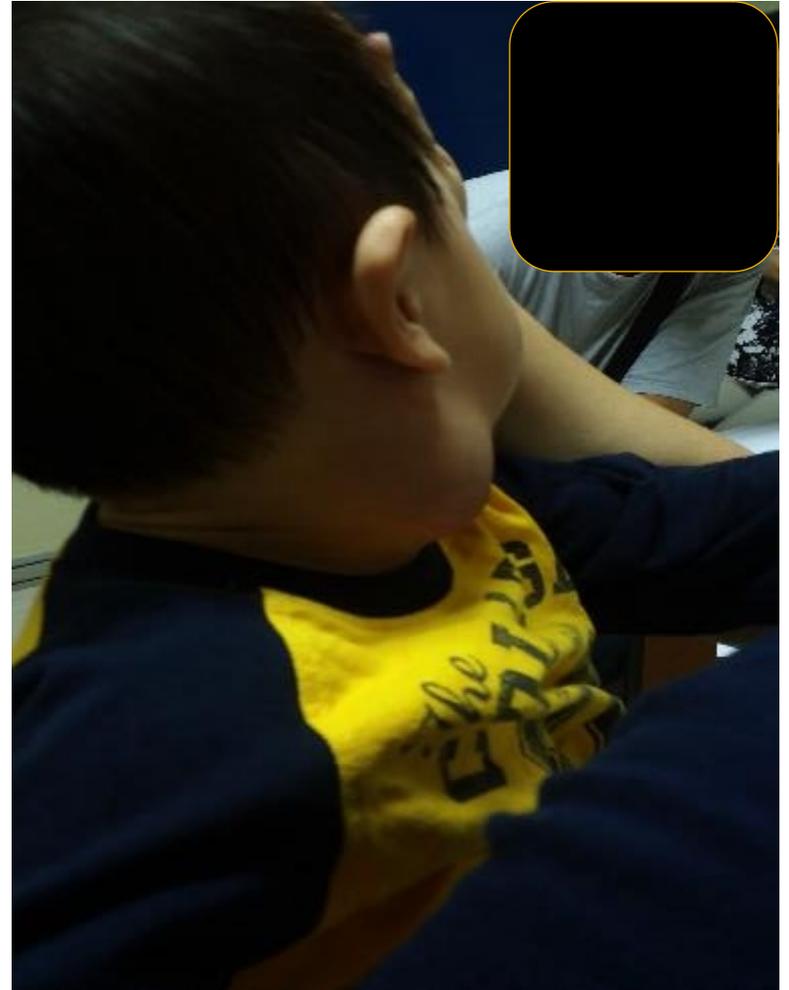


Figure 77-4 A child with the characteristic swelling and neck positioning associated with parapharyngeal space abscess. *Dr. Ibnu Harris Fadillah, Sp. THTBKL, Subsp. Onk (K)*

Parapharyngeal abscess



PRESTYLOID vs POST STYLOID

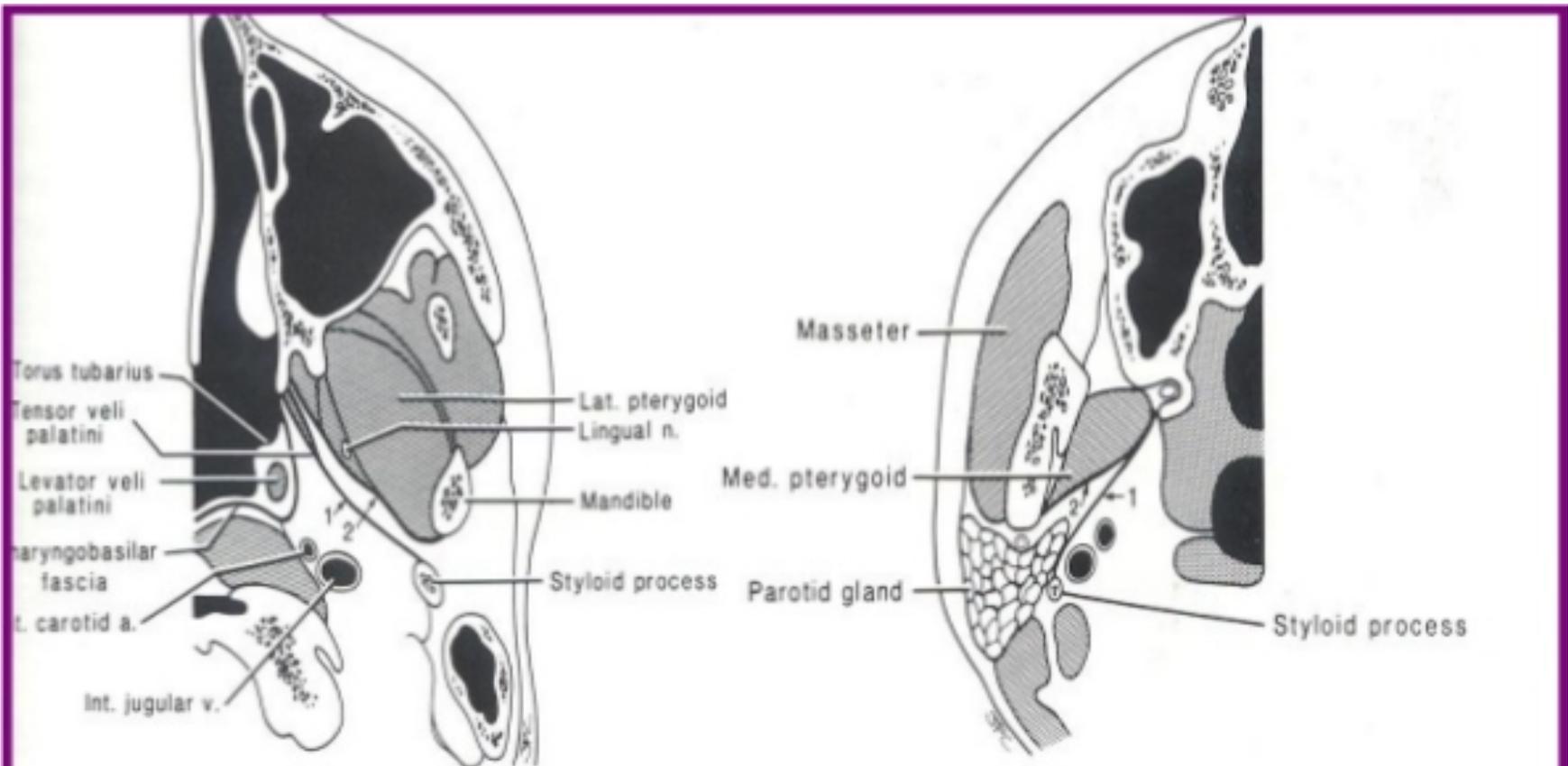


Fig. 2. **Left.** Axial section of the parapharyngeal space at the level of the nasopharynx. 1 = fascial layer from the tensor veli palatini muscle to the styloid process; 2 = medial pterygoid fascia. **Right.** Lower section of the parapharyngeal space. The parotid gland is seen protruding into the prestyloid compartment. 1 = tensor veli palatini fascia; 2 = medial pterygoid fascia.

PRESTYLOID vs POST STYLOID

RUANG PRESTYLOID

- Jaringan Lemak (Adipose)
- Kelenjar Parotis pars Retromandibular
- Kelenjar Limfe (Limf Node)

- Arteri karotis Interna
- Vena Jugularis
- Symphatetic Chain
- Cranial Nerve IX - XII
- Kelenjar Limfe

RUANG POSTSTYLOID

Prestyloid & Poststyloid

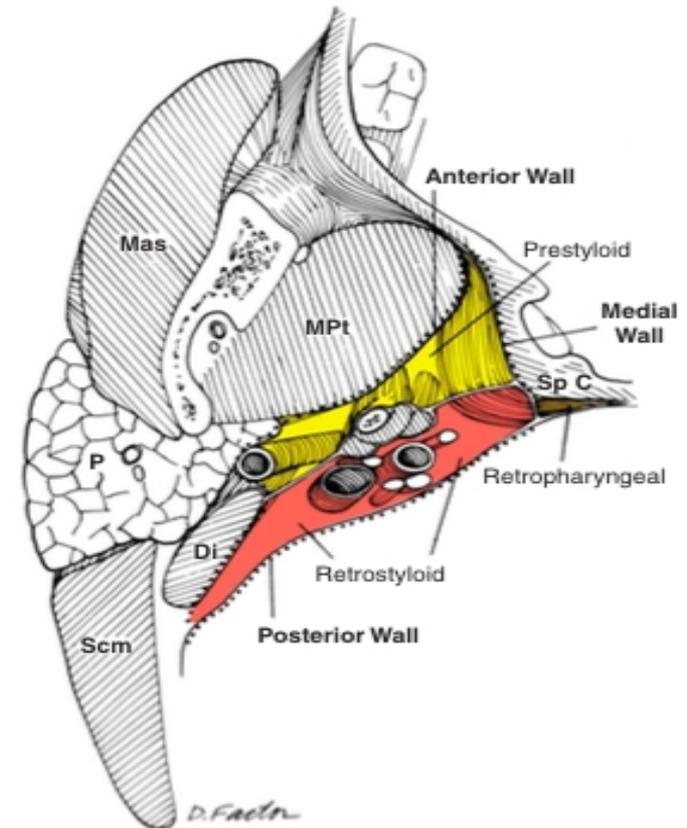
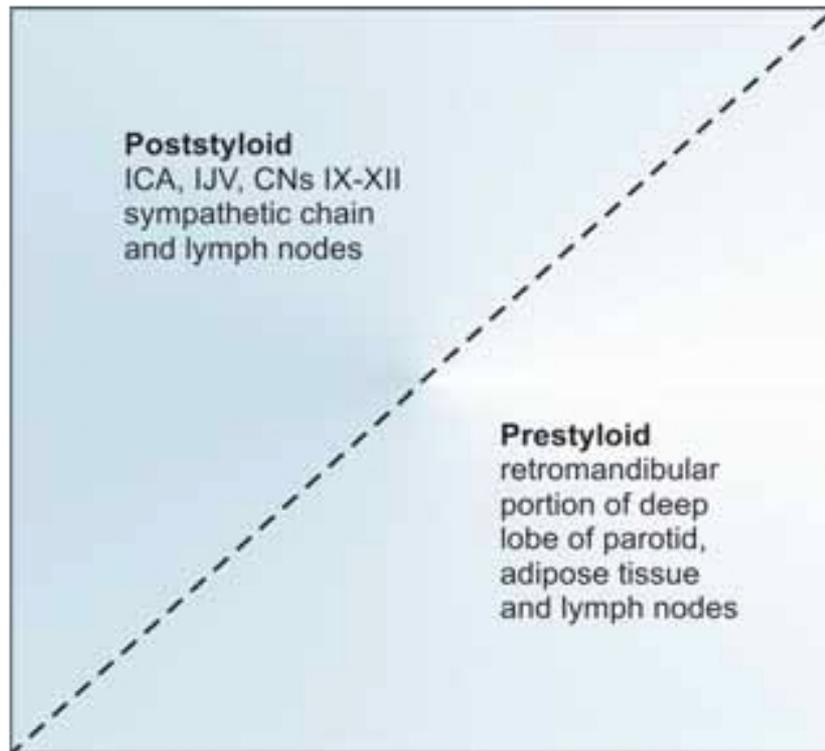
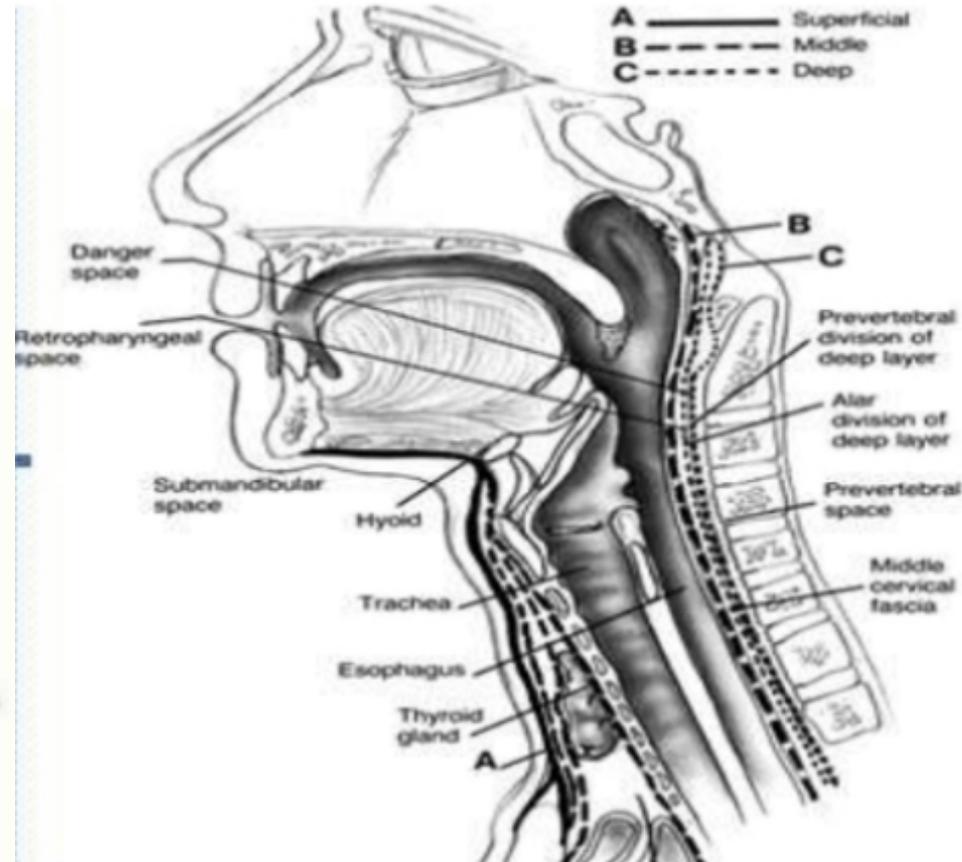
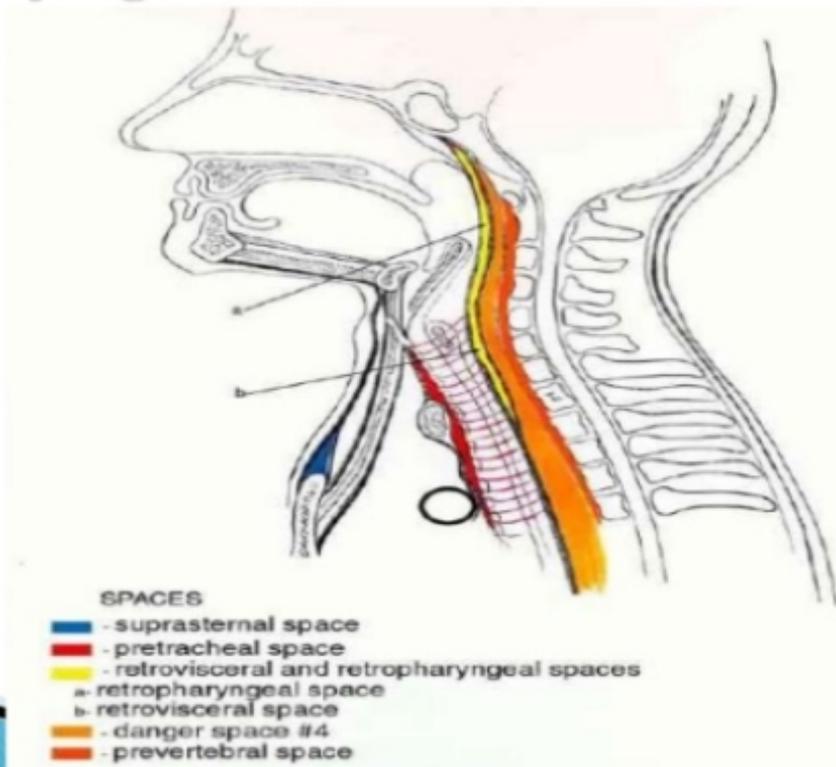


