

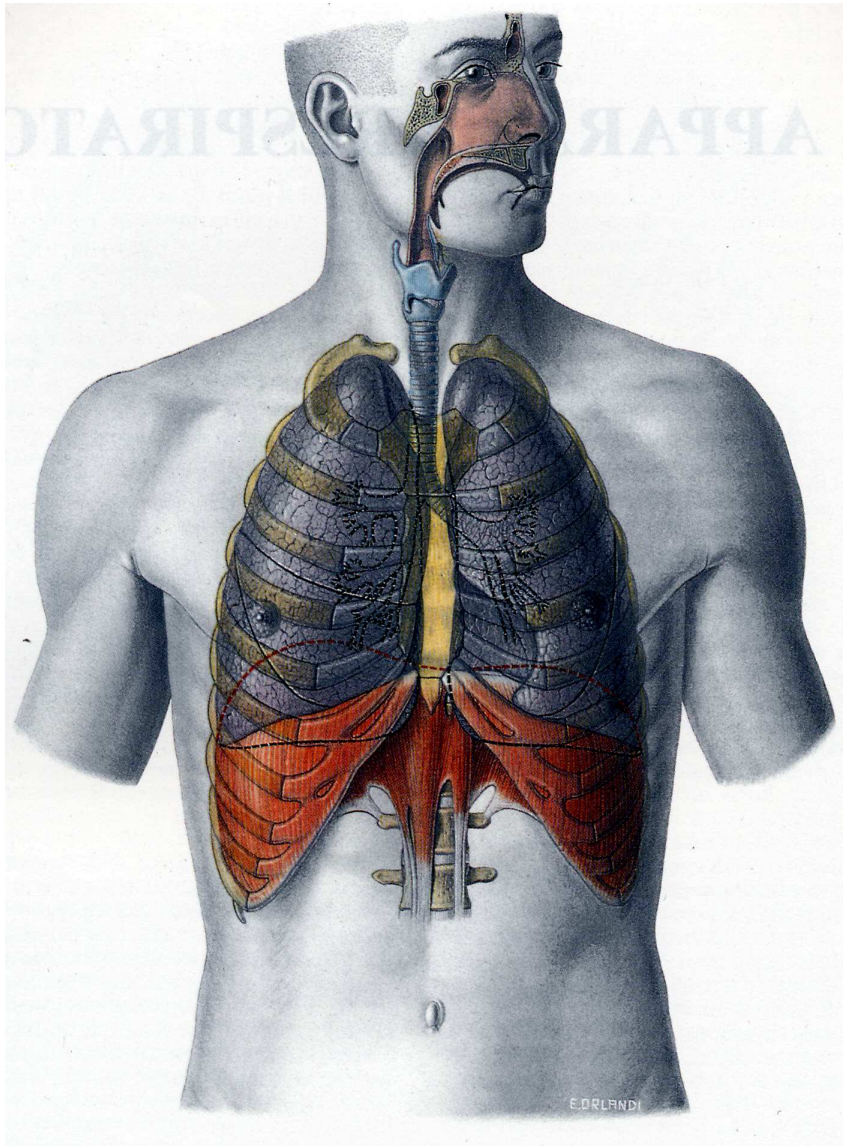


**Università degli studi di
Bari
Corso di Laurea
nella
Professione Sanitaria in Infermiere
Facoltà di Medicina e Chirurgia**

**CORSO DI
ANATOMIA UMANA**

Anatomia Umana

- Anatomia Macro- e Microscopica.
 - **Apparato circolatorio**
 - **Apparato emolinfopoietico**
 - **Apparato respiratorio**
 - Apparato uropoietico
 - Apparato endocrino
 - Apparato genitale maschile
 - Apparato genitale femminile
 - Apparato tegumentario
 - Apparato locomotore
 - Apparato nervoso



APPARATO RESPIRATORIO

Naso { Naso esterno
Canali nasali e cavità paranasali

Faringe

Laringe

Trachea

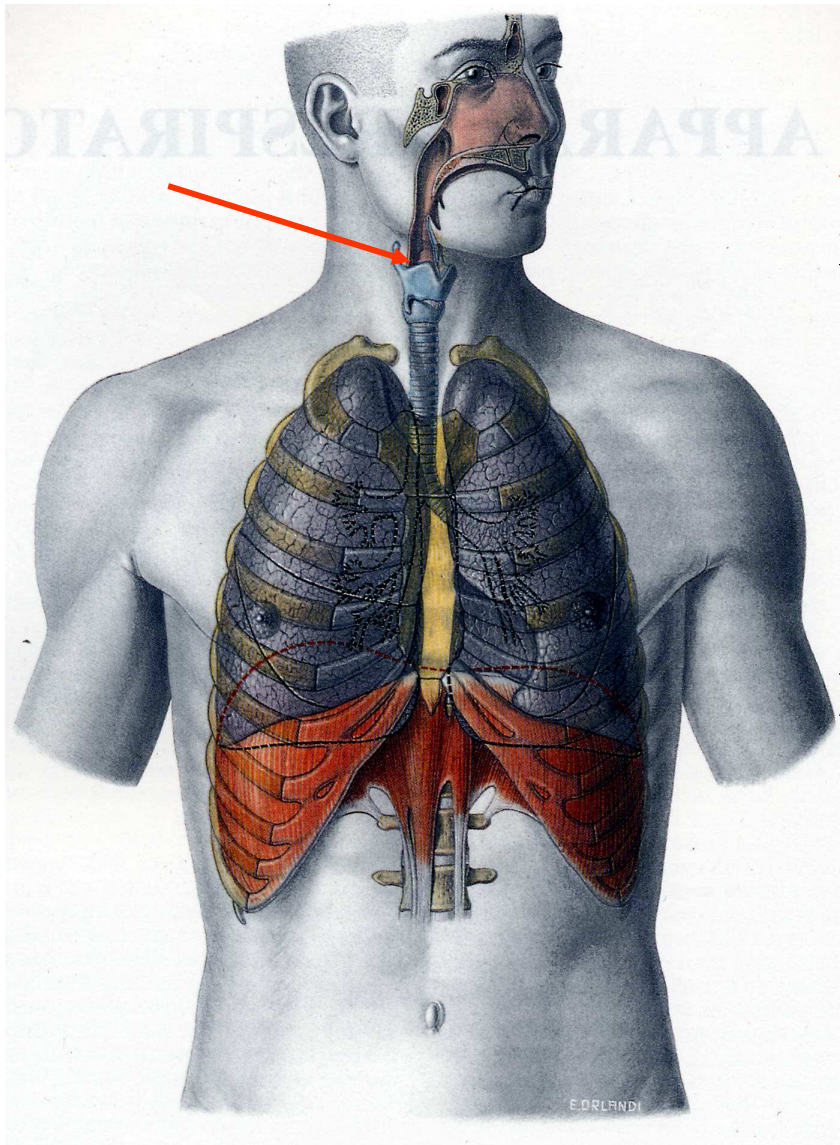
Bronchi

Polmoni

Pleure

Funzioni dell'apparato respiratorio

- Scambi di O₂ e CO₂
- Regolazione pH
- Protezione da patogeni inalati
- Vocalizzazione



APPARATO RESPIRATORIO

VIE RESPIRATORIE

superiori

cavità nasali e paranasali

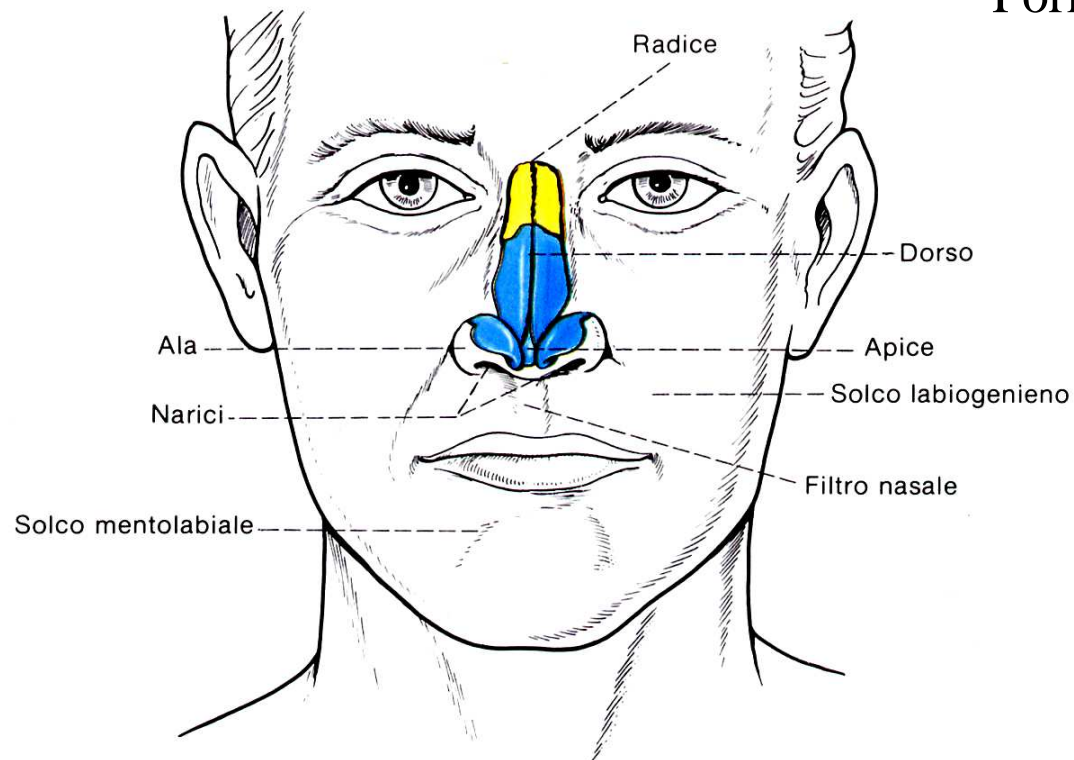
rinofaringe

inferiori

laringe e trachea

POLMONI

NASO ESTERNO



Posizione

Forma di piramide triangolare

- tre facce

1 posteriore

2 laterali

parte fissa
ali del naso

- tre margini

2 laterali

1 anteriore (dorso del naso)

- apice

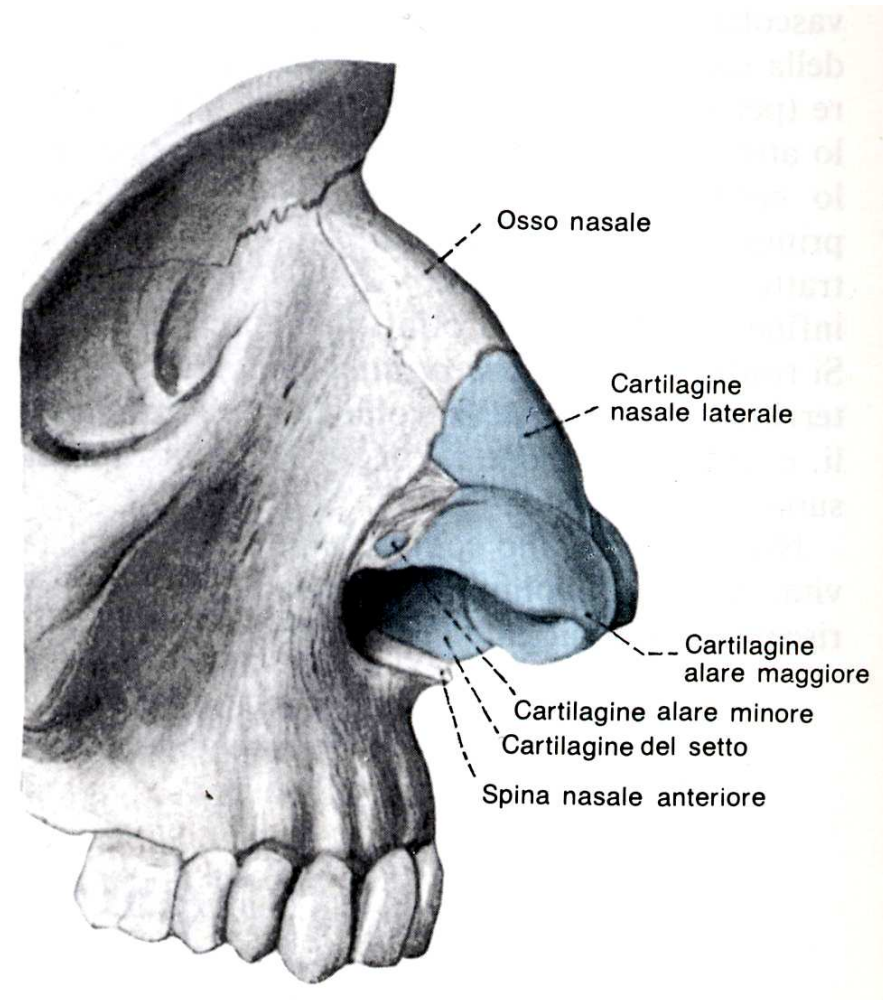
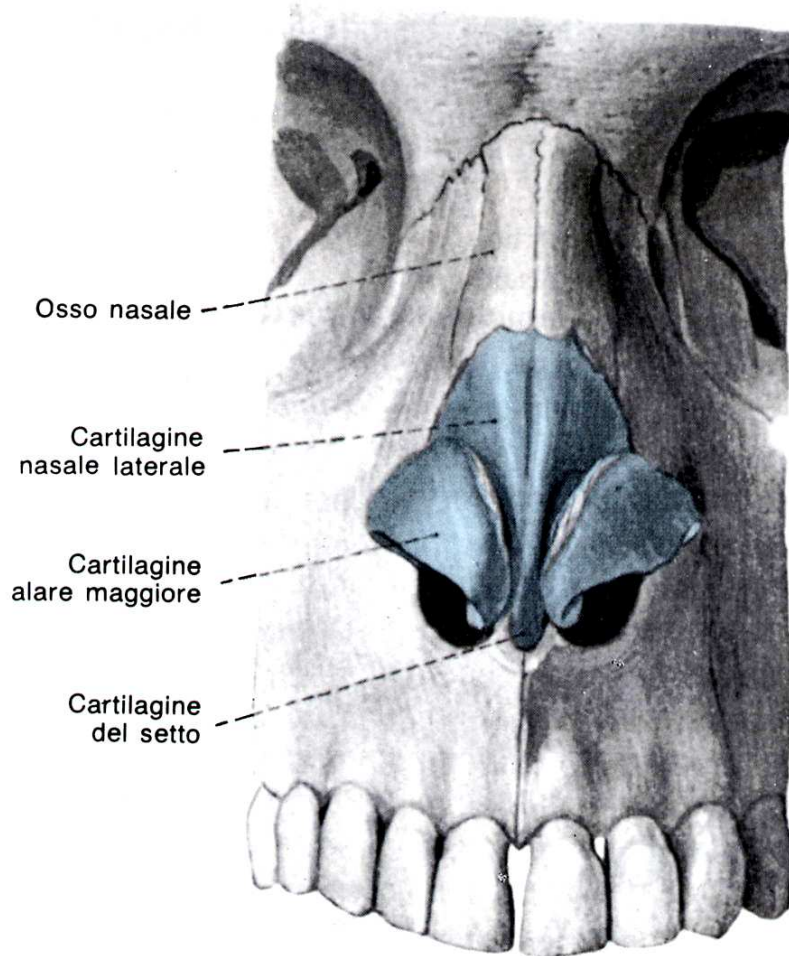
radice del naso