Figure 21-1. Anatomic borders of the parapharyngeal space (area outlined by dots). *Di*, Digastric muscle; *Mas*, masseter muscle; *Mpt*, medial pterygoid muscle; *P*, parotid gland; *Scm*, sternocleidomastoid muscle; *Spc*, superior constrictor muscle. (Courtesy of the Mayo Foundation, Rochester, Minn.)

Ruang potensial yang dibatasi oleh Panjang leher

Ruang Leher Dalam yg dbatasi panjang leher



ABSES RETROFARING

- SERING TERJADI PADA ANAK DENGAN USIA < 5 TAHUN

RUANG RETROFARING MASIH TERISI OLEH KELENJAR LIMFE

- ETIOLOGI : INFEKSI PADA RUANG RETROFARING AKIBAT TRAUMA, ISPA, LIMFADENITIS, TBC

RETROPHARYNGEAL ABSCESS

○ *Retropharyngeal space abscess*

Infeksi Retropharyngeal limfatik drain →
iritasi Fascia prevertebra = meningismus

Batasan : posterior dari dinding pharyngeal
anterior dari prevertebra fascia

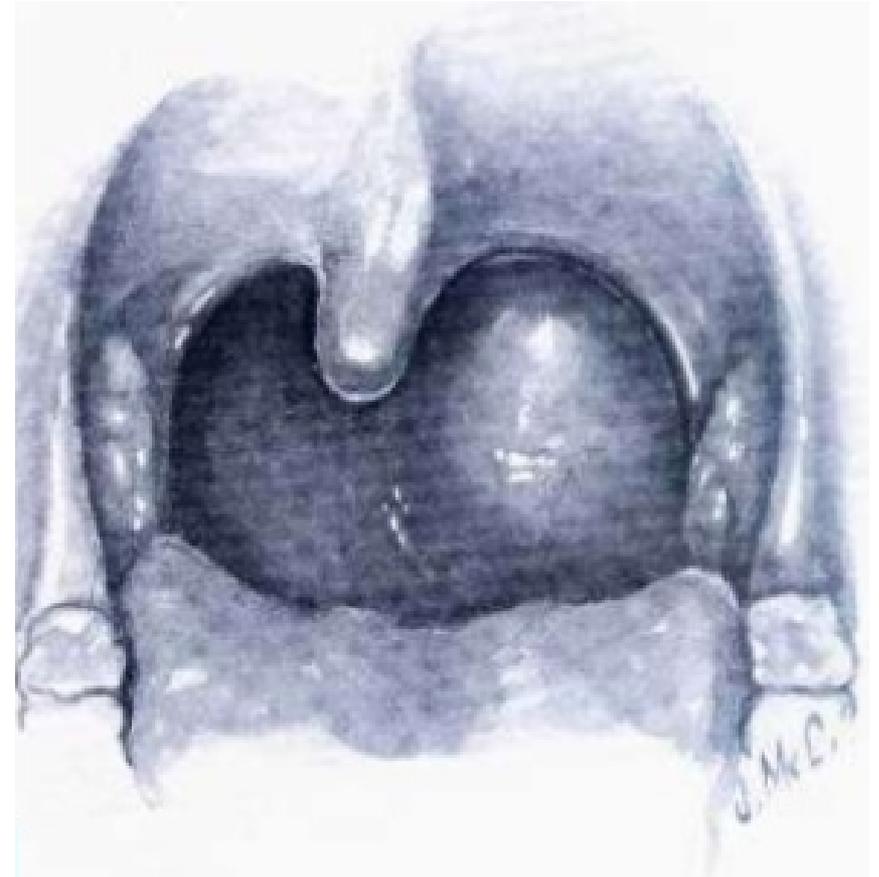
Gejala klinis : Dinding posterior pharynx terdorong
ke depan, dysphagia, "hot potato voice"
Dapat meluas ke mediastinum

ABSES RETROFARING

GEJALA DAN TANDA :

- NYERI MENELAN ATAU ODINOFAGIA
- DEMAM, KAKU LEHER, NYERI
- STRIDOR → NGOROK → SUMBATAN JALAN NAFAS ATAS
- TAMPAK PENONJOLAN PADA DINDING POSTERIOR FARING

ABSES RETROFARING



Retropharyngeal space abscess

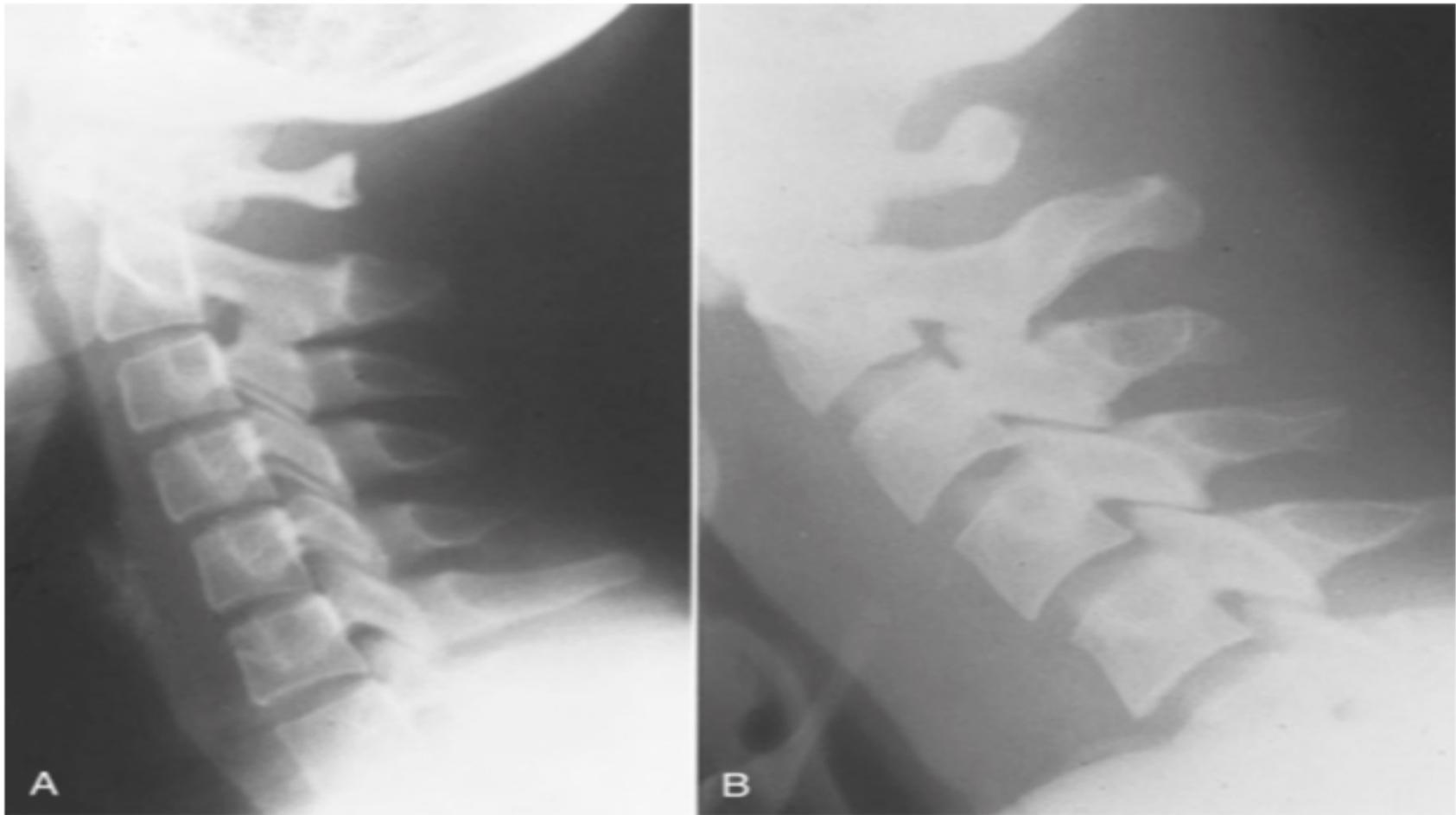
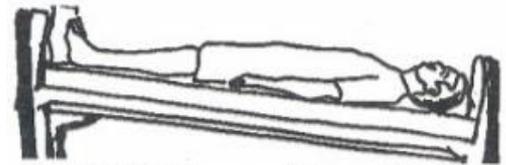


Figure 77-6 A, Lateral soft tissue radiograph of the neck demonstrating the normal thickness of soft tissue overlying the cervical vertebra. B, Retropharyngeal abscess demonstrating bulging of the retropharyngeal soft tissue.

ABSES RETROFARING

TATALAKSANA :

- Antibiotik dosis tinggi parenteral
- Evakuasi abses dgn pungsi dan drainase
- POSISI TRENDELENBURG →
Mencegah aspirasi jalan nafas

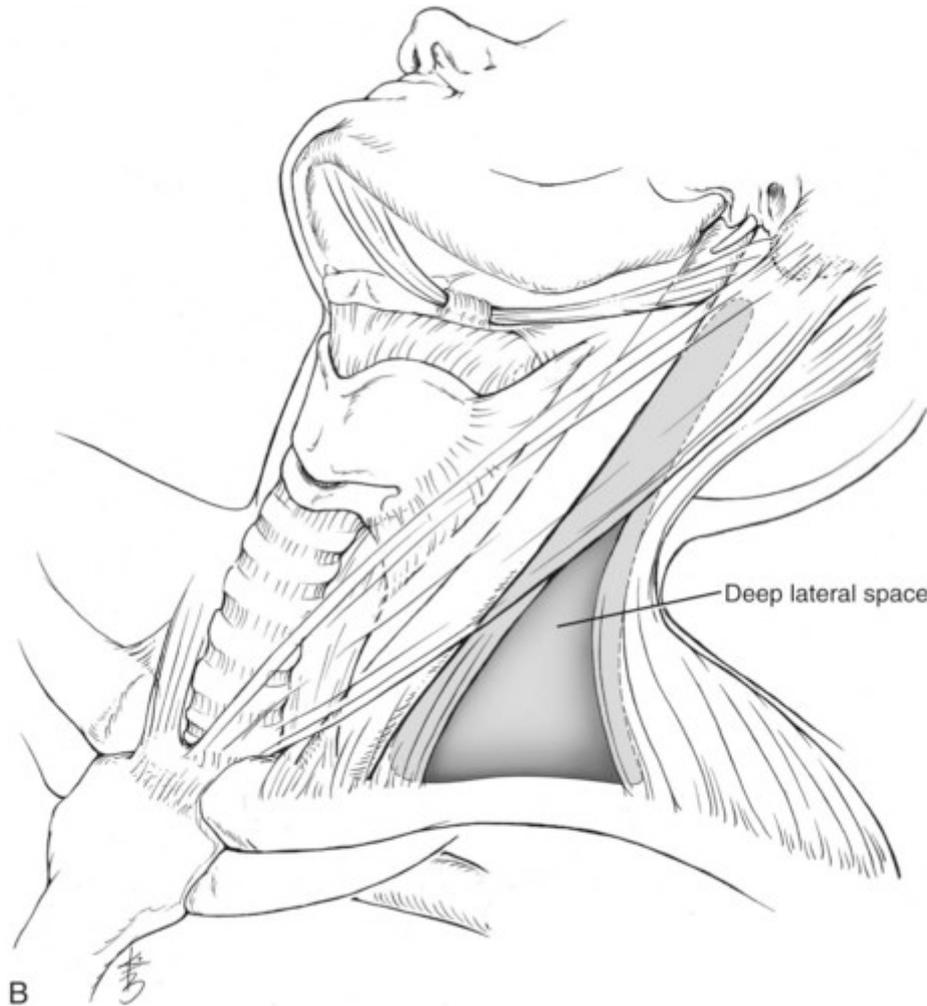


Gambar 7.3 Cara posisi trendelenburg
Sumber: Belland dan Wells 1986

KOMPLIKASI :

- Infeksi meluas
- Mediastinitis
- OBSTRUKSI JALAN NAFAS → ASPIRASI

Deep lateral space



Deep lateral space

○ *Deep lateral space/compartement infection*

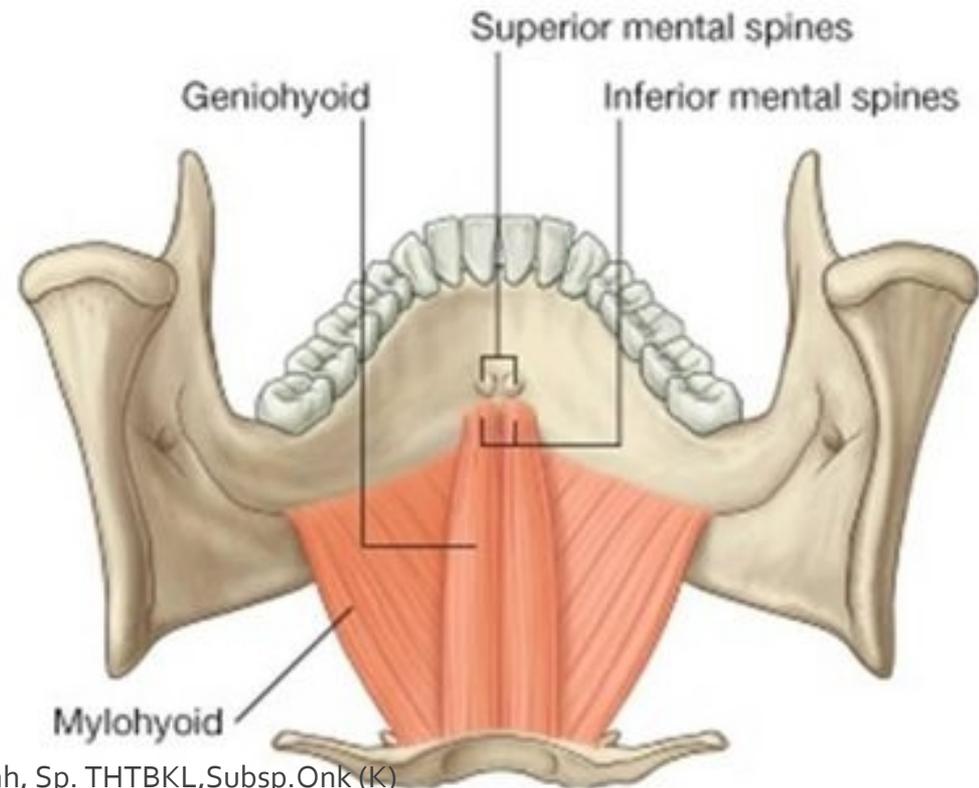
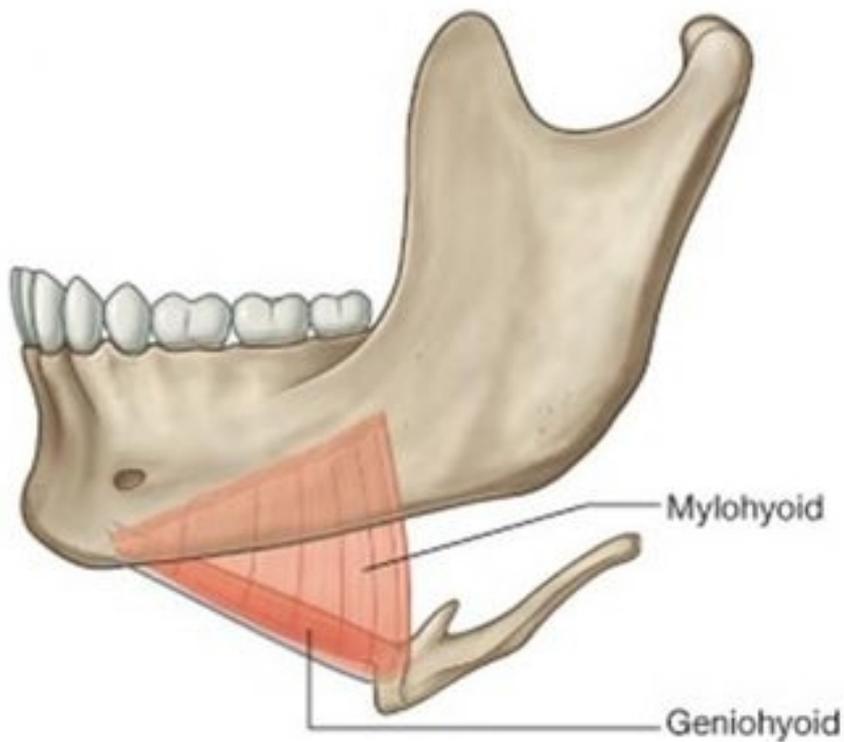
Bakteri penyebab berasal dari upper aerodigestive track → odontogenik

Trauma leher / benda asing esofagus/intubasi →
laserasi mukosa → penyebaran bakteri ke deep
neck space → abses