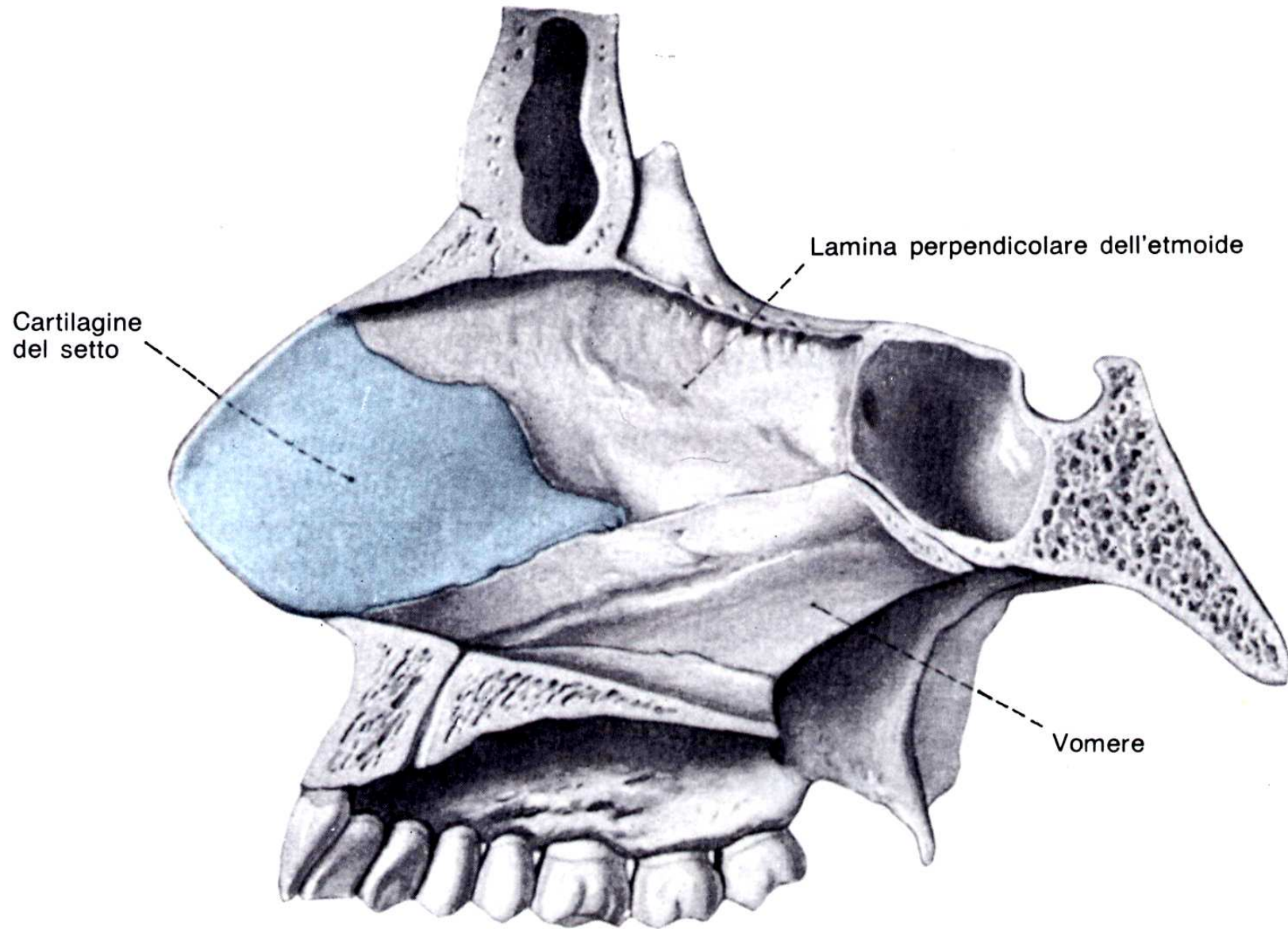
- base

lobulo nasale

setto nasale

narici





VACOLARIZZAZIONE DEL NASO

Carotide esterna

MASCELLARE

OFTALMICA

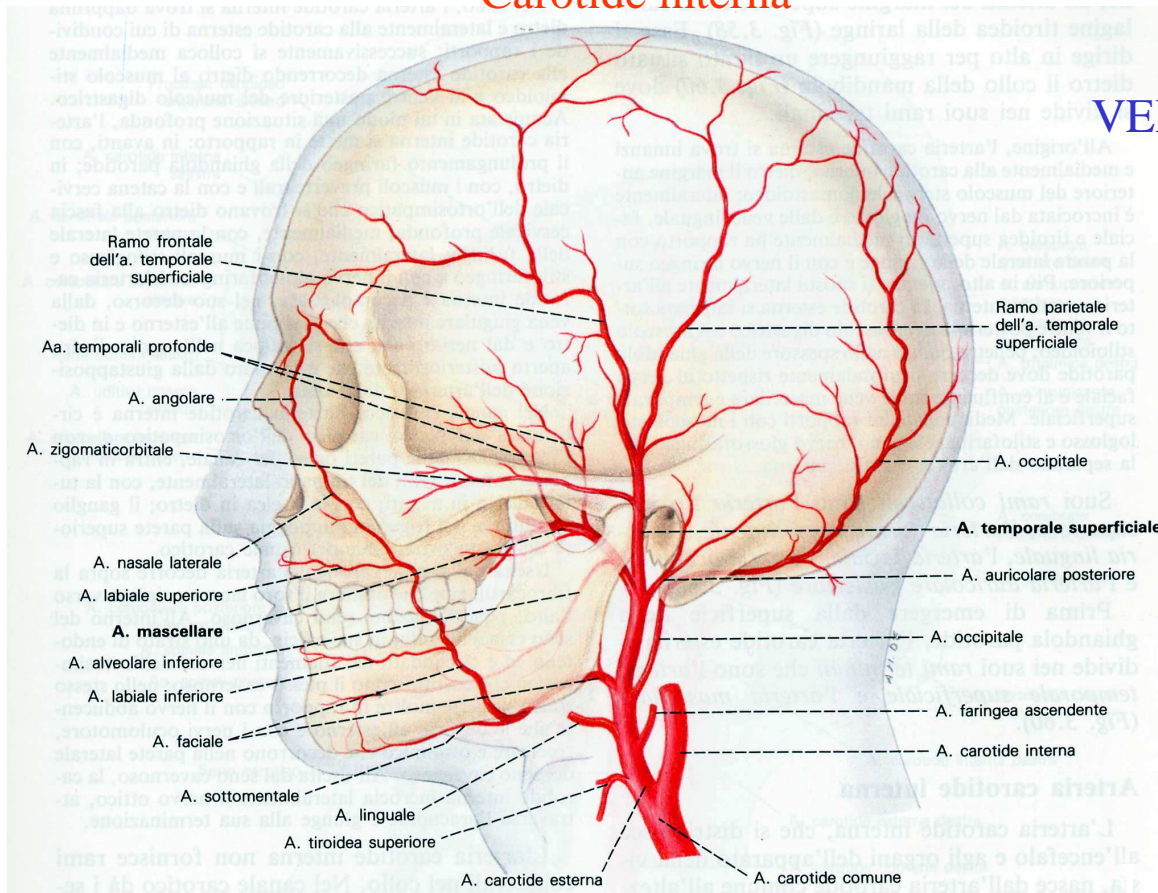
Carotide interna

Naso esterno

VENA FACIALE ANTERIORE

Vena faciale comune

Vena giugulare interna

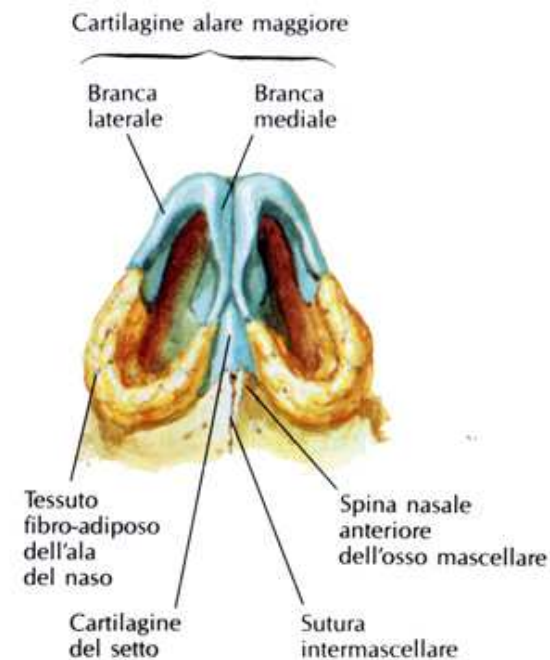
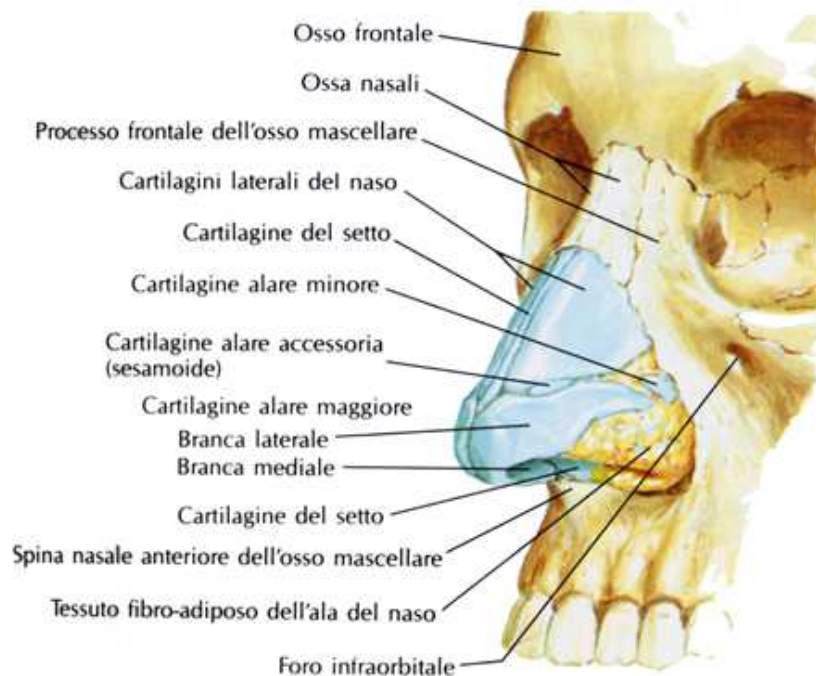
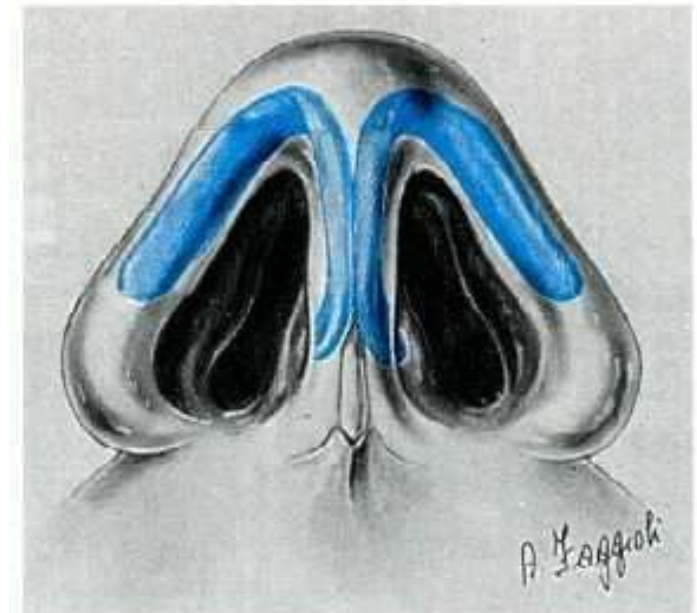


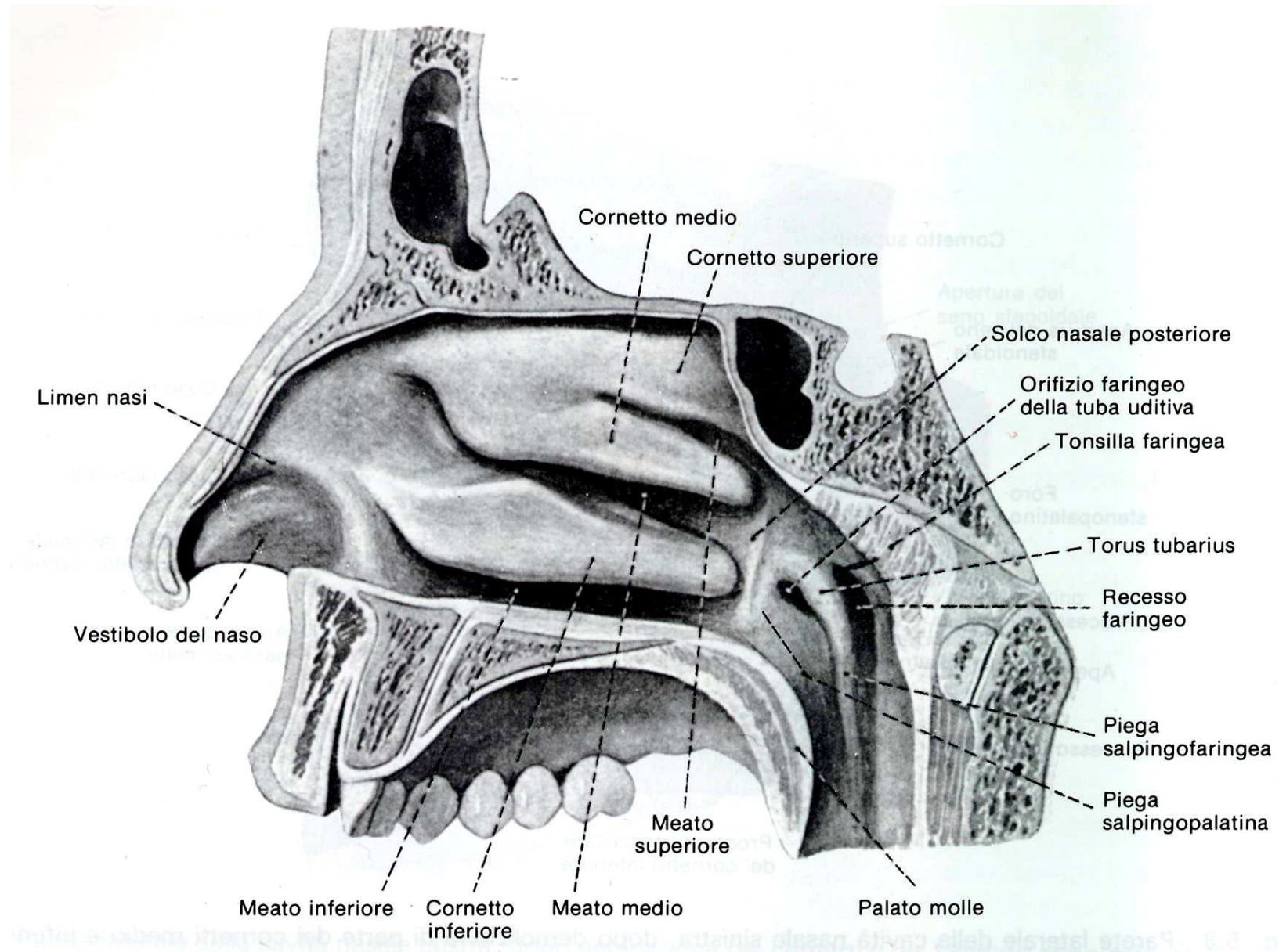
CAVITÀ NASALI E PARANASALI

VESTIBOLO DEL NASO
CAVITÀ DEL NASO PROPRIAMENTE DETTA
cavità paranasali

VESTIBOLO DEL NASO

- Delimitazione
- Vibrisse
- Gh. mucose e sudoripare
- Transizione della cute a mucosa respiratoria





CAVITA' NASALI PROPRIAMENTE DETTE

Vestibolo del naso
cavità nasali
rinofaringe

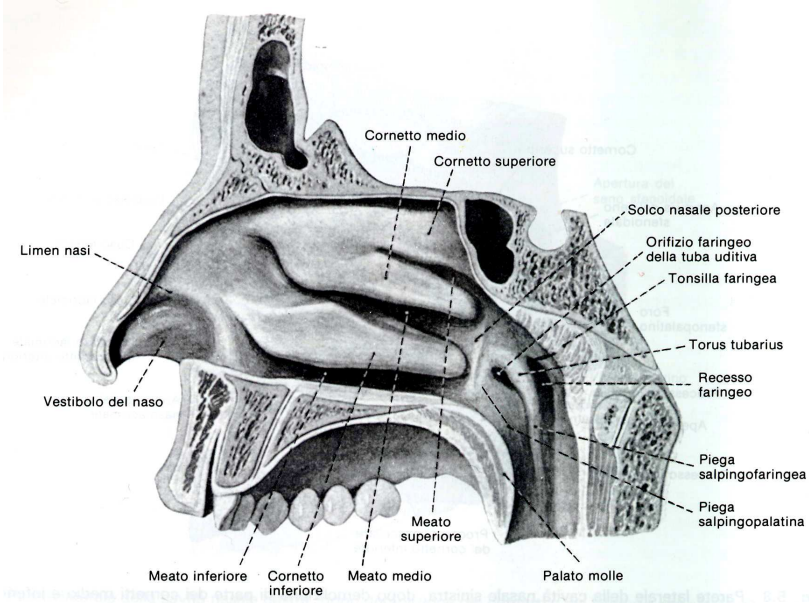
Pavimento

Volta

Due pareti

mediale o settale

laterale



VOLTA

Sfenoide

Etmoide

Spina nasale del frontale

Ossa nasali

PARETE LATERALE

Cornetto sup, med e inf

Meato sup, med e inf

PARETE MEDIALE

Lamina perpendicolare etmoide

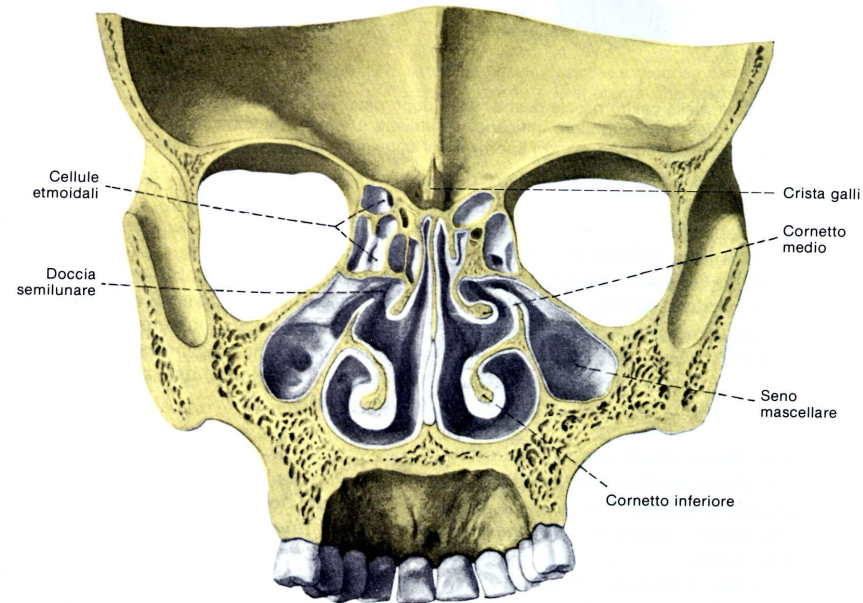
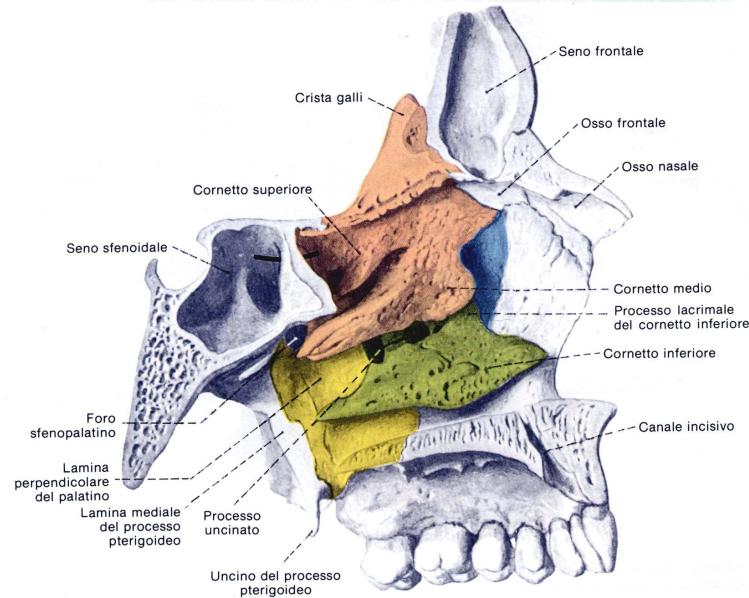
Vomere