Dapat meluas ke mediastinum

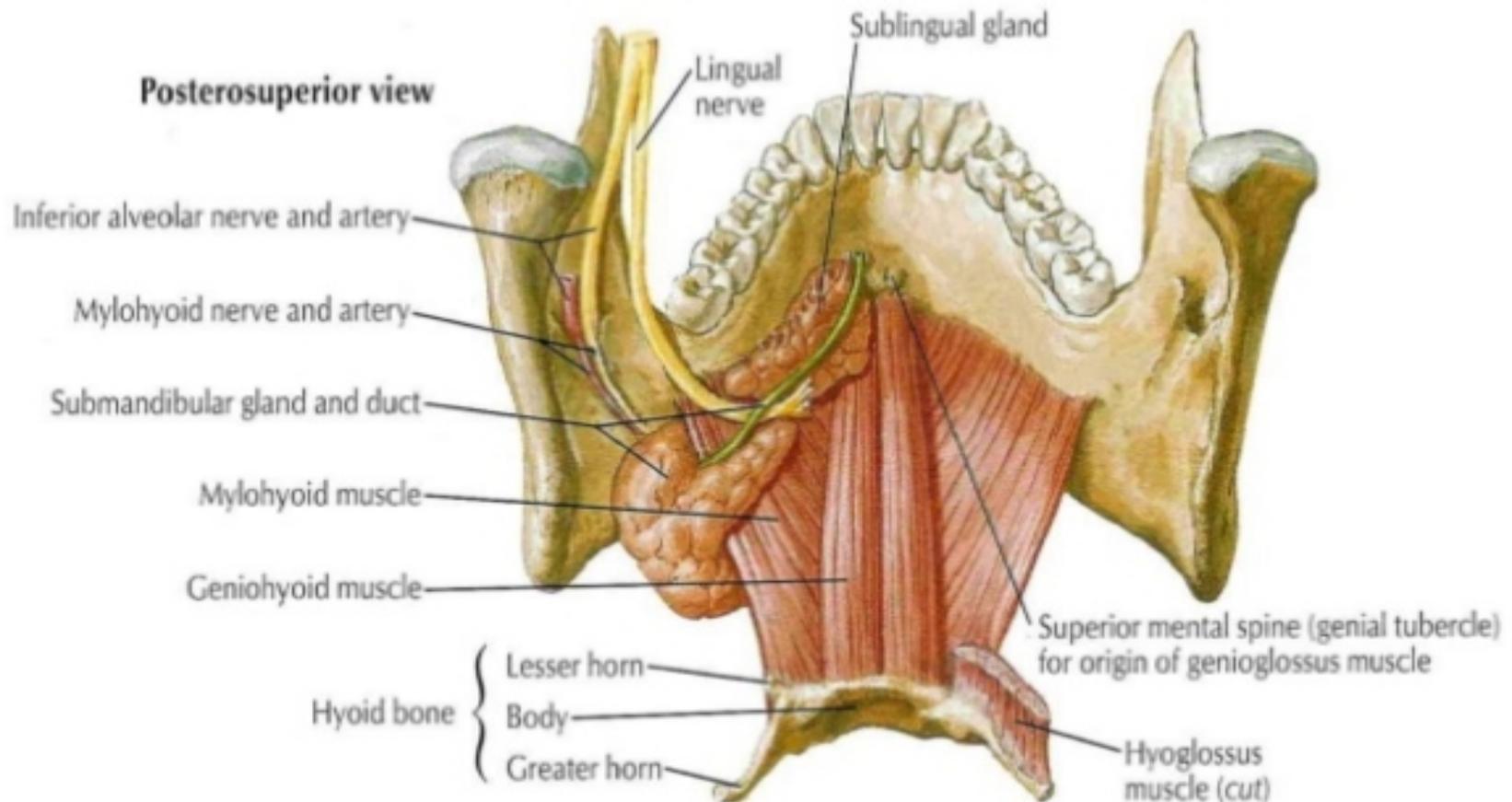
RUANG SUBMANDIBULA

- Mylohyoid Muscle membagi Ruang Superior dan inferior



RUANG SUBMANDIBULA

Ruang submandibula



Abces Submental-Submandibula

○ Abses Submental-Submandibular space

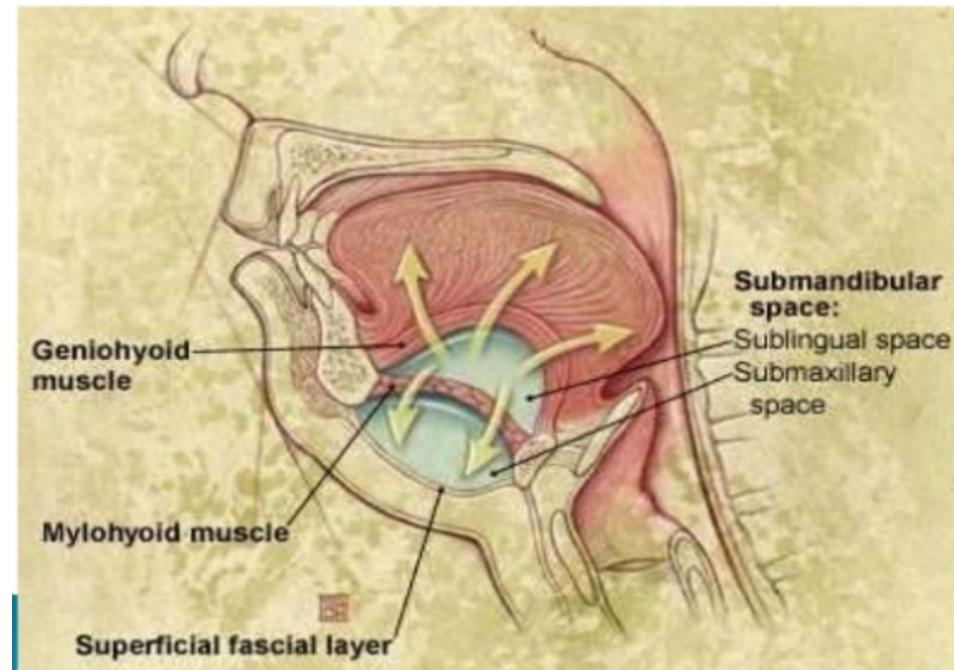
Infeksi pada submandibular space

→ Obstruksi Submandibular Duct

Infeksi Submental → Odontogenik, periapical infection molar#1

Ruang Submandibula

- MUSKULUS MILOHYOID MEMBAGI RUANG SUBMANDIBULA MENJADI :
 - > SUB LINGUAL
 - > SUBMAKSILA

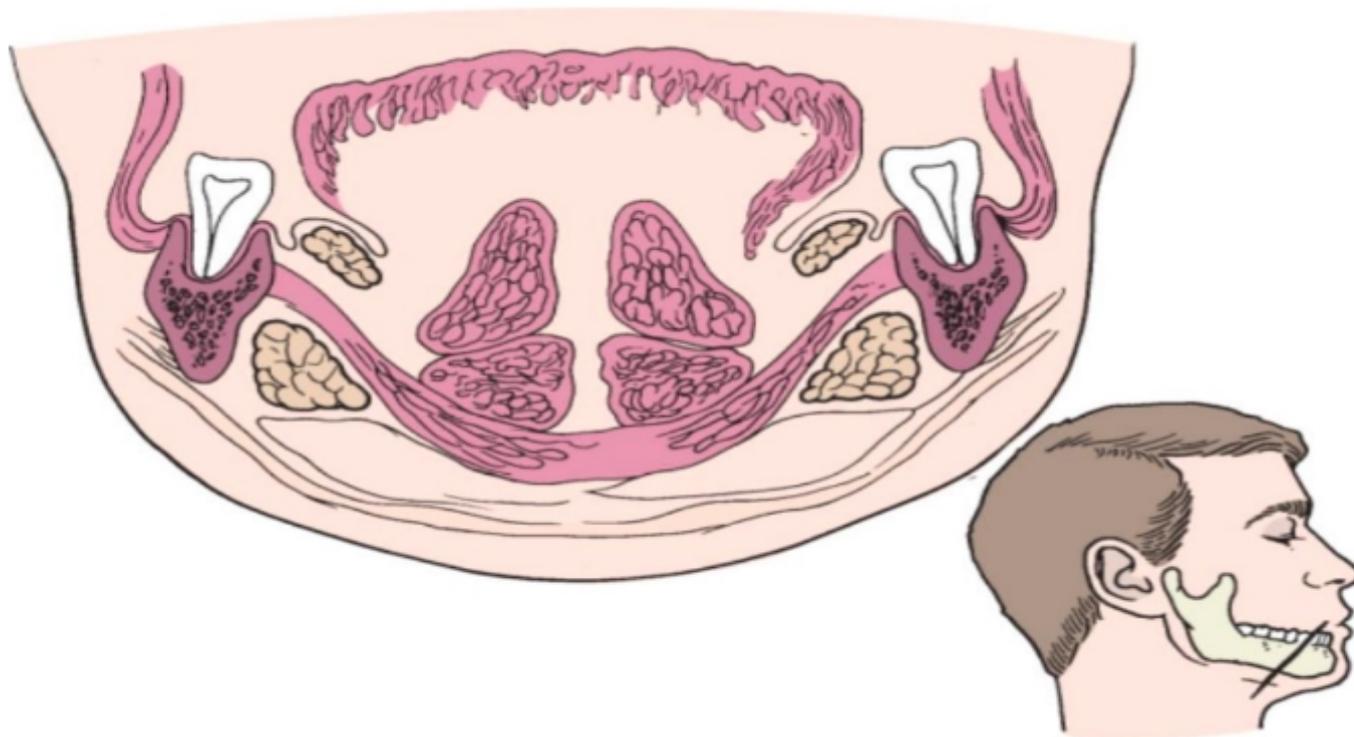


Abses ruang sublingual

- **Infeksi superior M. Mylohyoid** = Eritema dan edema ant dasar lidah dengan elevasi lidah, dysarthria, drooling.
- **Displacement Retrograde lidah** → Ludwig's Angina → mengancam jalan nafas

Abses Ruang submaksila/submental

- Infeksi Inferior M. Mylohyoid : merupakan perluasan infeksi Submandibular Gland

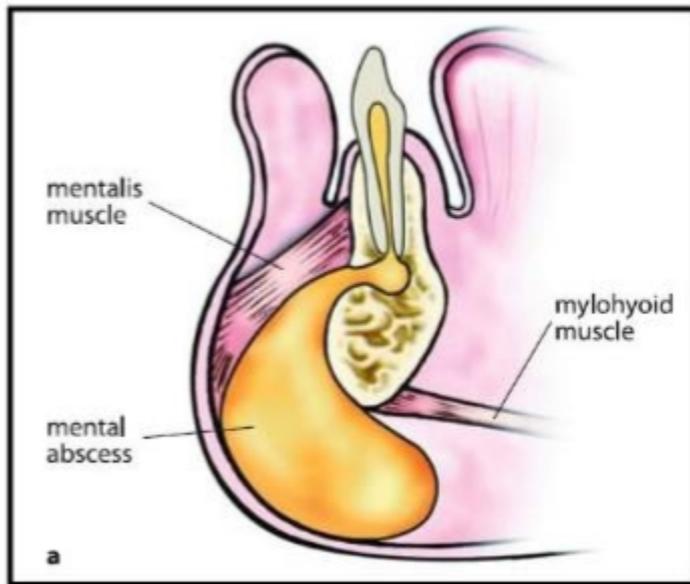


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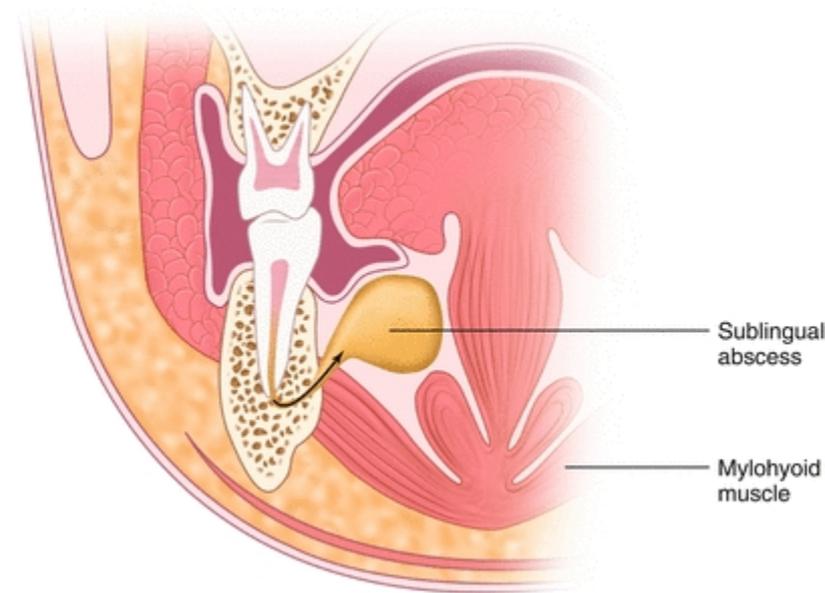
Figure 77-1 The mylohyoid sling divides the submental space into two relatively independent sites. The plane of this schematic is depicted in

Submental & Sublingual Abscesses

Submental space infection



Sublingual Abscess



INFEKSI SUBMANDIBULA (LUDWIG ANGINA/ANGINA LUDOVICI)

- INFEKSI RUANG SUBMANDIBULA SUMBER GIGI
- SUMBER INFEKSI DARI GIGI
- PEMBENGGKAKAN SELURUH RUANG SUBMANDIBULA, KERAS → BELUM ADA ABSES
- NYERI TENGGOROK DAN LEHER, DAPAT MENDORONG LIDAH KE ATAS → OBSTRUKSI JALAN NAFAS ATAS

ANGINA LUDOVICI



ANGINA LUDOVICI

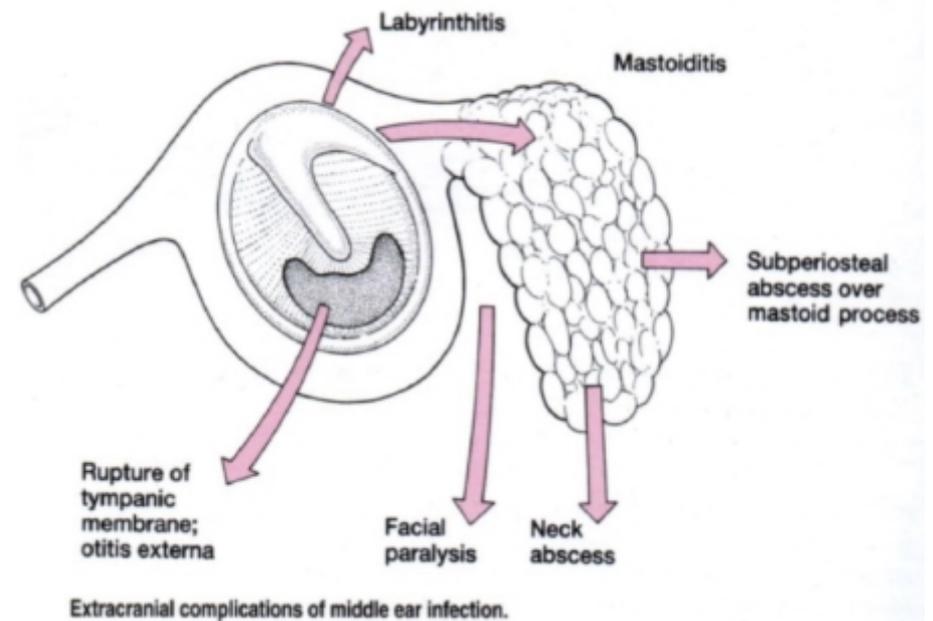
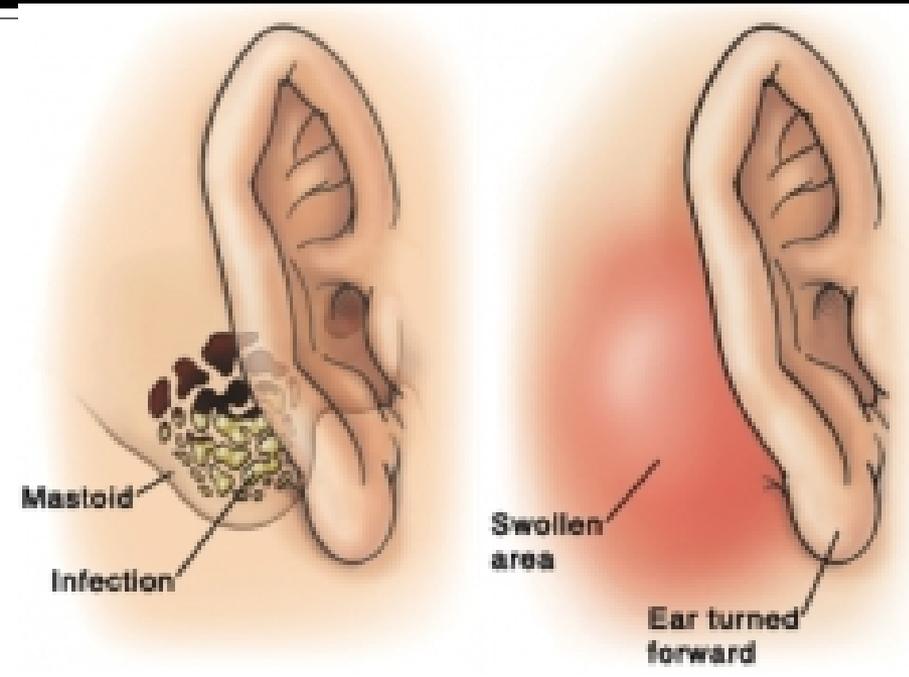
TATALAKSANA :

- MEDIKAMENTOSA → ANTIBIOTIK DOSIS TINGGI
- INSISI UNTUK MENGURANGI NYERI AKIBAT TENSION (DEKOMPRESI)
- BERPOTENSI SUMBATAN JALAN NAFAS ATAS → TRAKEOSTOMI

Tatalaksana

- Airway → Trakeostomi
- Pembedahan → Drainasi abses
- Antibiotik IV sesuai kultur kuman, pertimbangkan AB kuman anaerob → metronidazole
- Pemeriksaan penunjang CT Scan leher dengan kontras