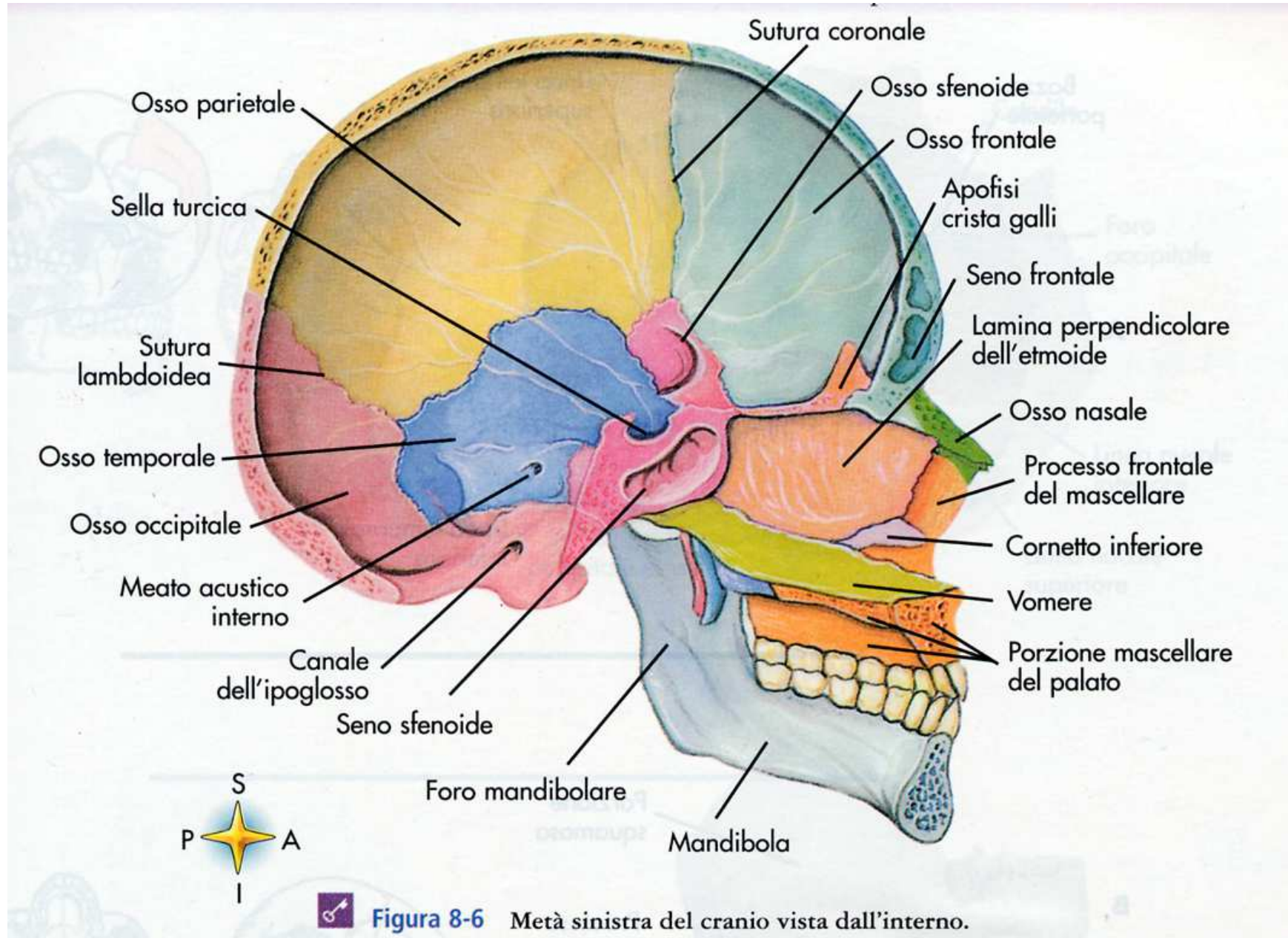
Cartilagine del setto

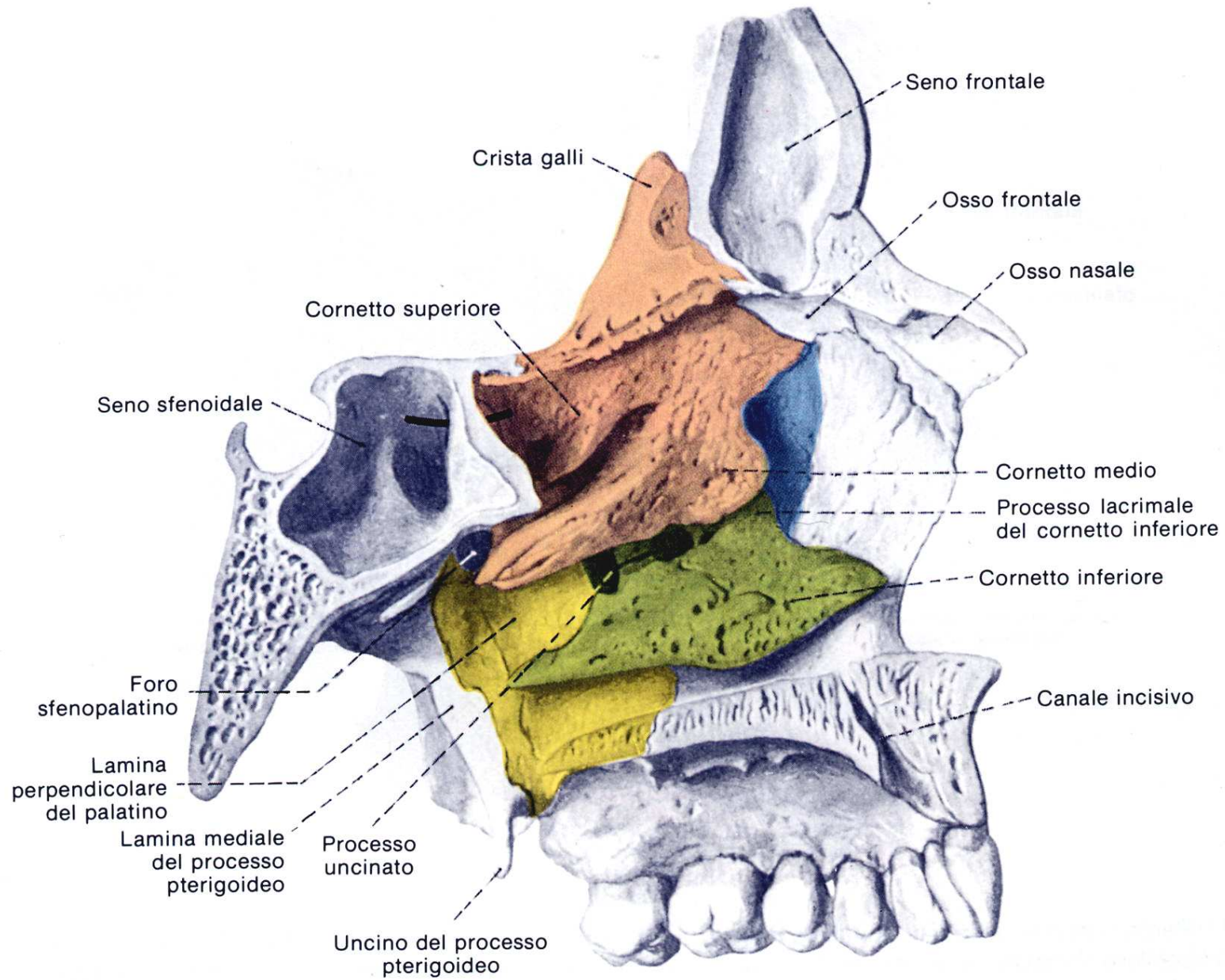
PAVIMENTO

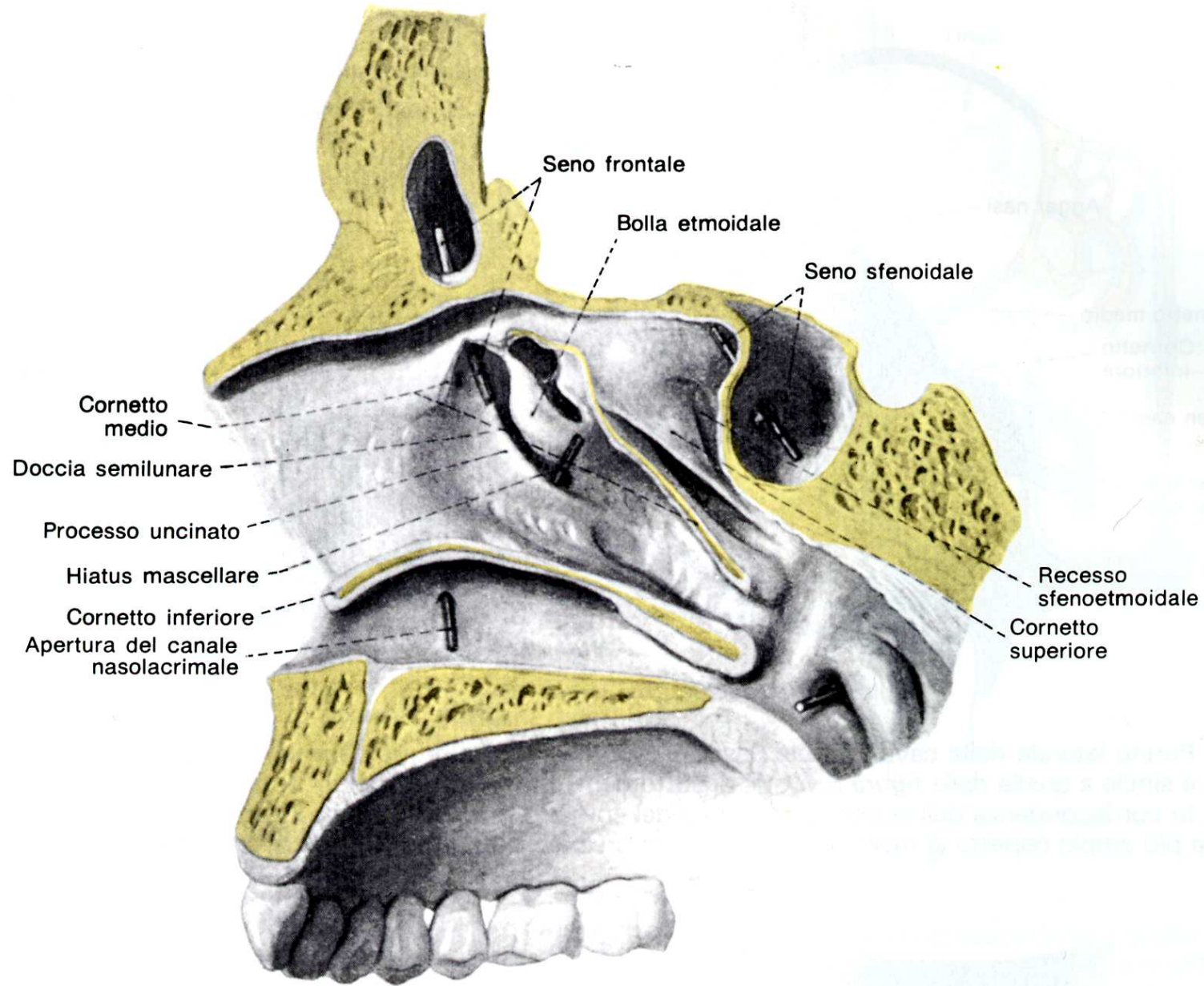
Mascellare

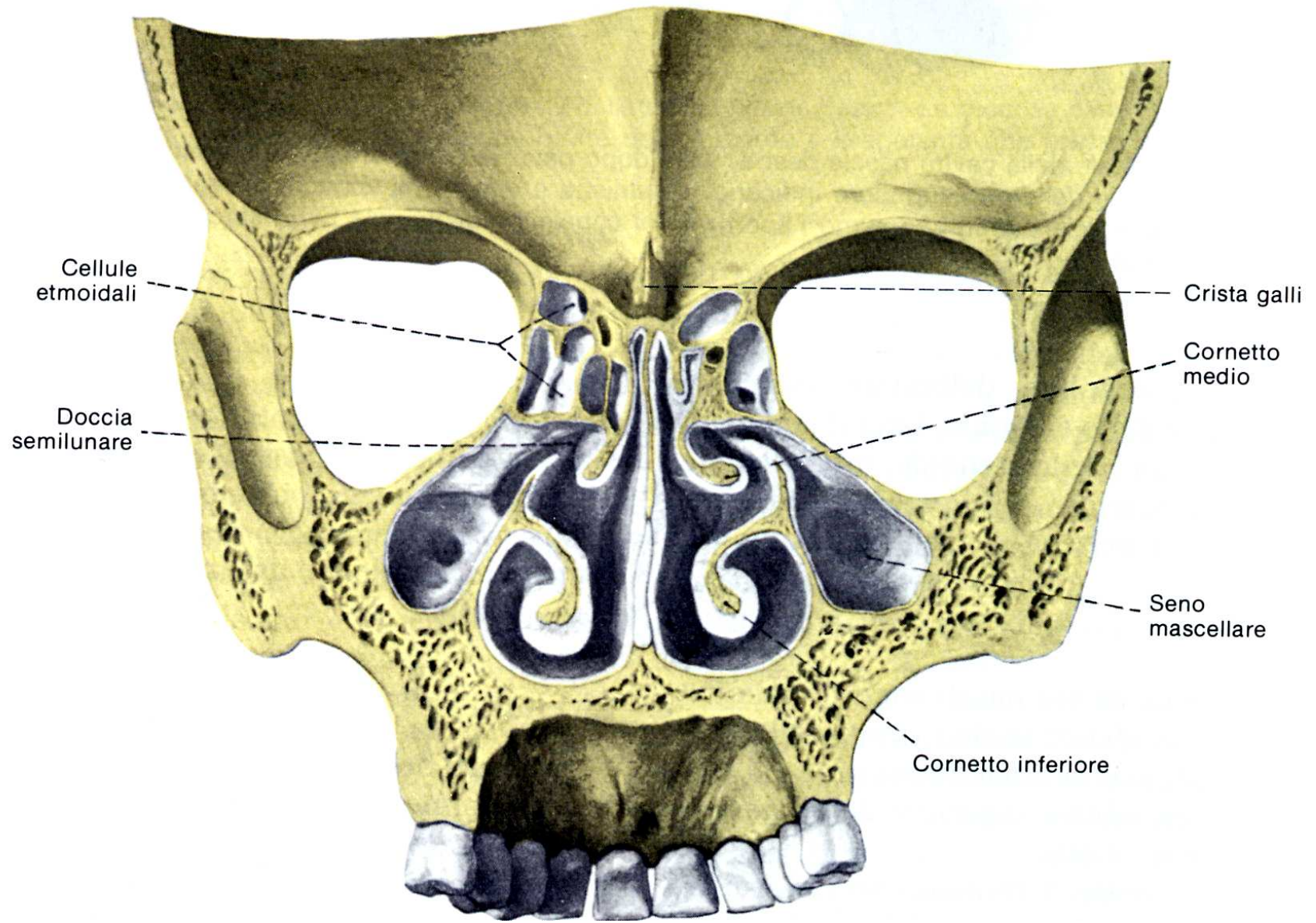
Ossa palatine

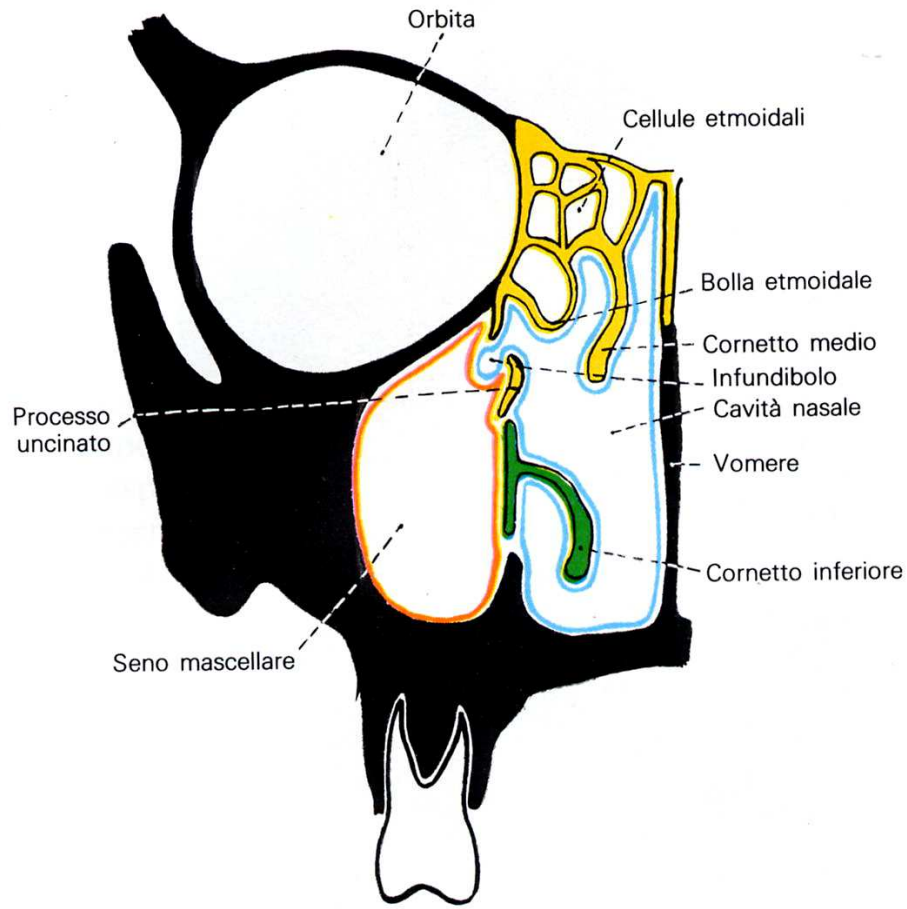




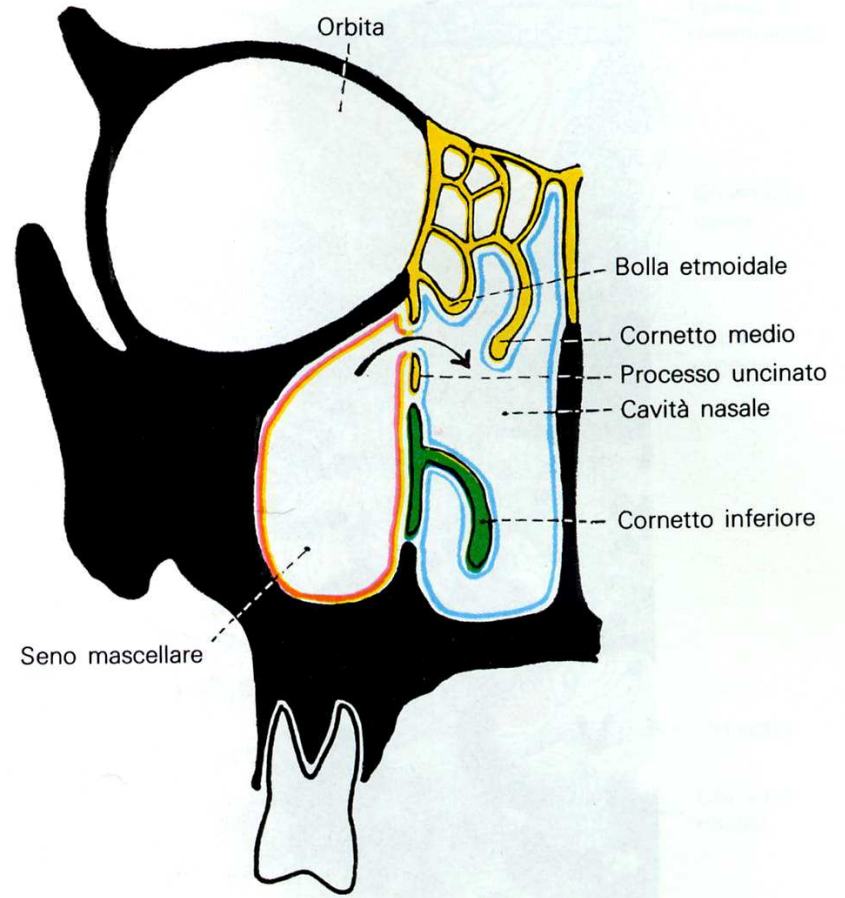








a



b

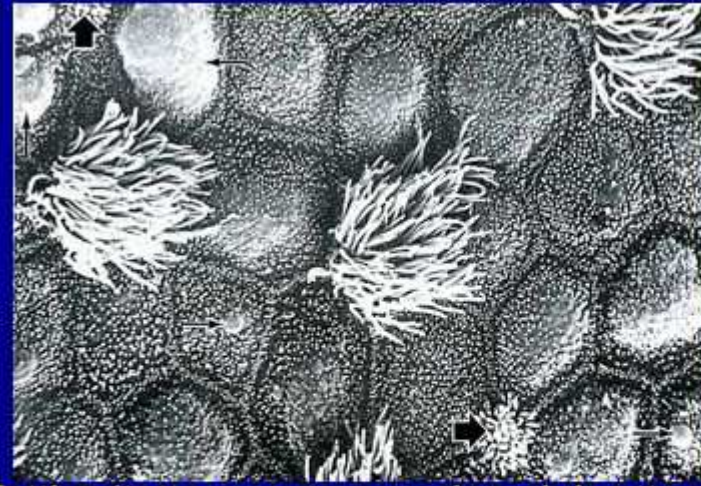
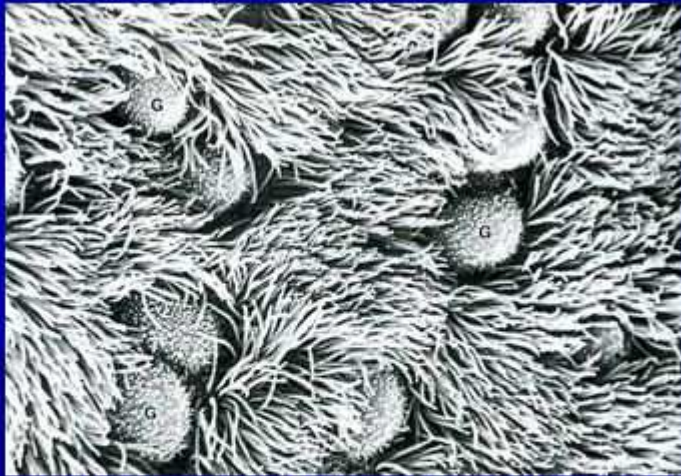
MUCOSA RESPIRATORIA

EPITELIO

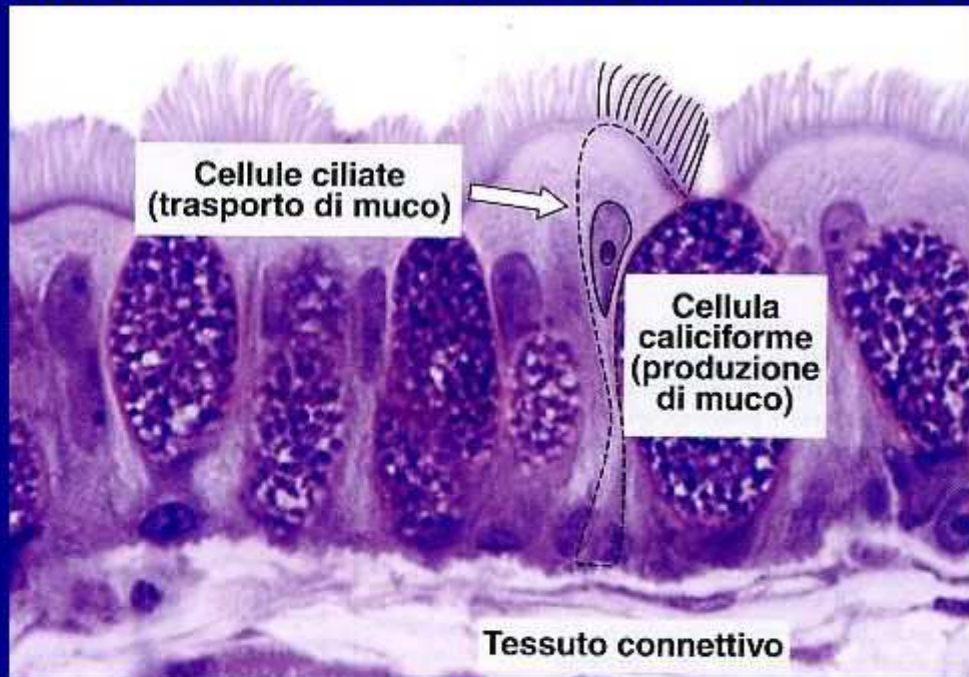
- Epitelio batiprismatico pluriseriato
- Ciglia vibratili
- Cellule caliciformi mucipare

LAMINA PROPRIA

- Connettivo lasso
- Gh tubolo-acinose ramificate
 - Inglobamento delle particelle
 - Azione antibatterica
 - Lisozima e IgA



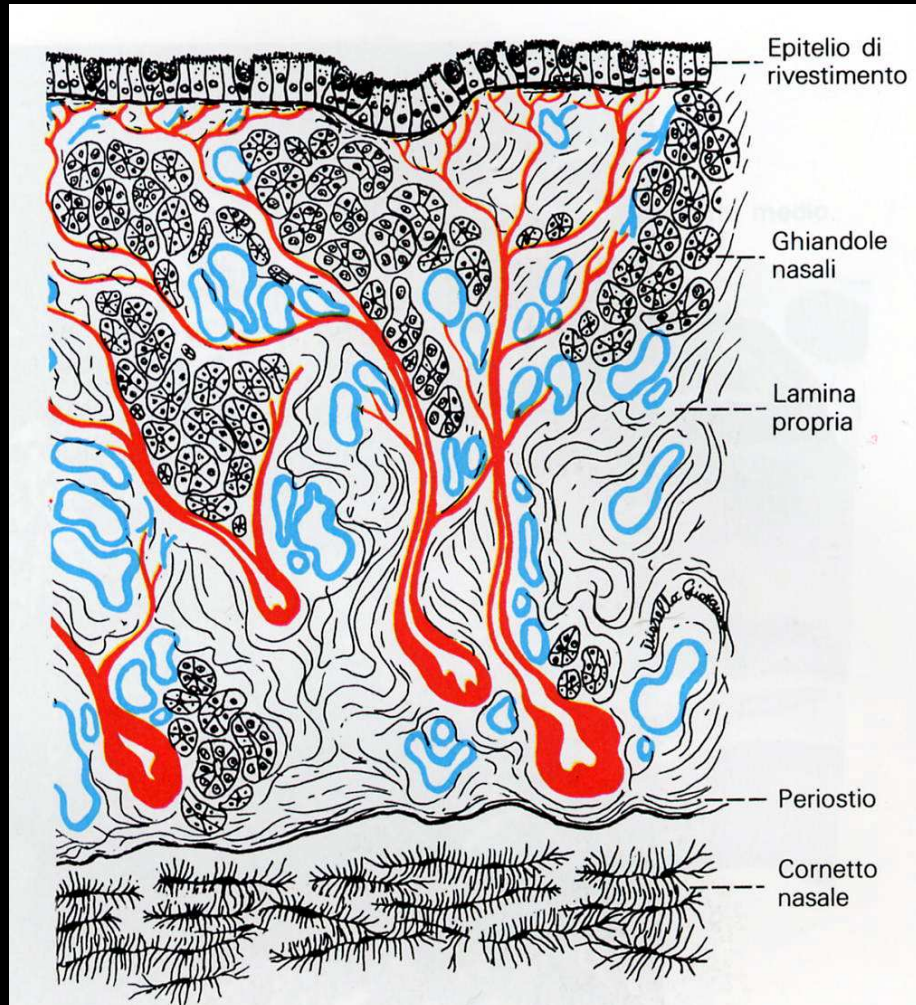
Cavità nasale: mucosa respiratoria ed olfattiva (tetto e parte superiore del setto nasale)



MUCOSA RESPIRATORIA

VASCOLARIZZAZIONE

- Molto sviluppata
- Funzione
- Anastomosi artero-venose

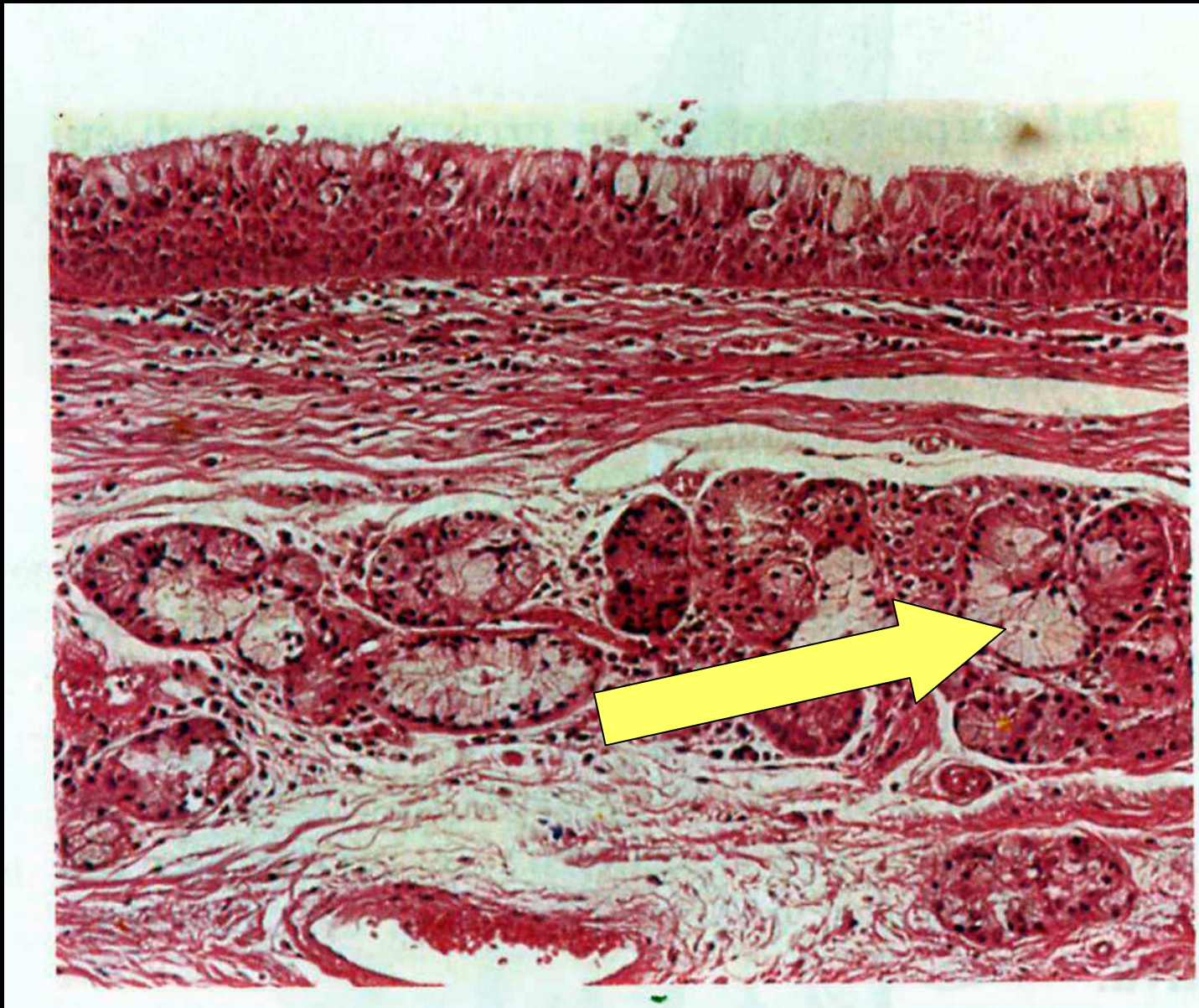


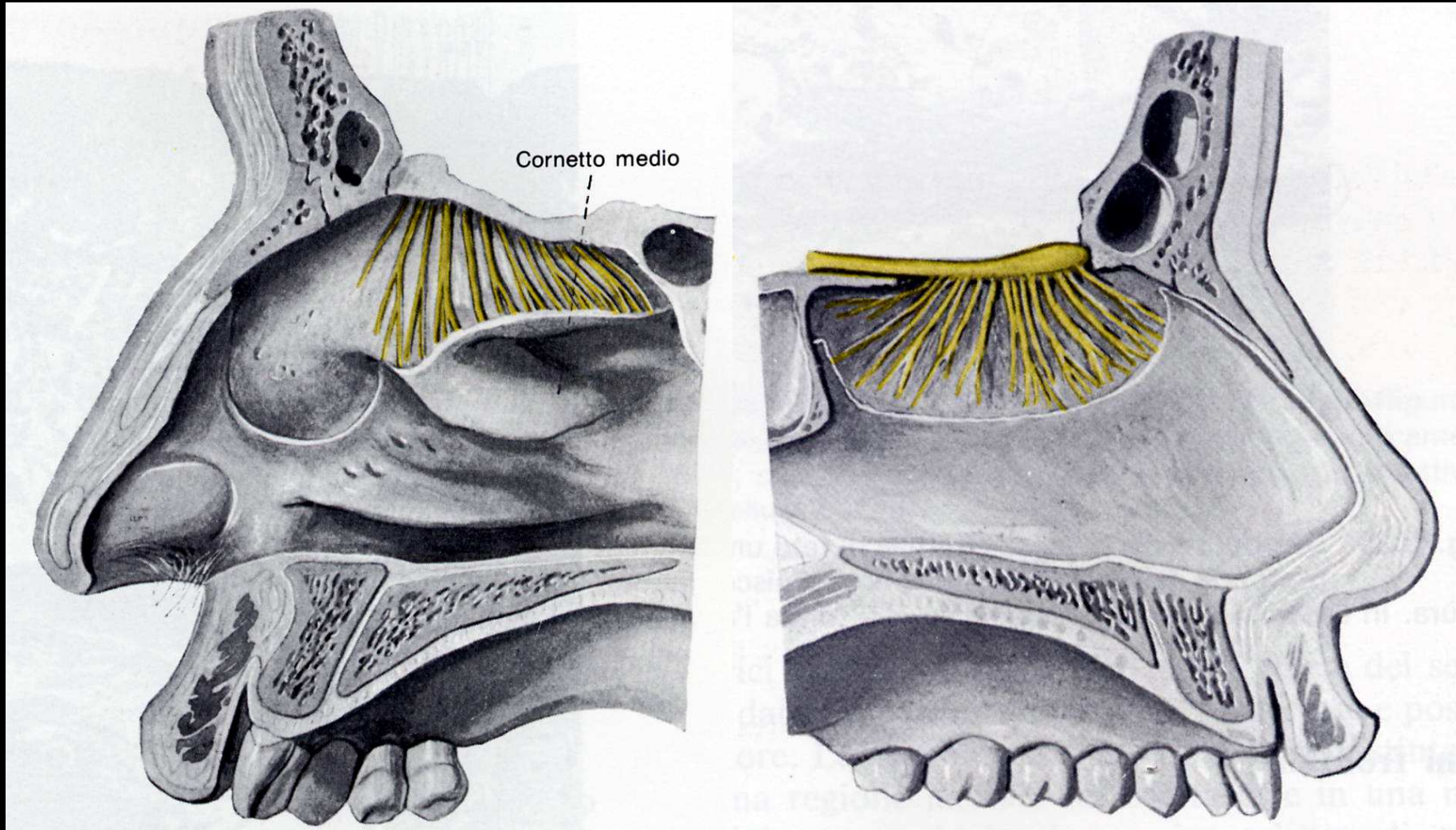
MUCOSA RESPIRATORIA

VASCOLARIZZAZIONE

- Molto sviluppata
- Funzione
- Anastomosi artero-venose

Mucosa respiratoria





MUCOSA OLFATTIVA

-Epitelio alto (60 μm)

* cellule olfattive

cellule nervose (recettori sensoriali primari)