ABSES BEZOLD



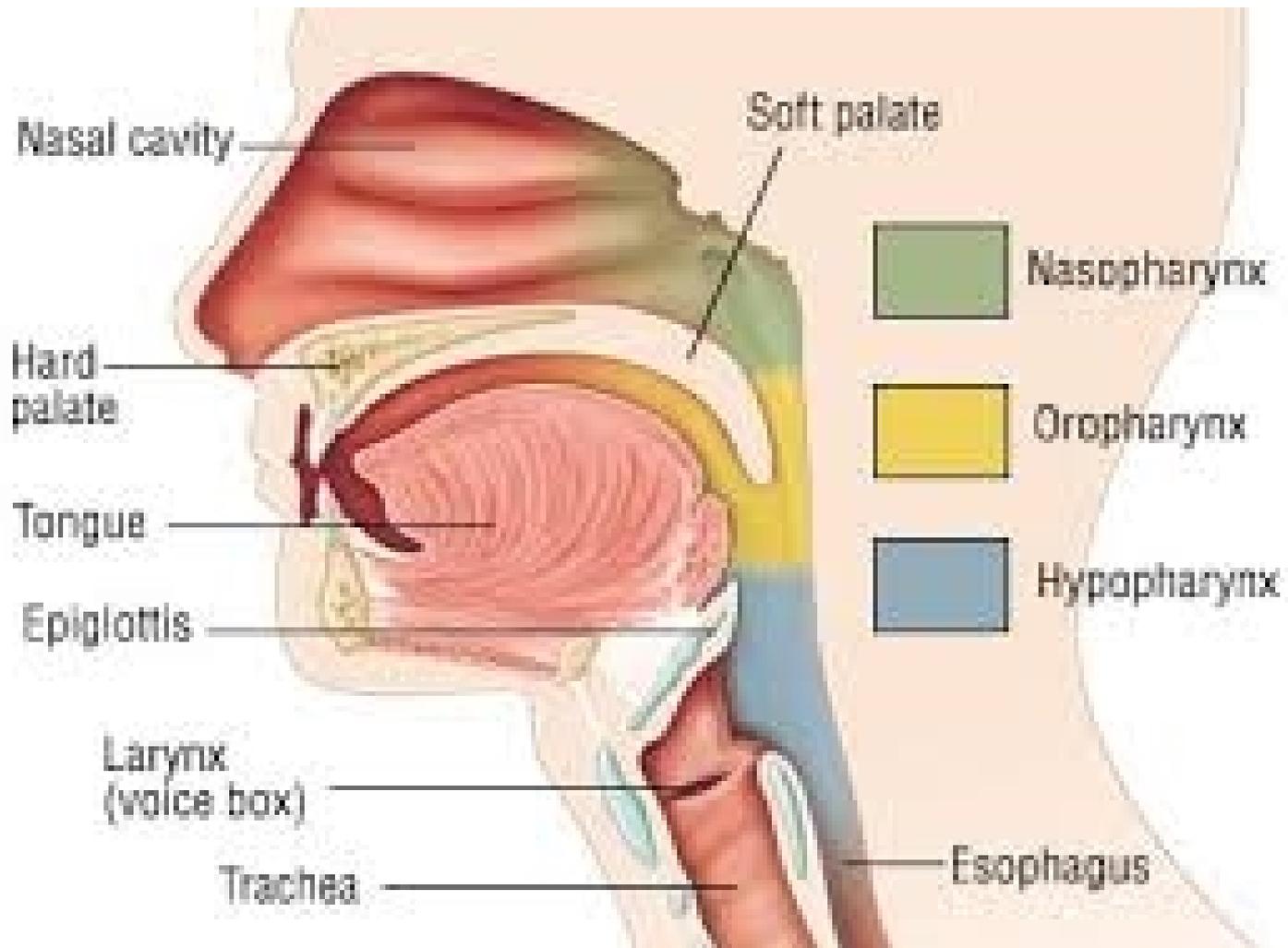
ABSES BEZOLD



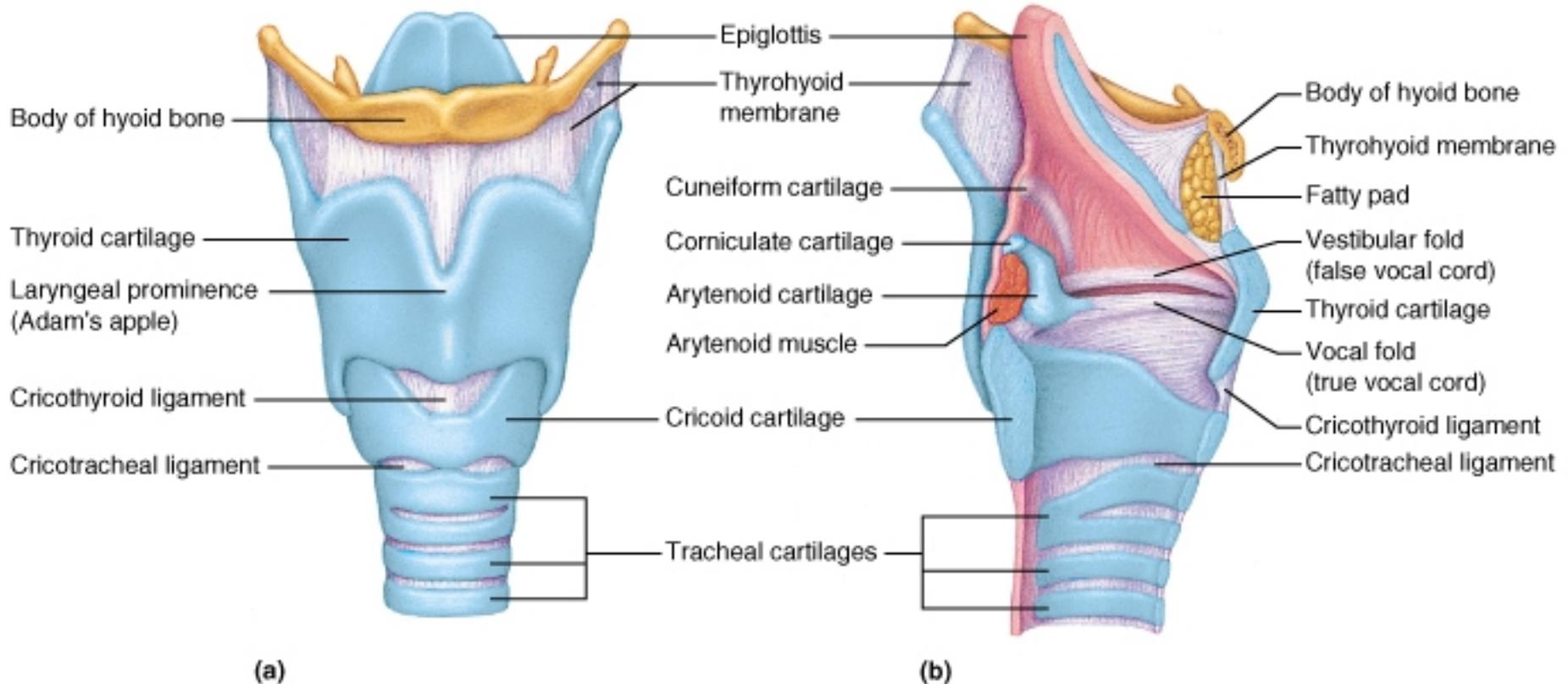
Benda Asing / Corpus Alienum

- Telinga
- Hidung
- Digestive track / Esofagus
- Airway

KONSEP UPPER AIRWAY



KONSEP UPPER AIRWAY



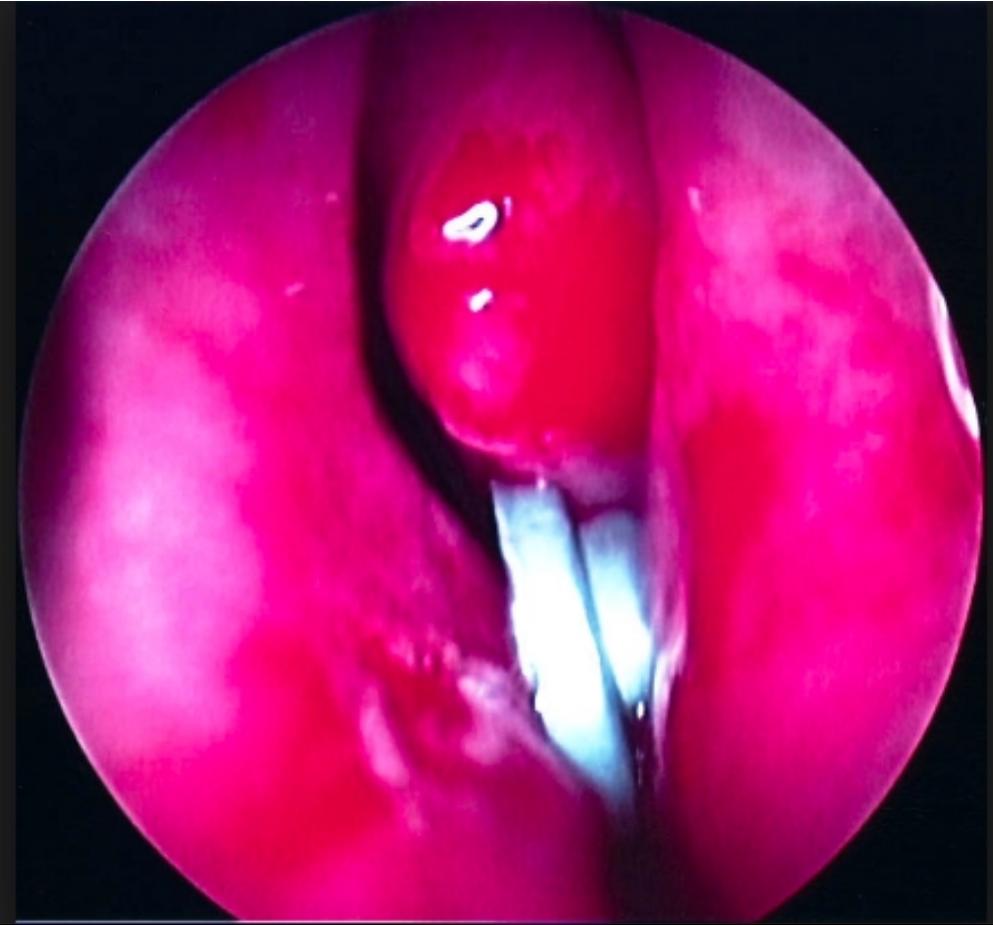
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BA Hidung



dr. Ibnu Harris Fadillah, Sp. THTBKL, Subsp. Onk (K)

BA Hidung



BA Hidung

- BA Organik : Kacang, Binatang, Kacang dapat mengembang
- Non organik : Korosif dan non korosif

Non Organik Korosif : Baterai

Non Organik Non Korosif : Plastik, Sterofoam, Busa

**“PERHATIKAN KEMUNGKINAN ASPIRASI
JALAN NAFAS”**

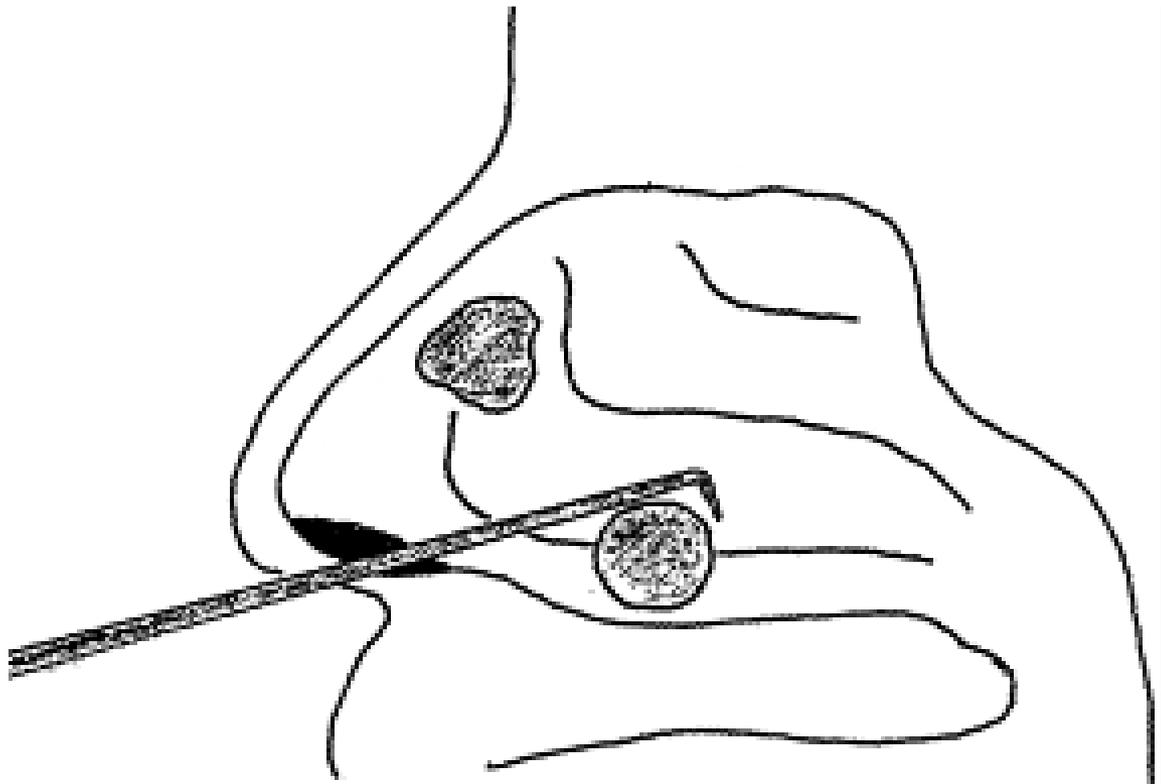
Diagnosis

“HIDUNG TERSUMBAT/PILEK SATU SISI DAN BERBAU”

Riwayat kemasukan BA dari anamnesis

Tatalaksana

○ Ekstraksi BA



Aspirasi Benda Asing Saluran Nafas

Identifikasi sumbatan jalan nafas atas atau bawah

Sumbatan jalan nafas atas : Stidor Inspirasi → memanjang

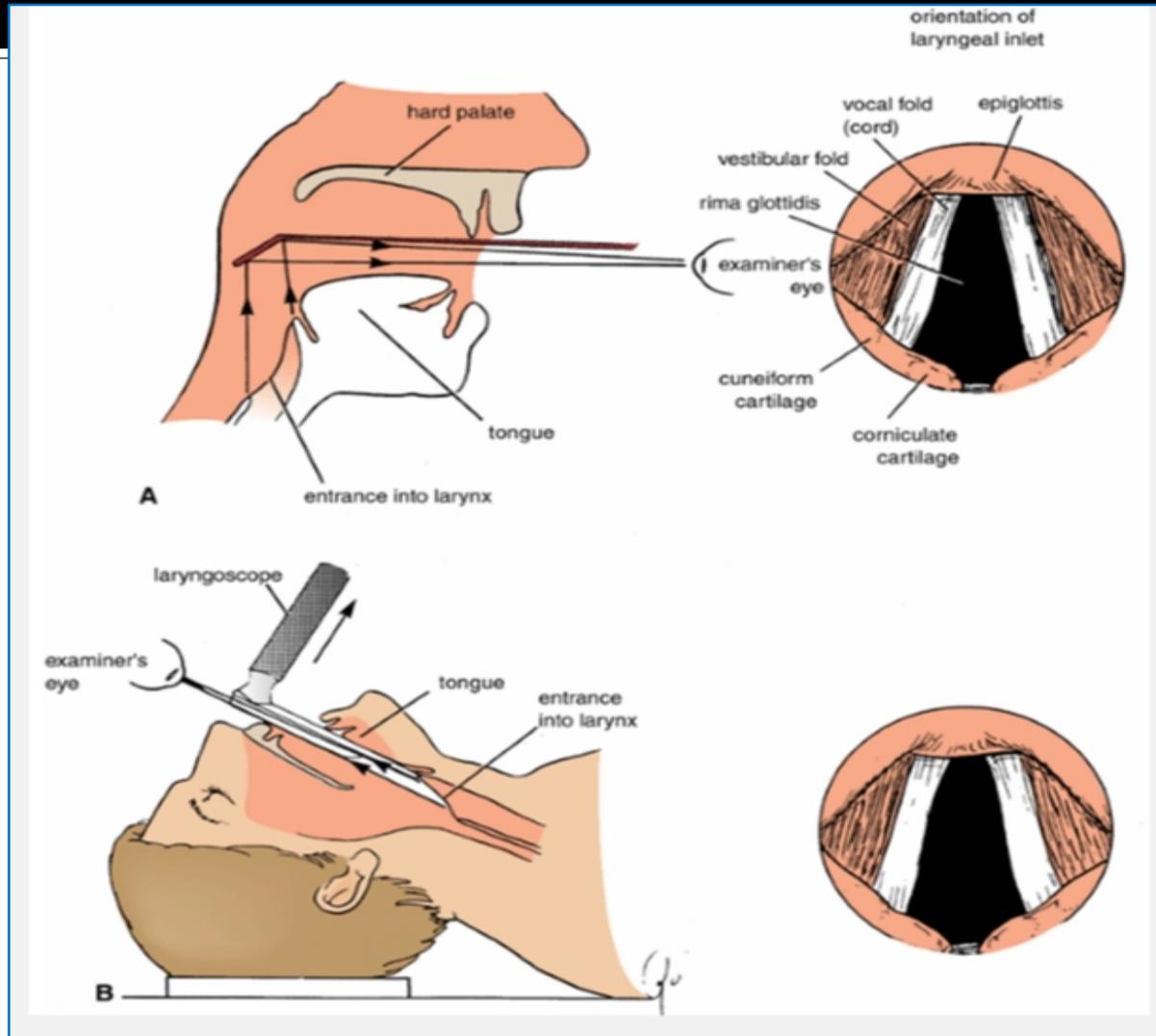
Sumbatan jalan nafas bawah : Stridor Ekspirasi → memangang/mengi

BENDA ASING SAL NAFAS



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LARINGOSKOPI DIREK/INDIREK



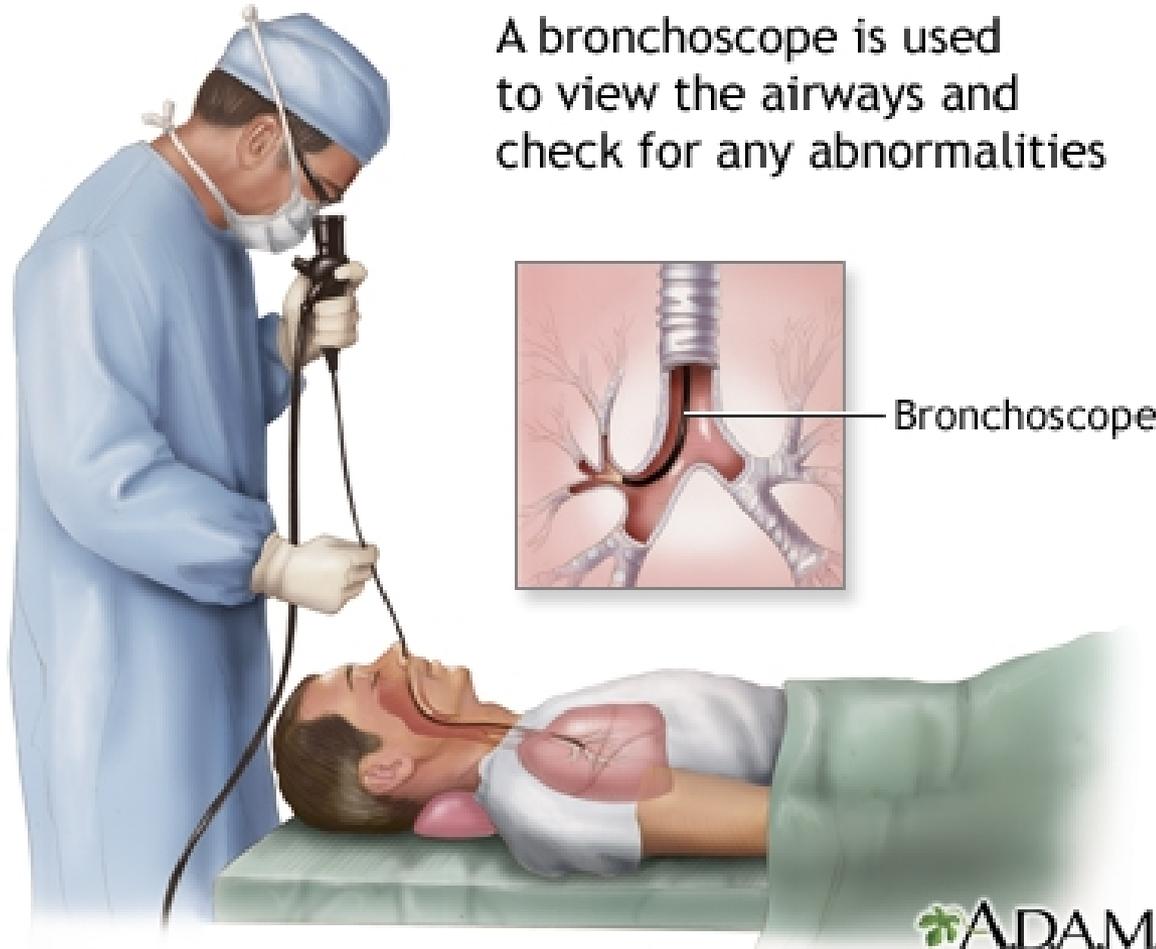
LARYNGOSCOPY



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Fiber Optik Bronkoskopi

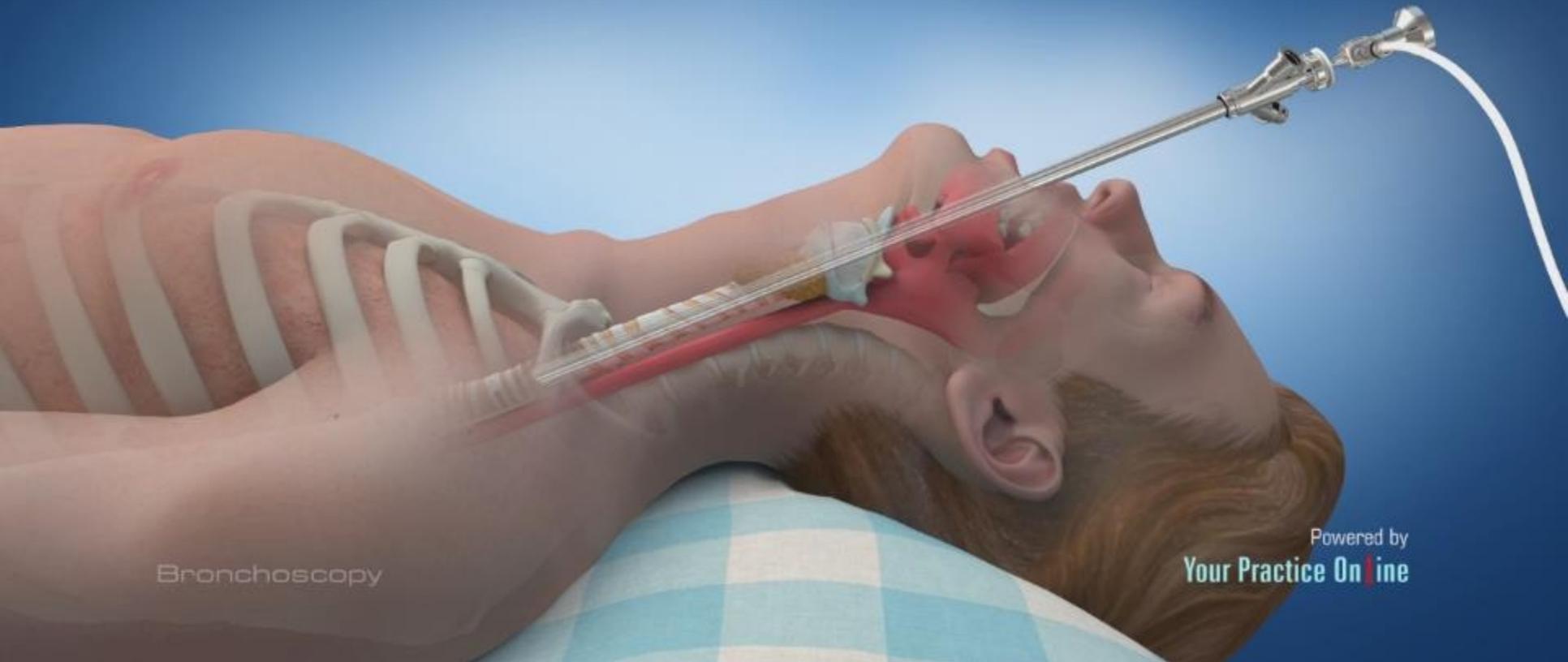
A bronchoscope is used to view the airways and check for any abnormalities



ADAM.

Rigid Bronkoskopi

Rigid bronchoscopy



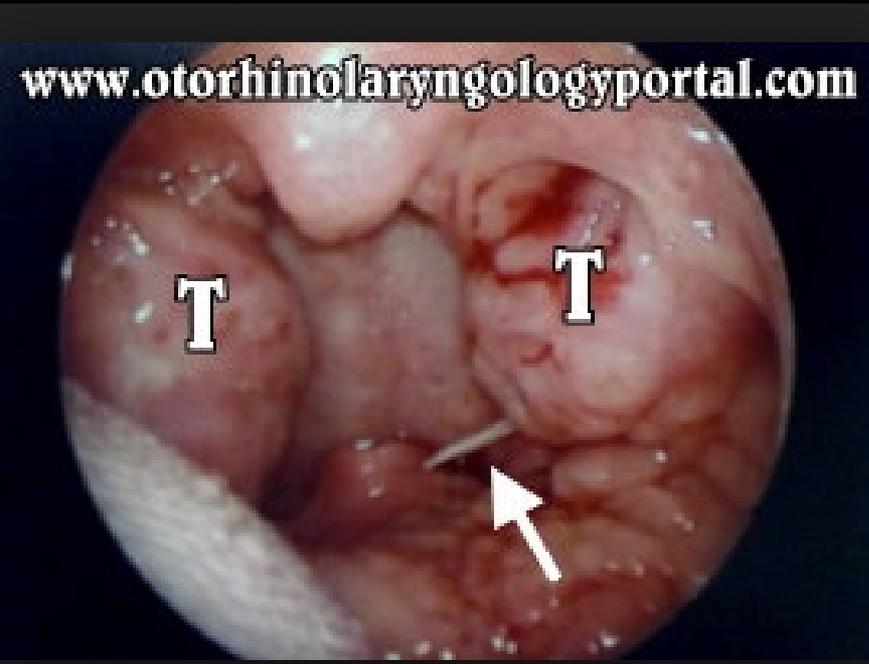
Bronchoscopy

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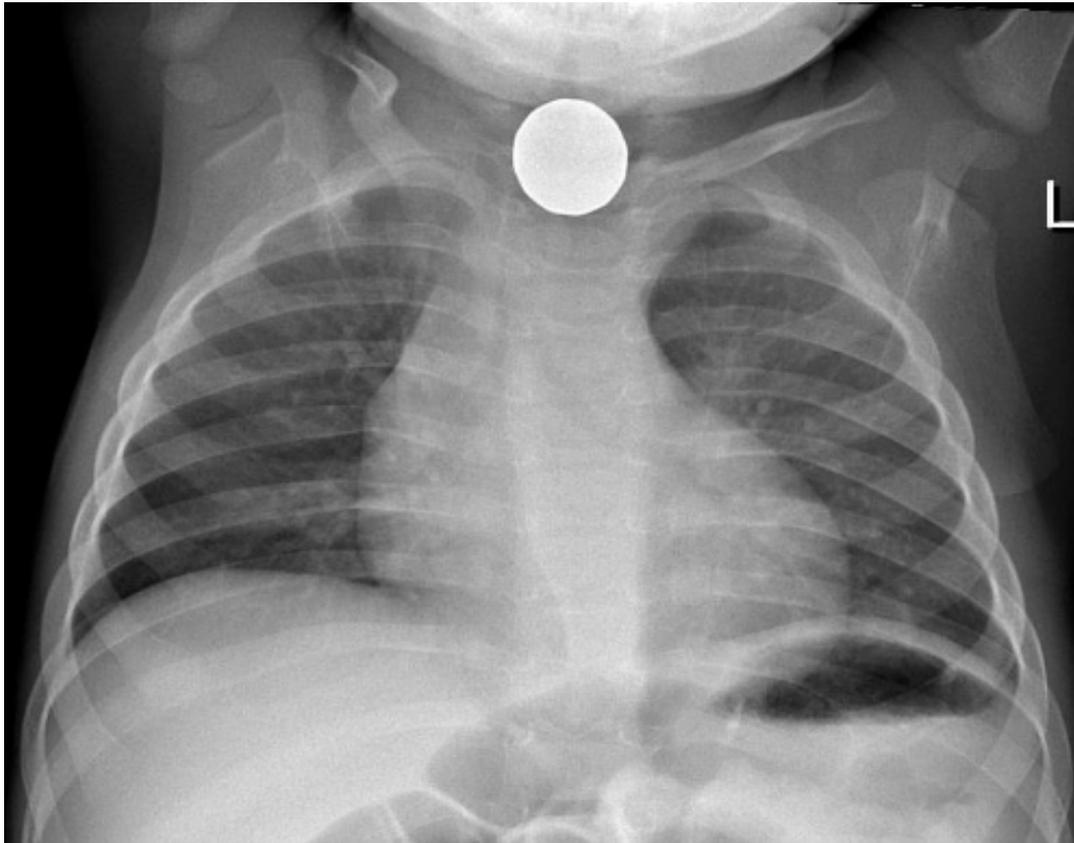
BA Digestif