corpo nello spessore dell'epitelio

due prolungamenti

uno centrifugo con vescicola e peluzzi olfattivi

* cellule di sostegno

elaborazione del secreto glicoproteico

* cellule basali

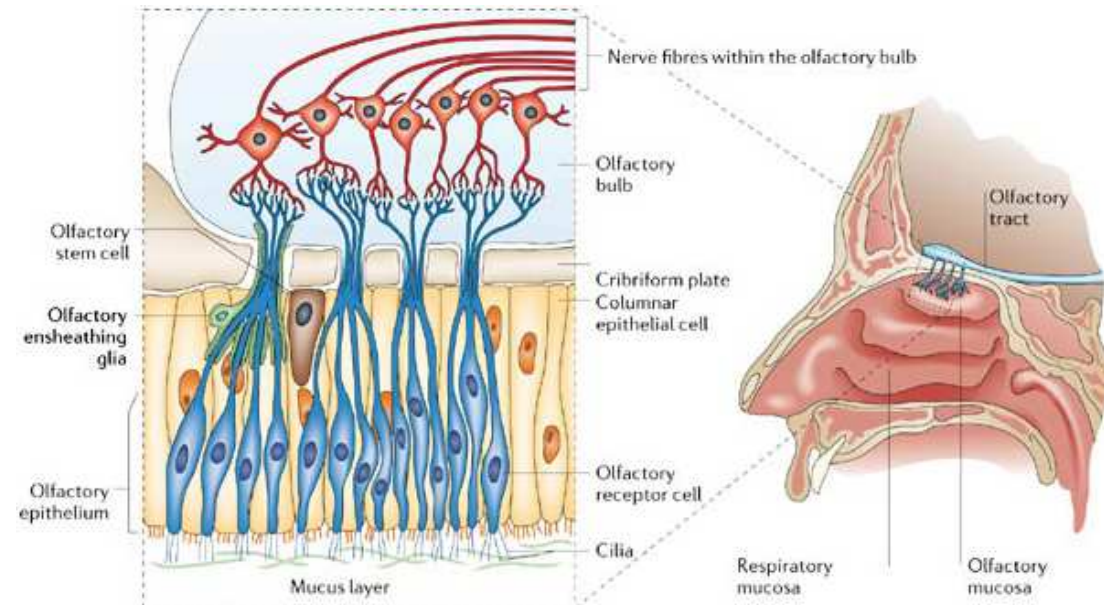
azione simile alle cellule di Schwann

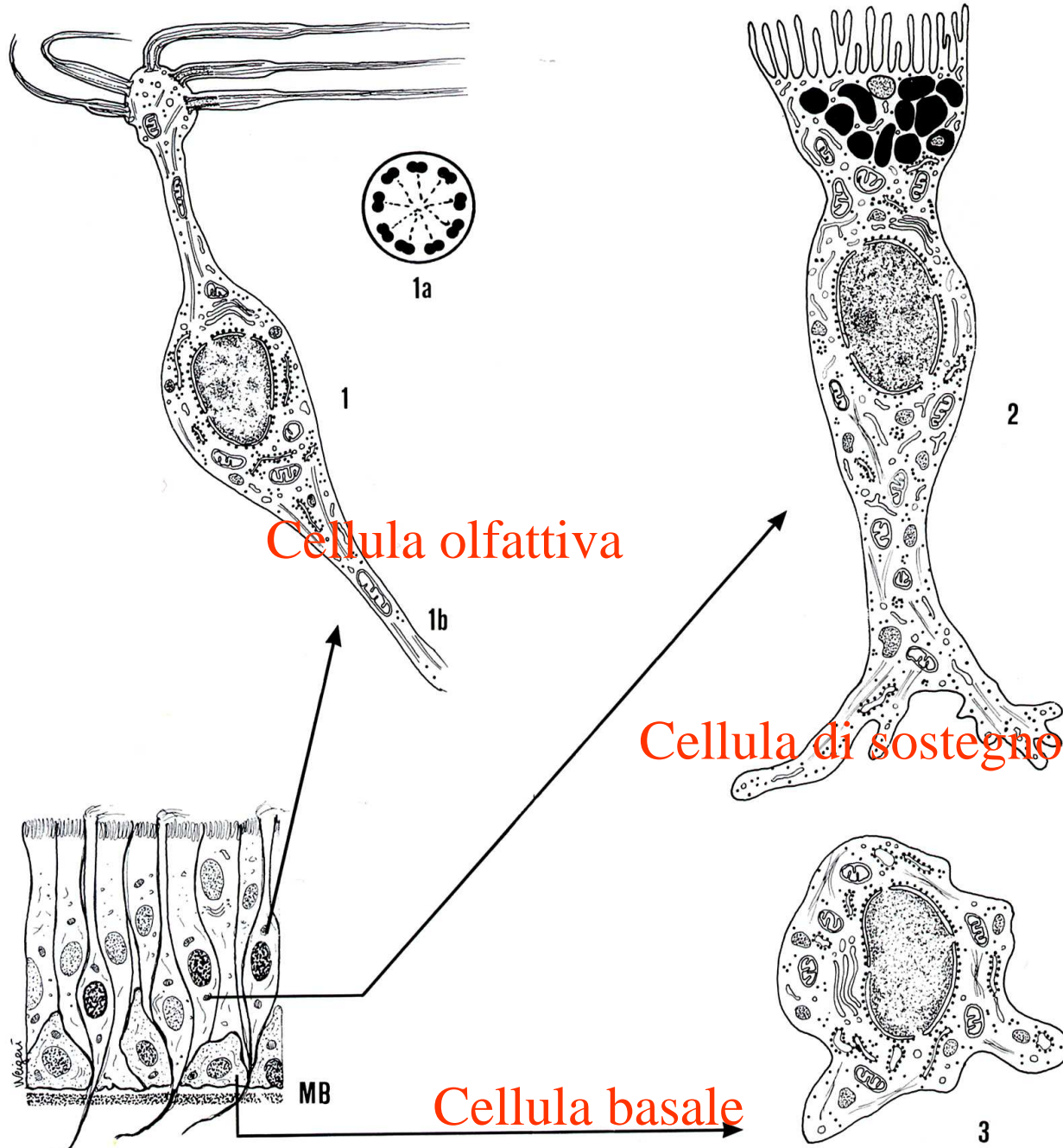
-Lamina propria

* connettivo denso ricco di linfociti

* Gh olfattive

solvente per le sostanze odorose



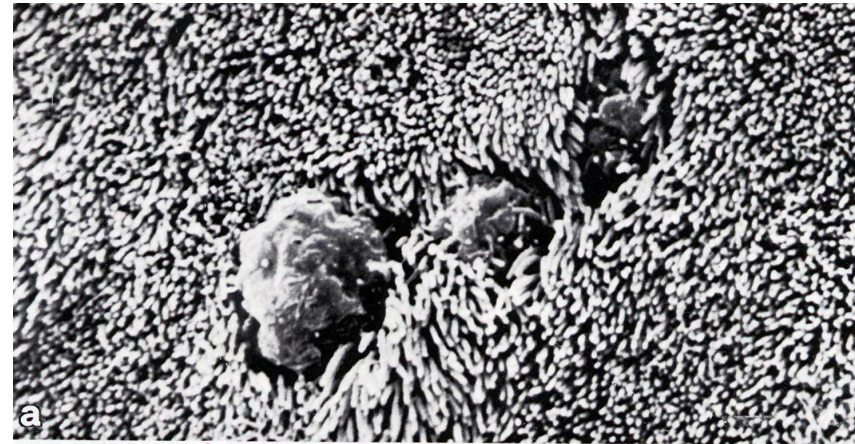


Cellula olfattiva

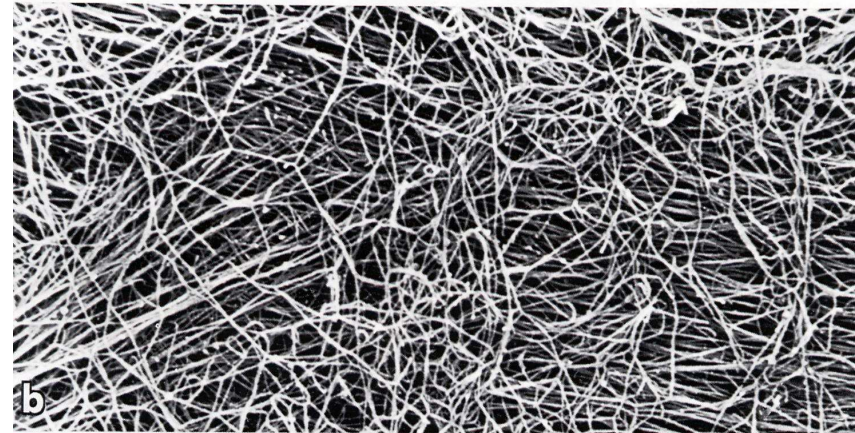
Cellula di sostegno

Cellula basale

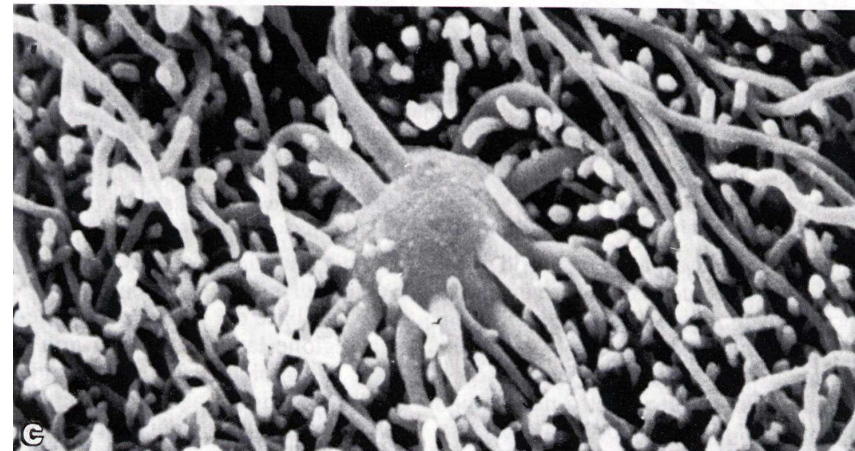
Mucosa respiratoria
ciglia vibratili con cellule
mucipare



Mucosa olfattiva
peluzzi olfattivi



Mucosa olfattiva
vescicola olfattoria con
filuzzi



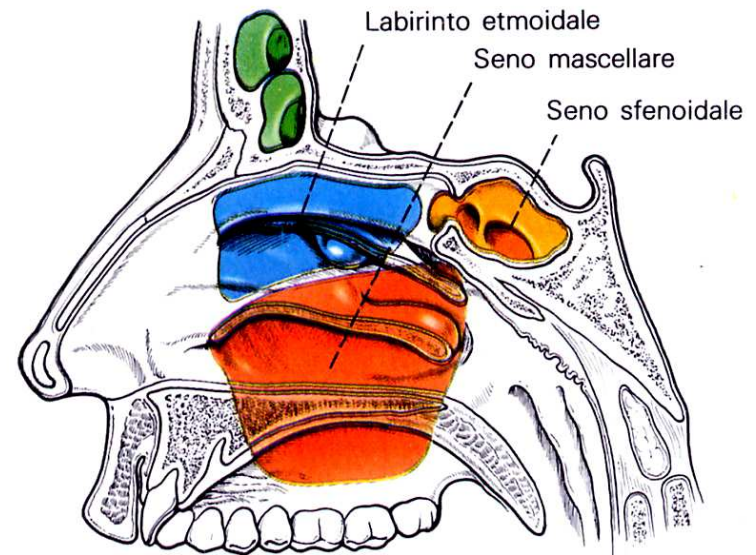
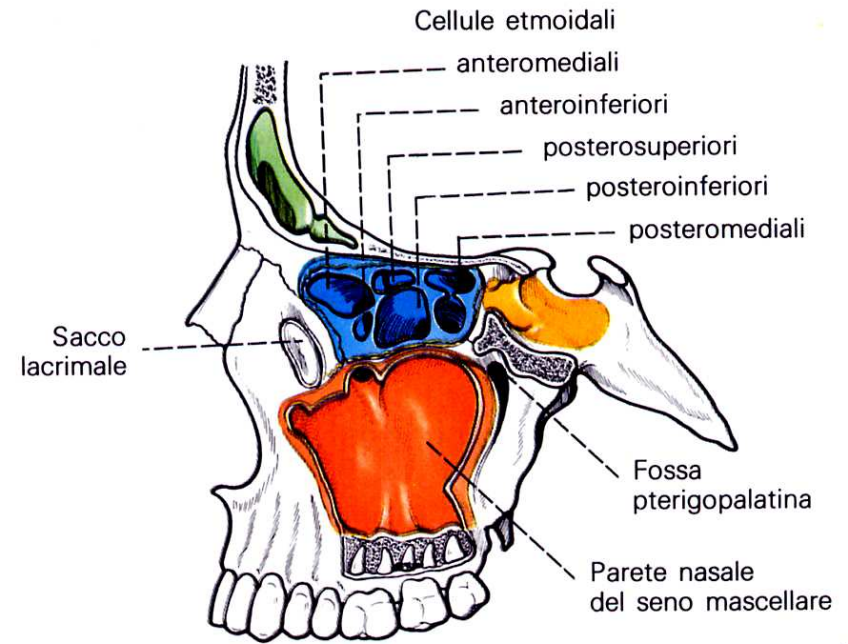
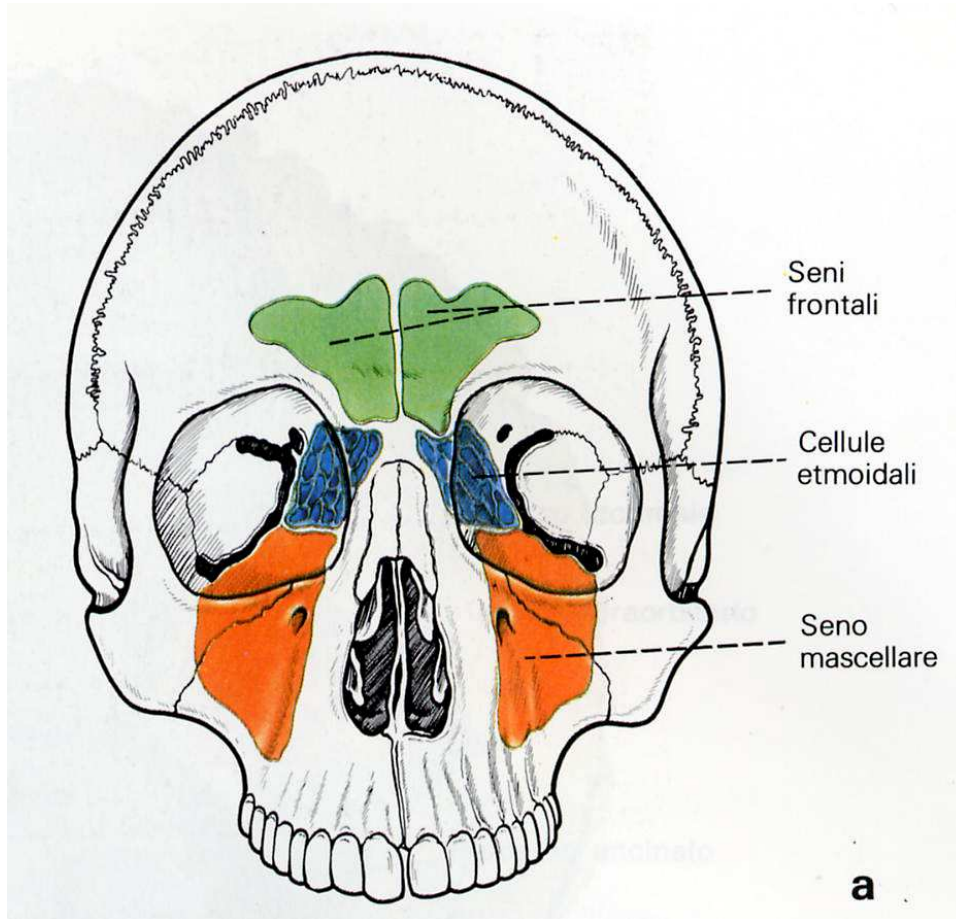
CAVITA' PARANASALI

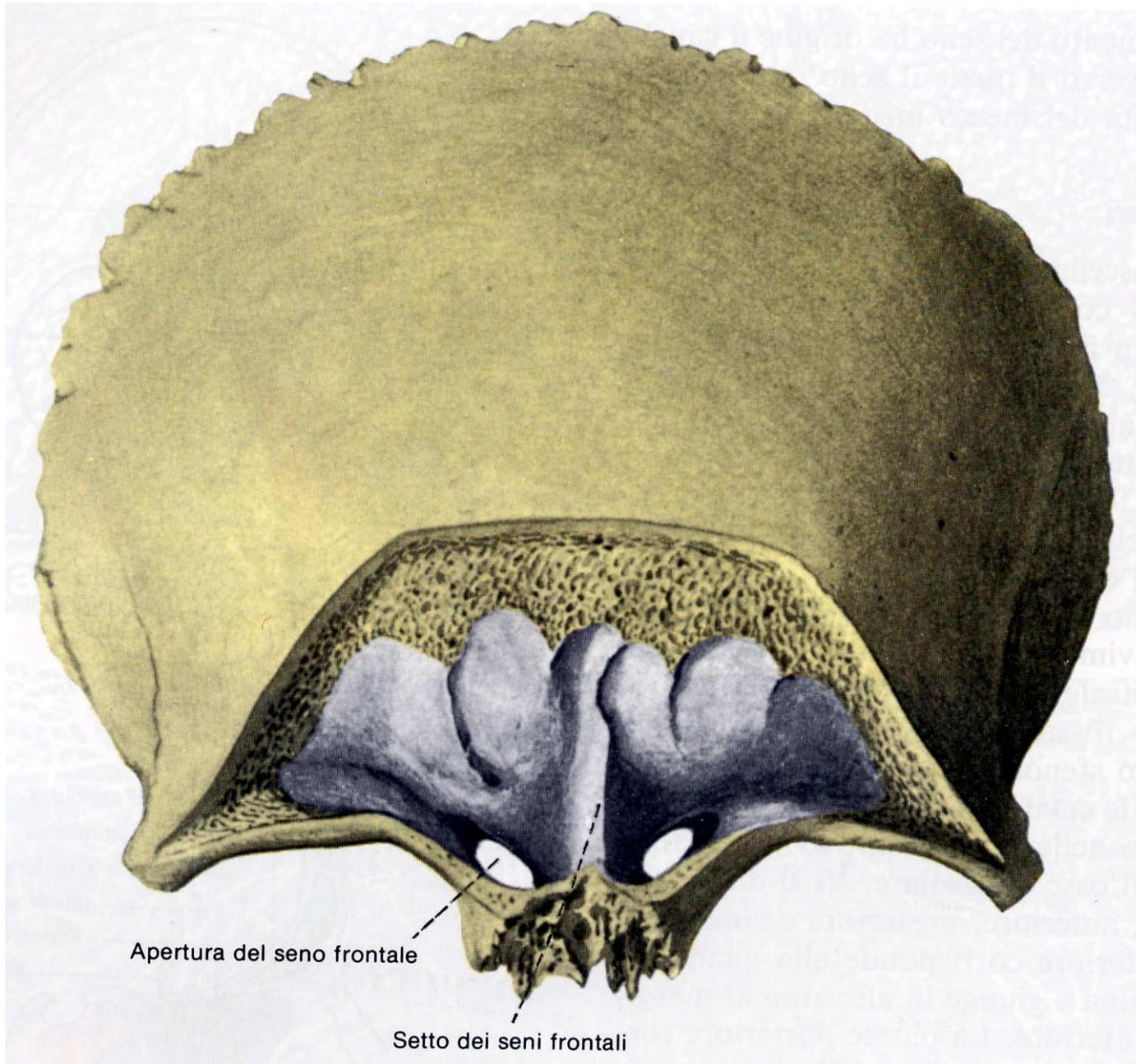
- Connesse alle cavità nasali
- Piene di aria respiratoria
- Cavità scavate nelle ossa:
 - Frontale
 - Etmoide
 - Mascellare
 - Palatino

- Funzione:
 - modificare l'aria ?
 - alleggerire il massiccio facciale
 - cassa di risonanza