- Duri Ikan
- Gigi Palsu
- Coin
- Jarum
- Daging

BA Digestif/ tulang ikan



BA Digestif/ Coin



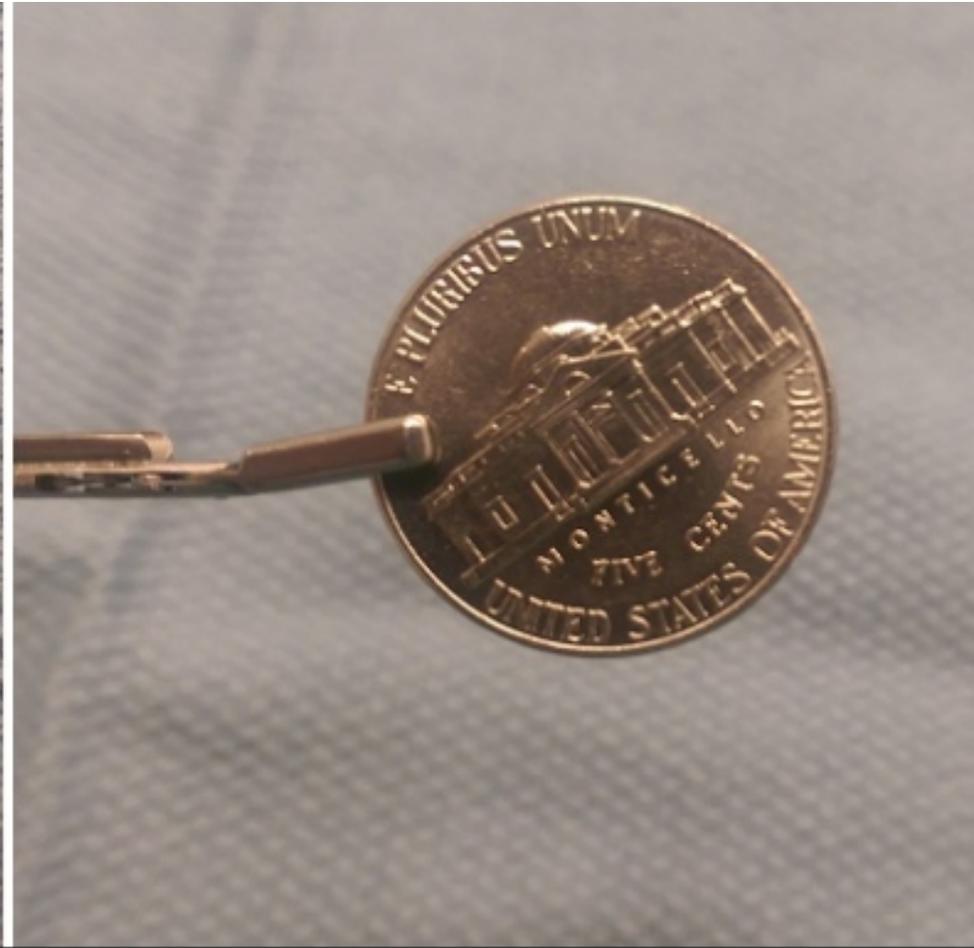
BA Digestif/ Gigi palsu



Tatalaksana

- Ekstraksi
- Laryngoscopy direct
- Esophagoscopy → ekstraksi
- Bronchoscopy → ekstraksi

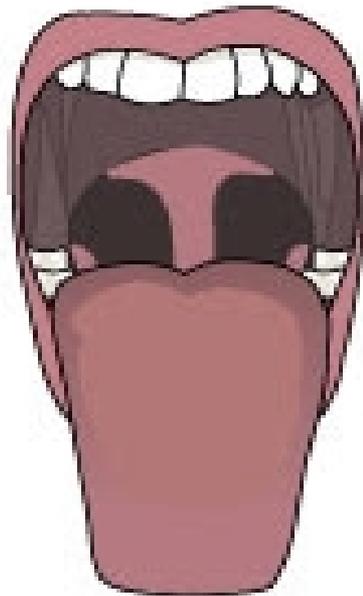
Esophagoscopy ekstraksi



The Mallampati Classification



Class 1



Class 2



Class 3



Class 4

Trakeostomi

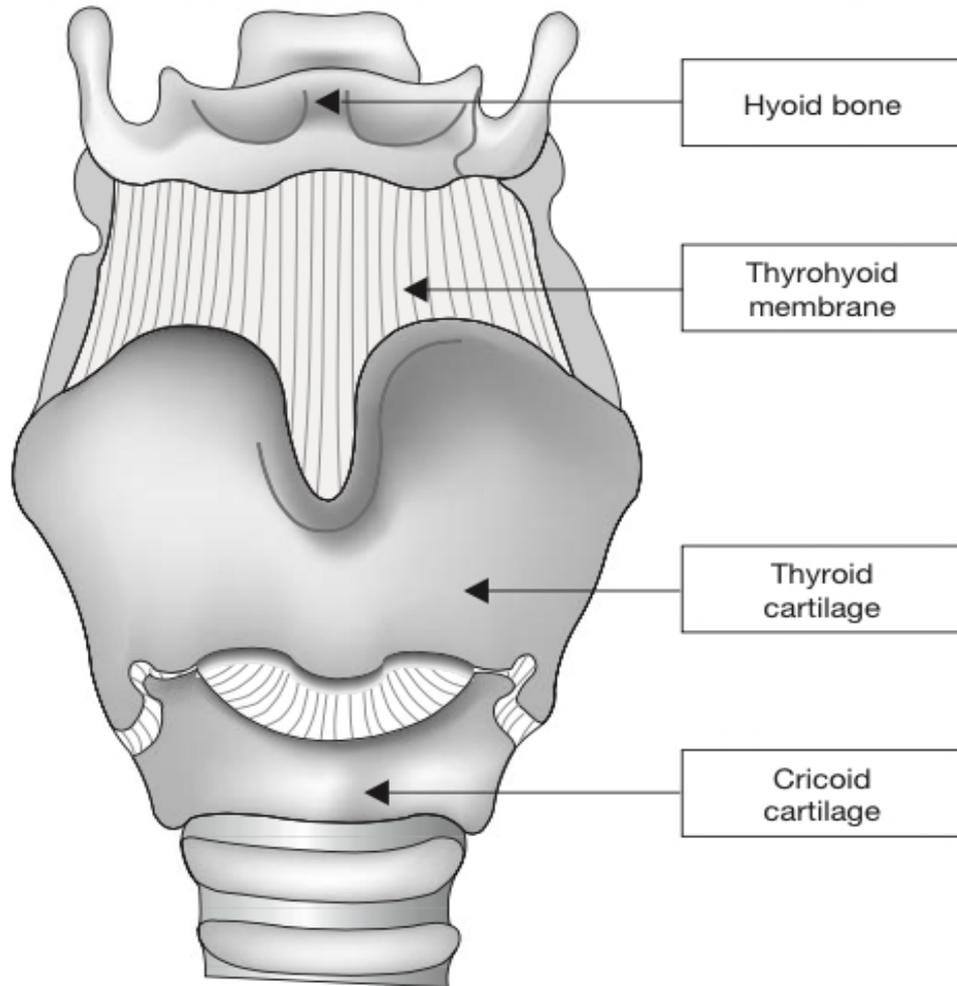
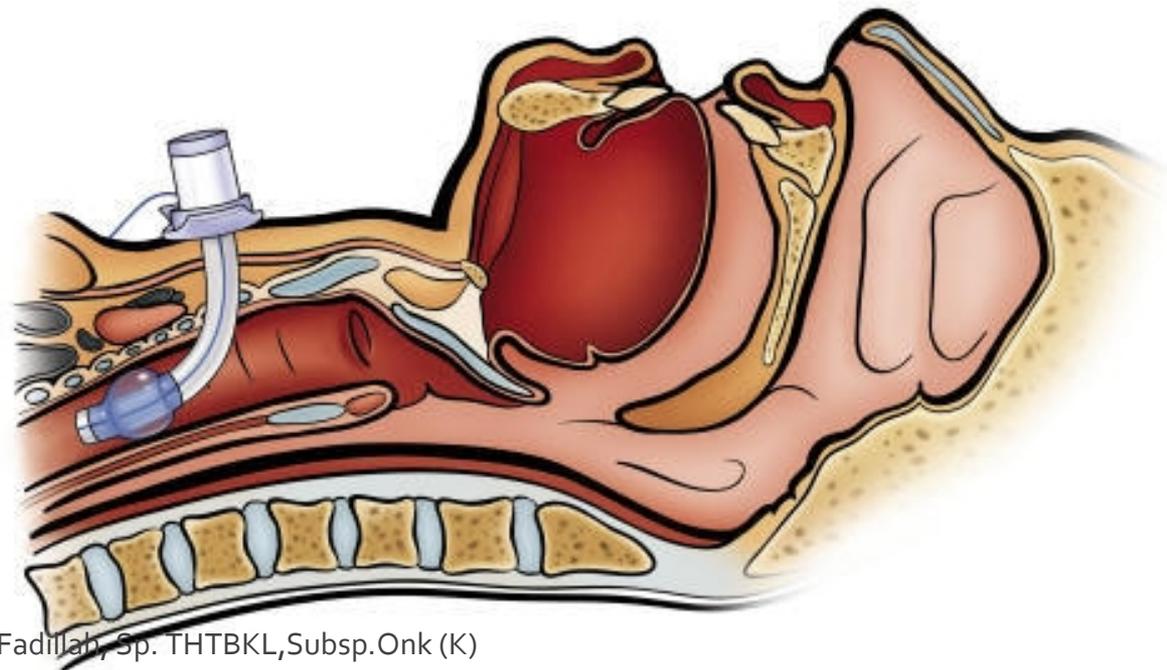
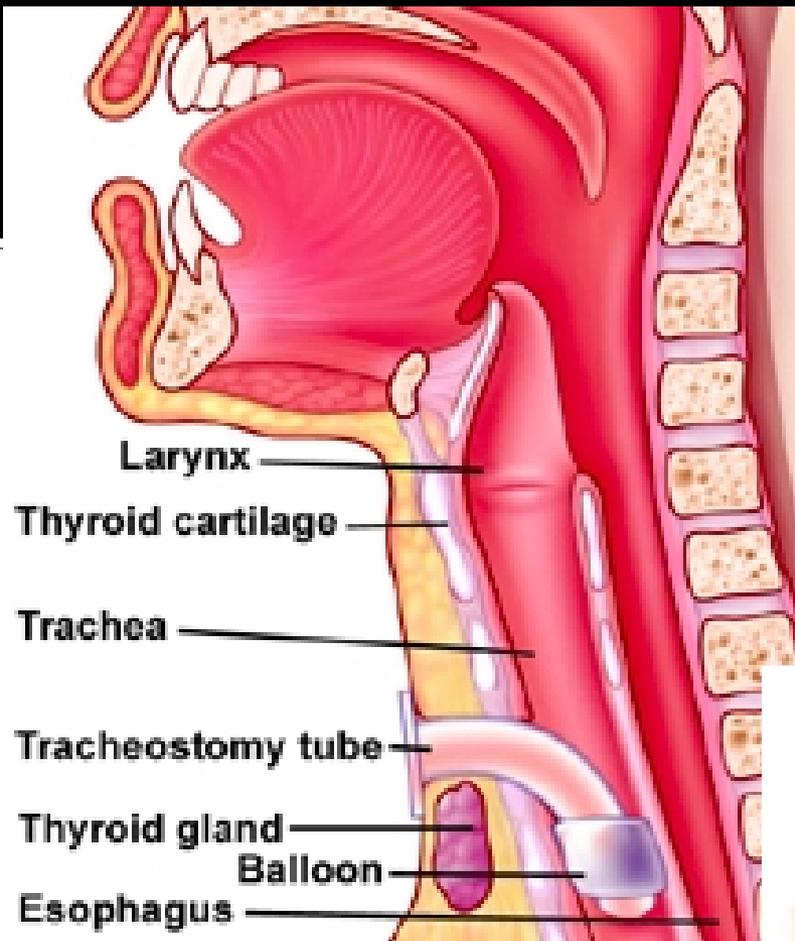


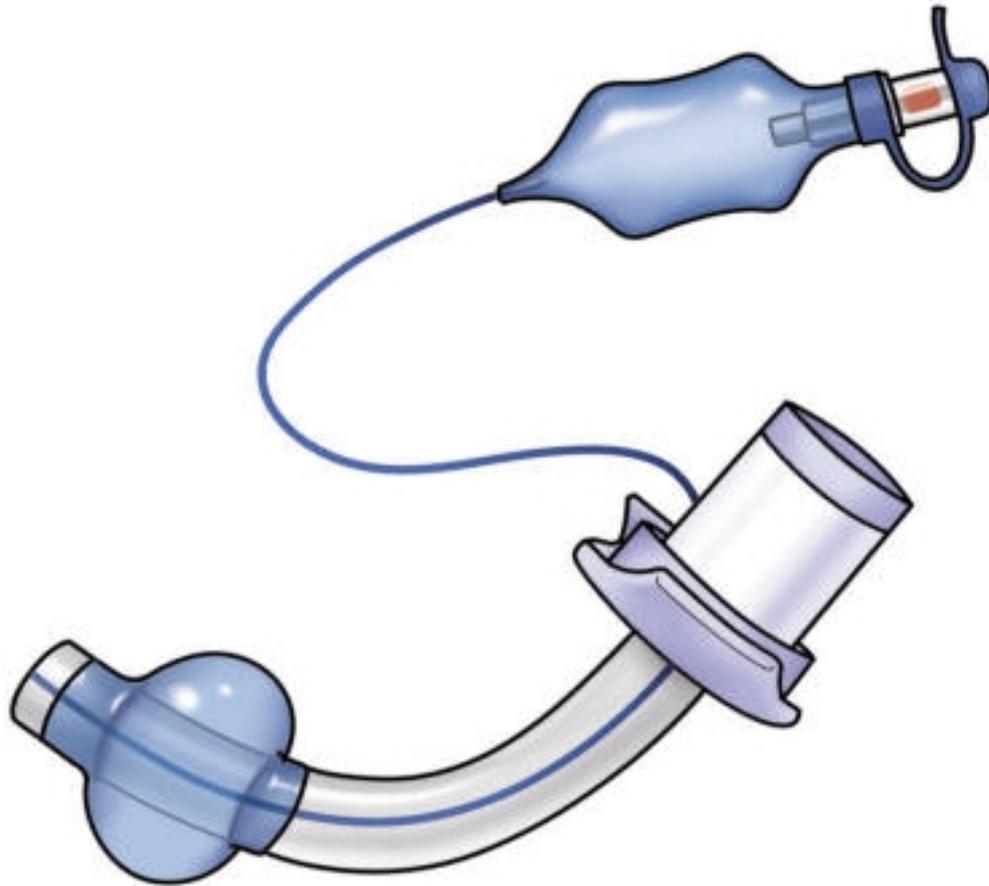
Fig. 3: Laryngeal anatomy.

TRAKEOSTOMI

- Pembuatan lubang pada cincin 2 - 3 kartilago trakea



1. Mengurangi ruang rugi nafas
2. Bronkhial washing



Tracheostomy



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Trakeostomi

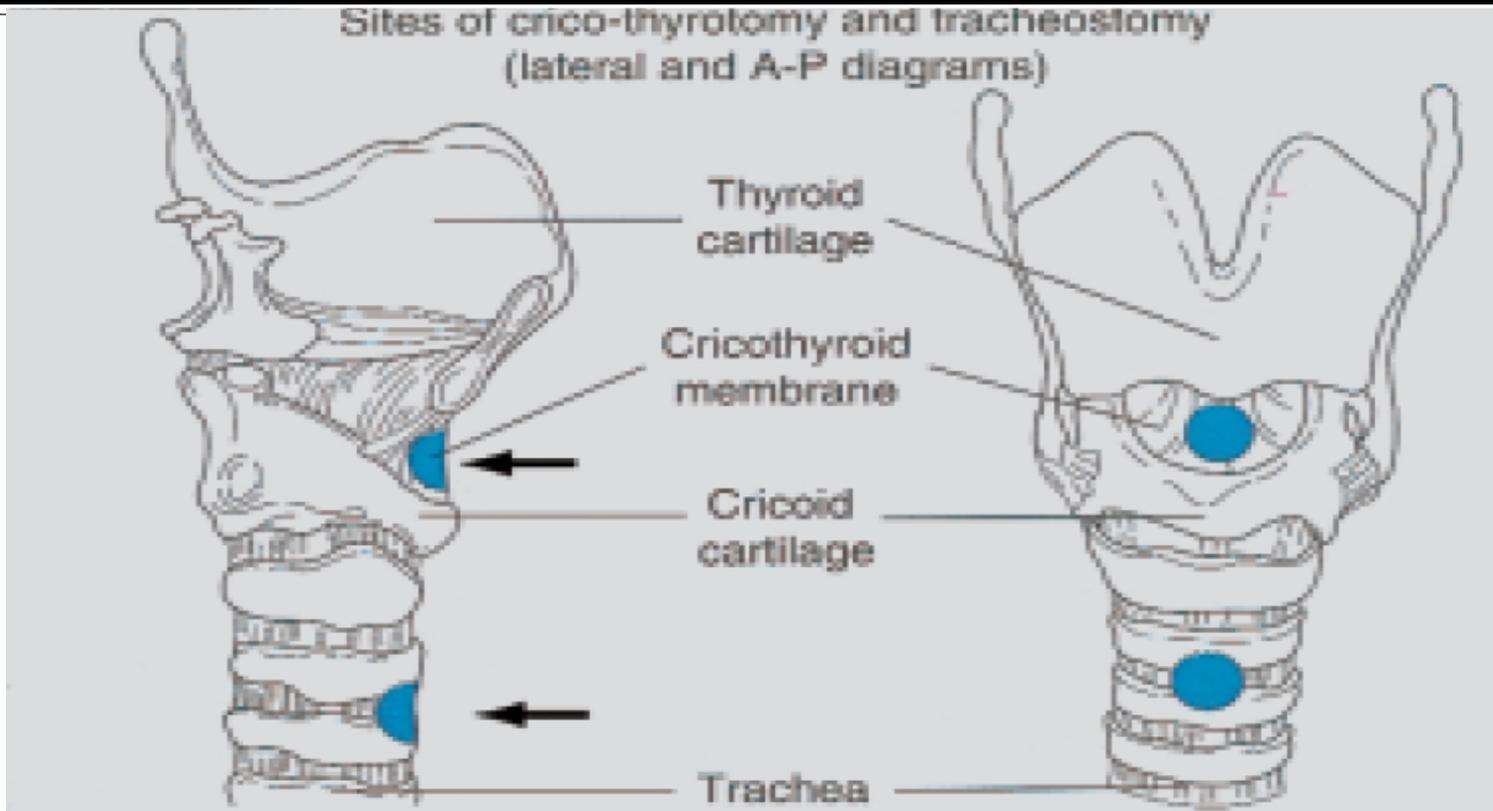
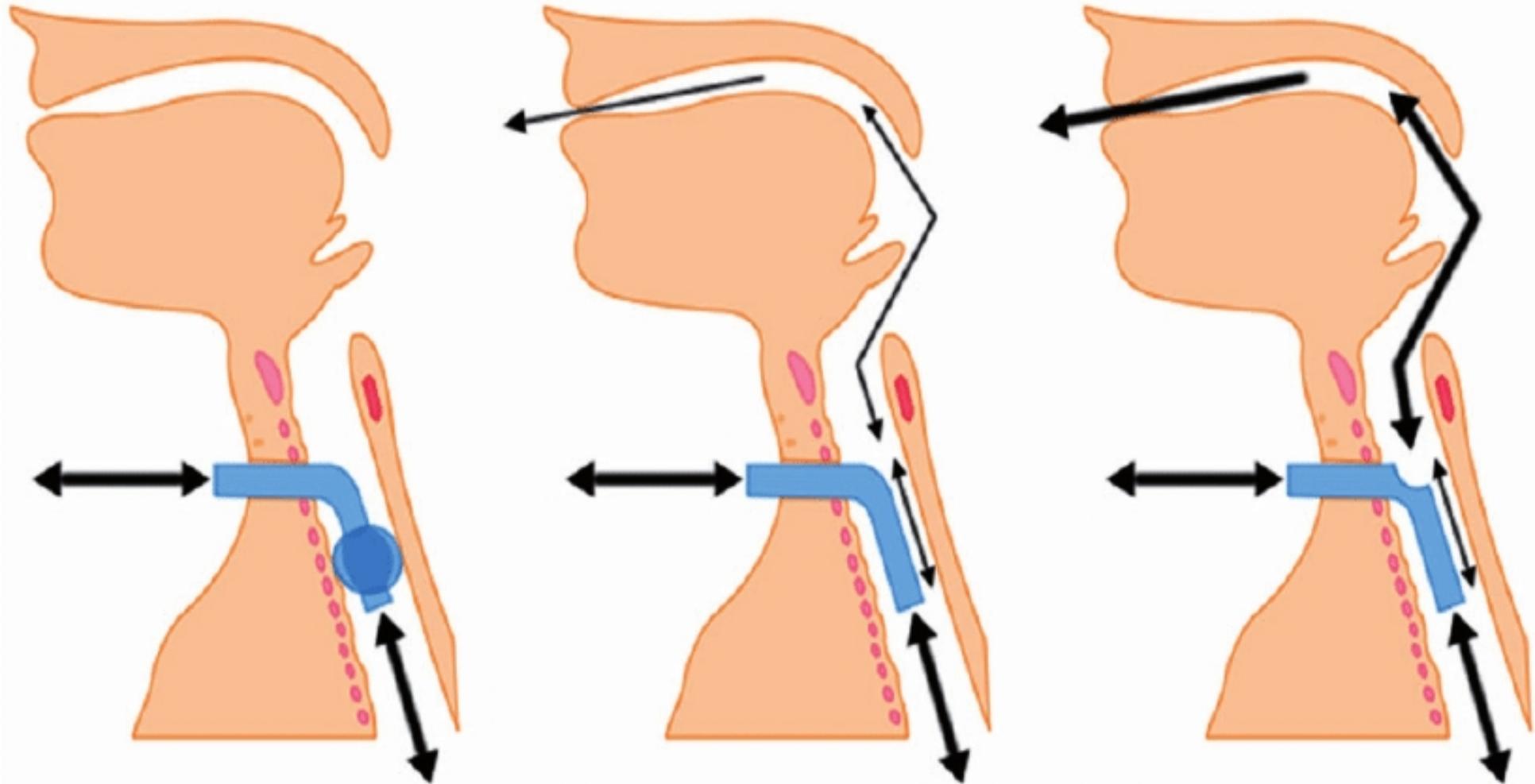


Fig. 4.104 Tracheostomy. Openings are usually made between the 2nd and 3rd tracheal rings. A “higher” tracheostomy predisposes to stenosis of the larynx in the subglottic region. The airway is most accessible and superficial at the level of the cricothyroid membrane, and in acute laryngeal obstruction an opening through the membrane will restore the airway. The cricothyrotomy opening is, however, for an emergency, and is only temporary. Indwelling tubes at this site lead to subglottic stenosis of the larynx.

TRACHEOSTOMY



Perforated vs Non Perforated

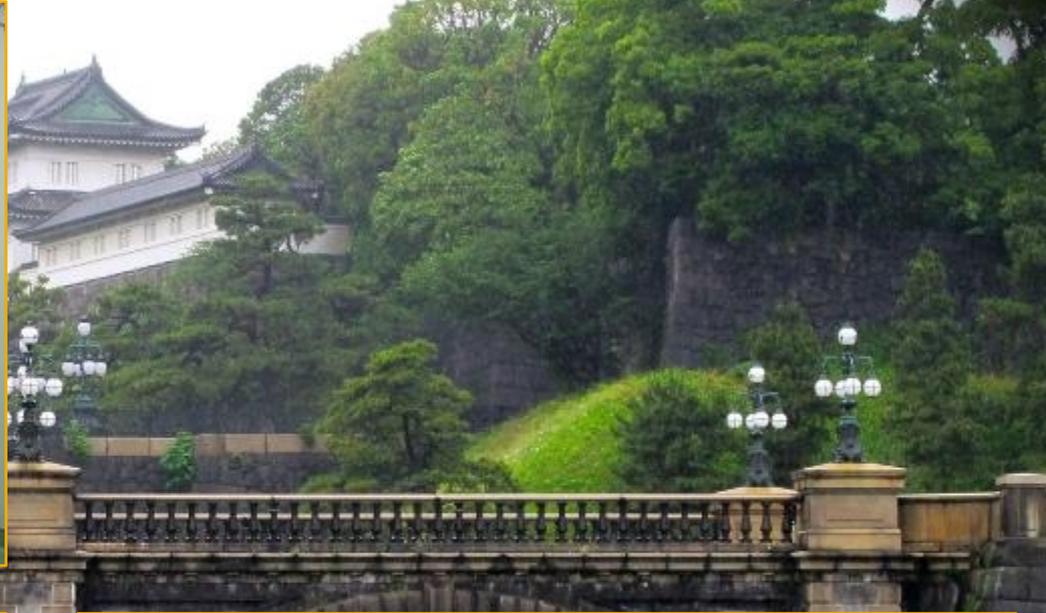


Tracheostomy



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TERIMA KASIH



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END