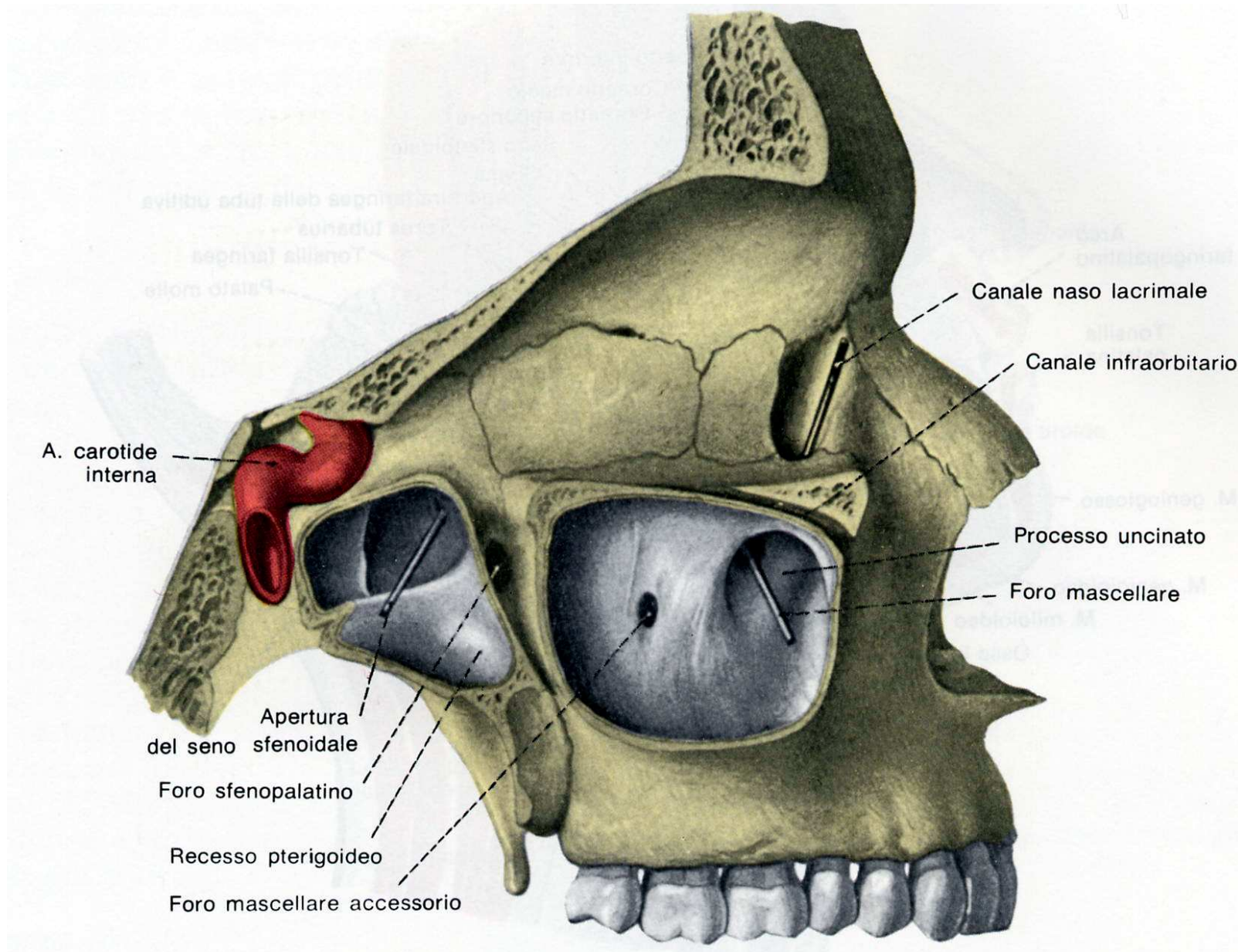
1. SENI FRONTALI
2. SENI MASCELLARI
3. SENI SFENOIDALI
4. CELLULE ETMOIDALI





Apertura del seno frontale

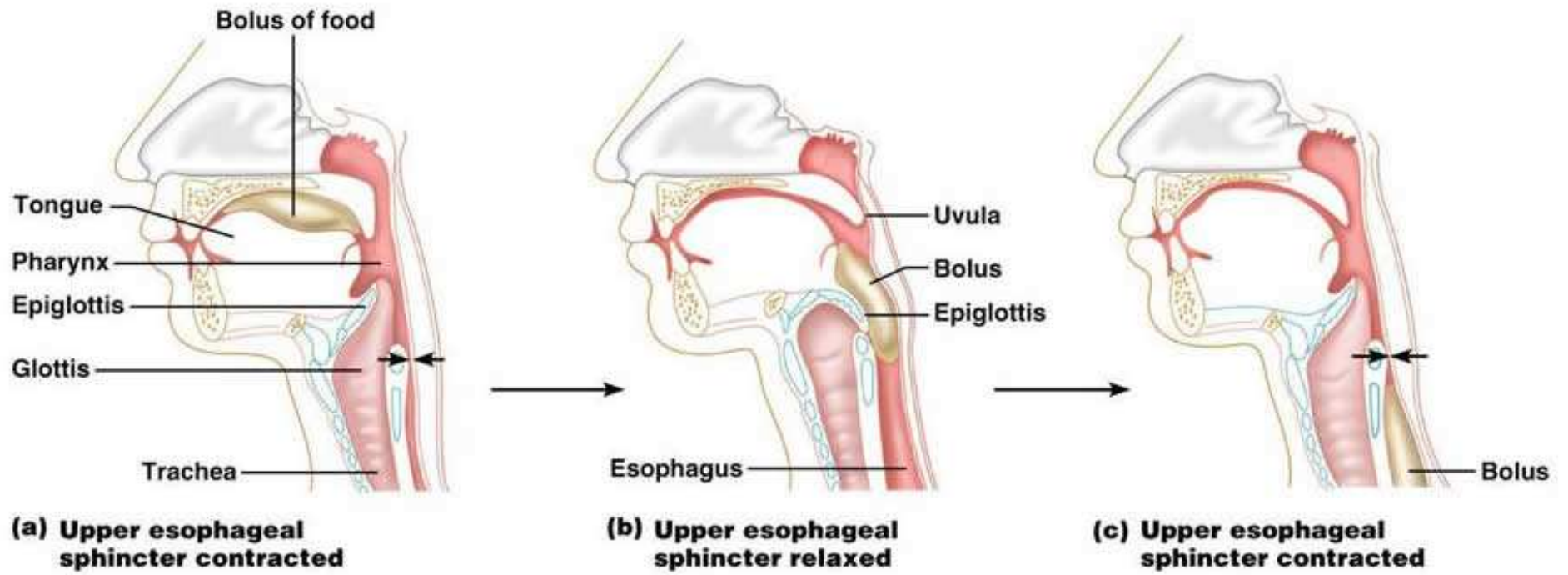
Setto dei seni frontali

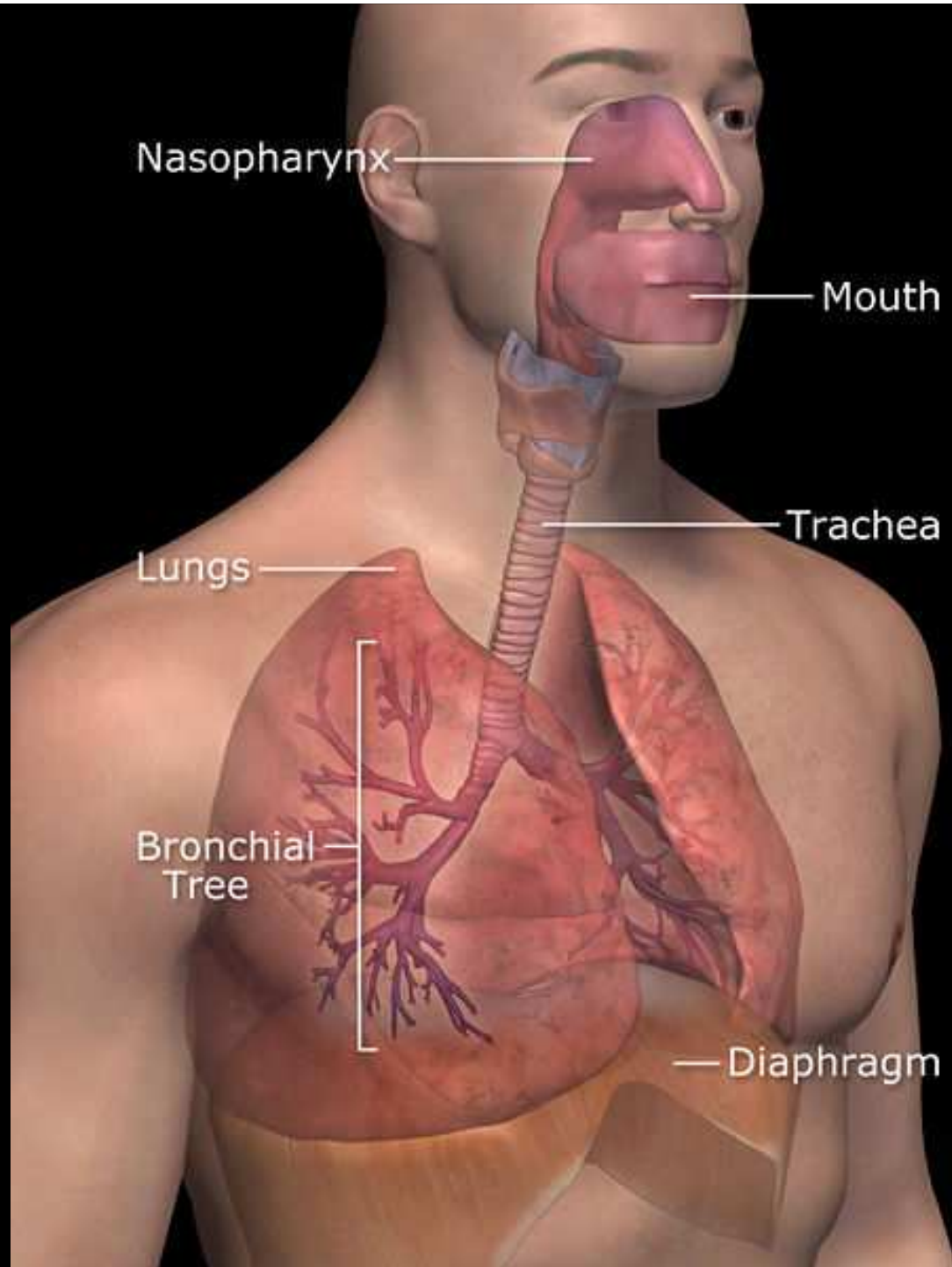


FARINGE

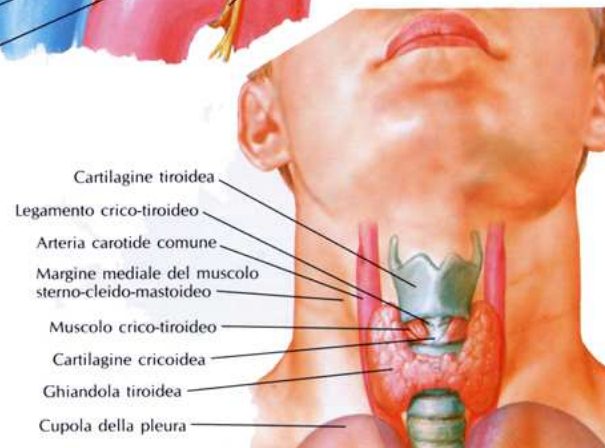
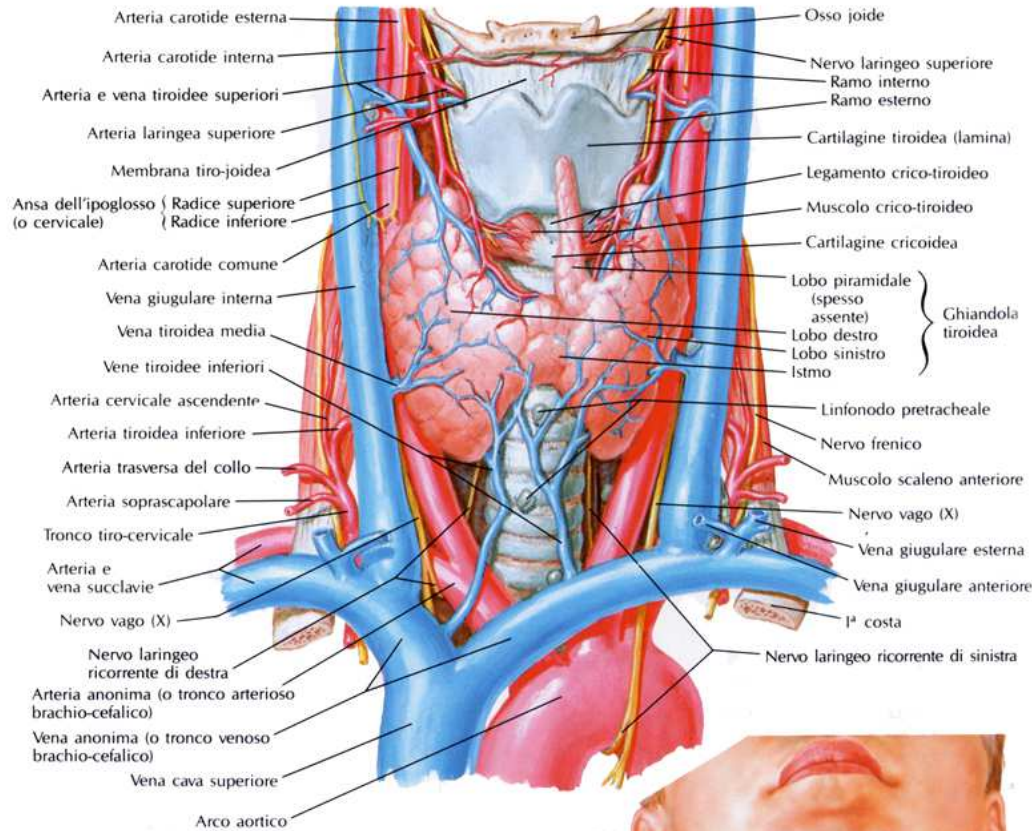


FARINGE





LARINGE



- Organo impari mediano
- Loggia viscerale del collo
- Sotto l'osso ioide
- Tra C4-C6
- lunghezza 4 cm
- Larghezza 4 cm
- Diametro antero-posteriore 2-3 cm
- forma di piramide triangolare
- Base in alto e apice in basso

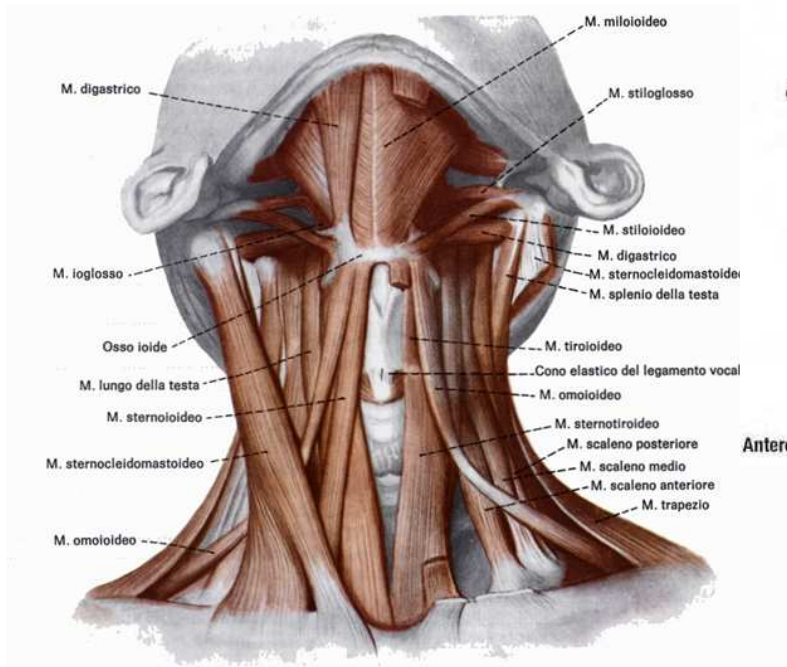
RAPPORTI ANATOMICI

Anteriormente:

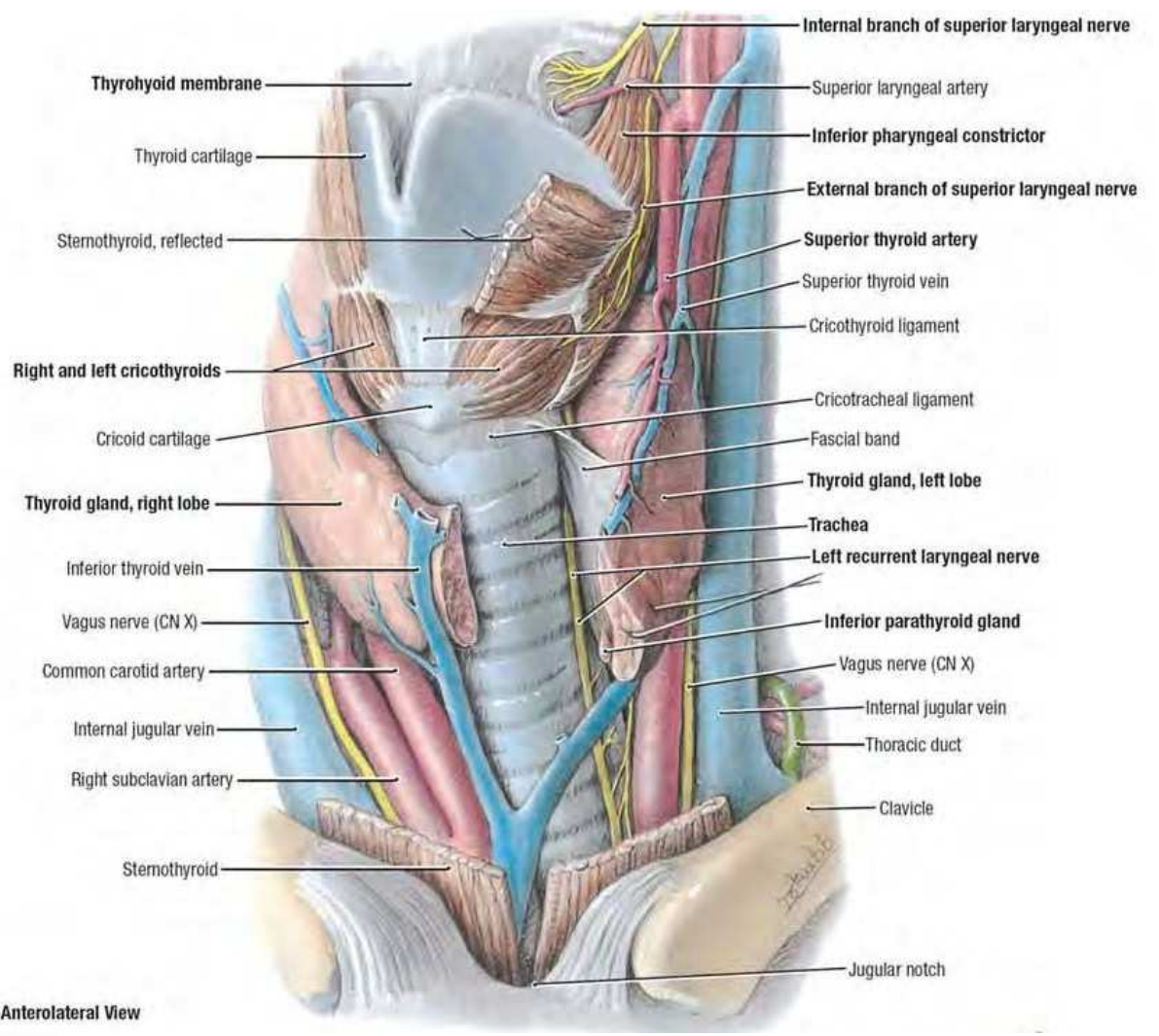
- tiroide
- m. sottoioidei

Posteriormente:

- faringe



Preparazione dei muscoli del collo, vista in proiezione anteriore. A sinistra, il muscolo sternocleidomastoideo e il ventre anteriore del digastrico sono stati sezionati e in gran parte asportati; in tal modo si mettono in luce i muscoli scaleni.



Anterolateral View

RAPPORTI ANATOMICI

Anteriormente:

- tiroide
- m. sottoioidei

Posteriormente:

- faringe

Lateralmente:

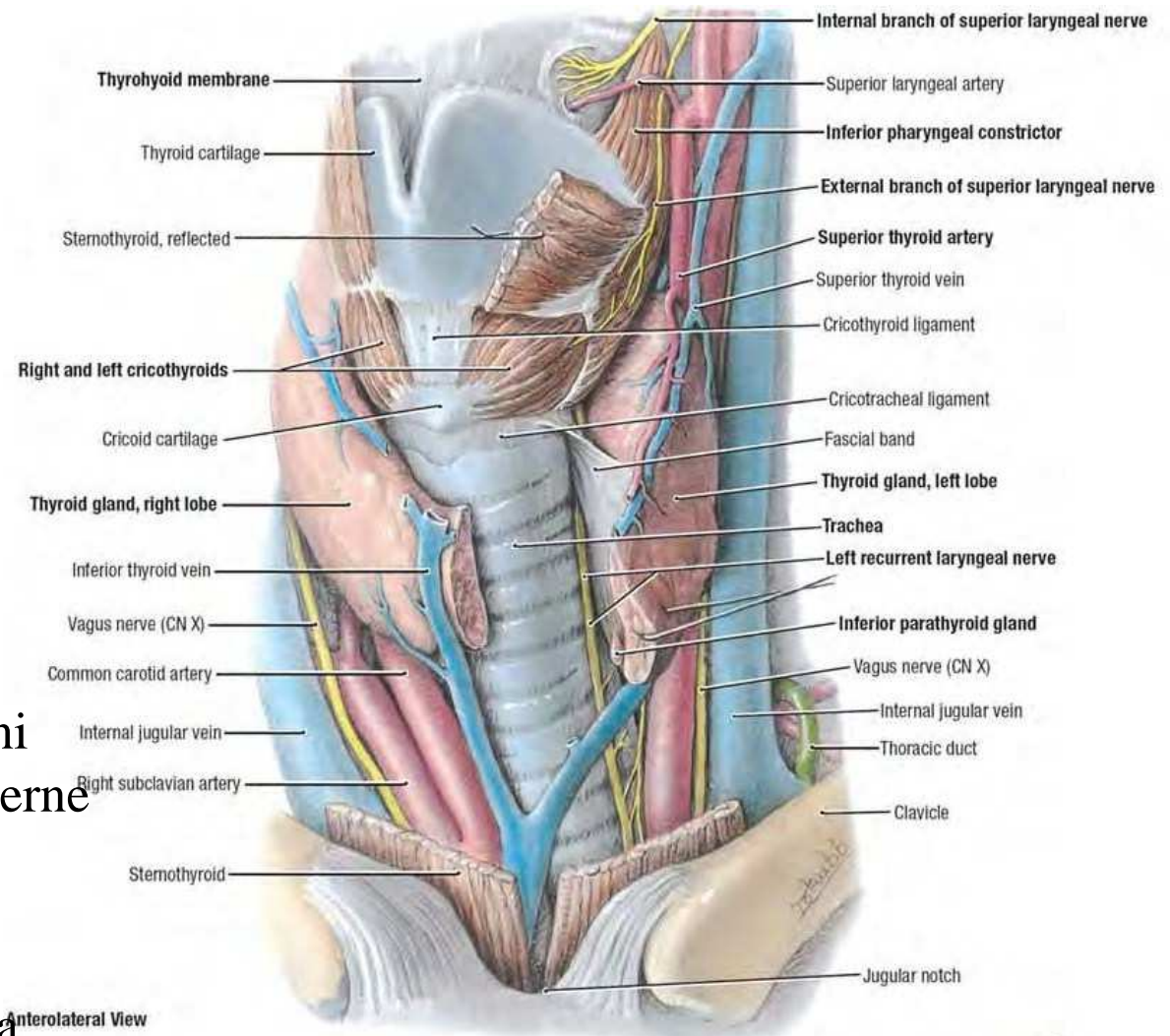
- art carotidi comuni
- vene giugulari interne
- nervo vago

Base:

- radice della lingua
- adito laringeo

Apice:

- continuità con la trachea



RAPPORTI ANATOMICI

Anteriormente:

- tiroide
- m. sottoioidei

Posteriormente:

- faringe

Lateralmente:

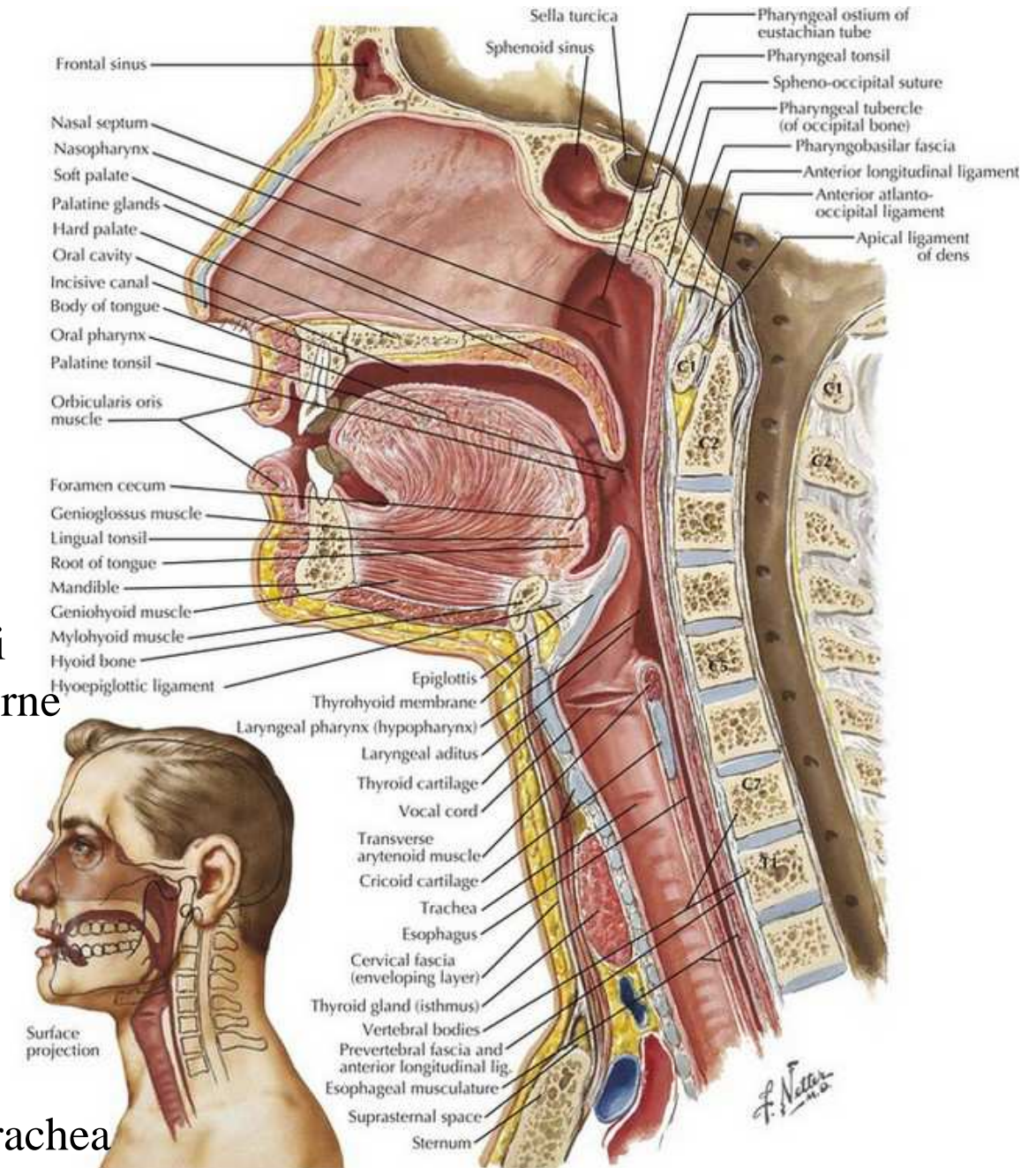
- art carotidi comuni
- vene giugulari interne
- nervo vago

Base:

- radice della lingua
- adito laringeo

Apice:

- continuità con la trachea

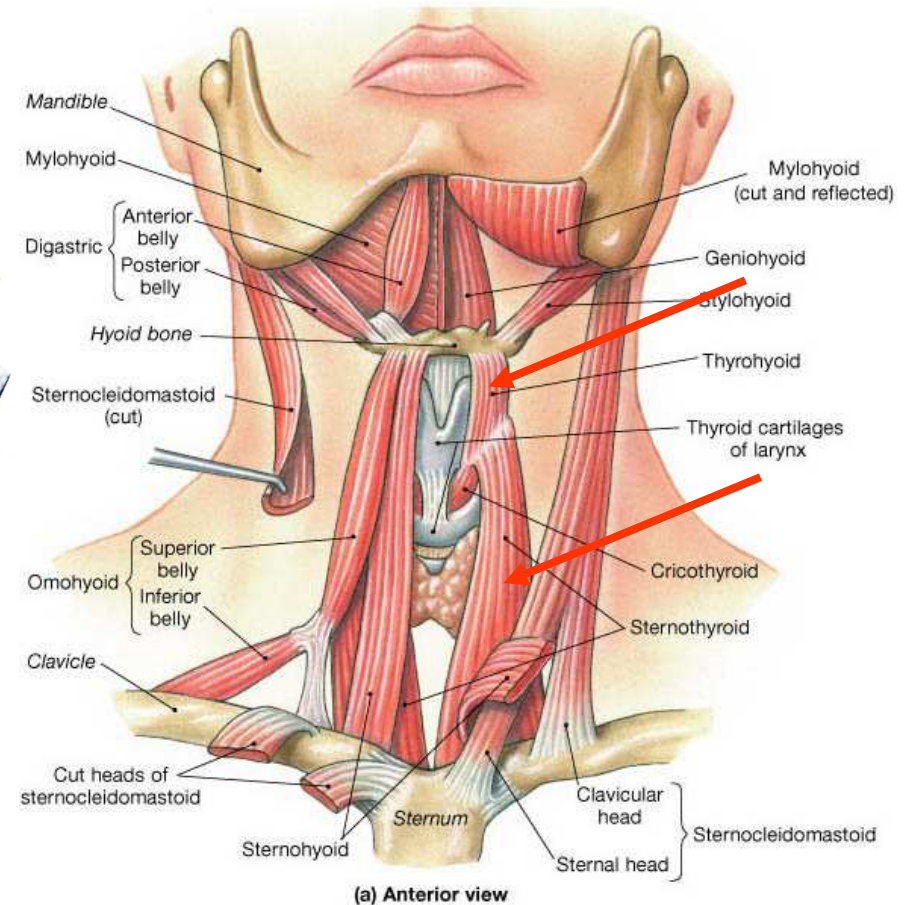
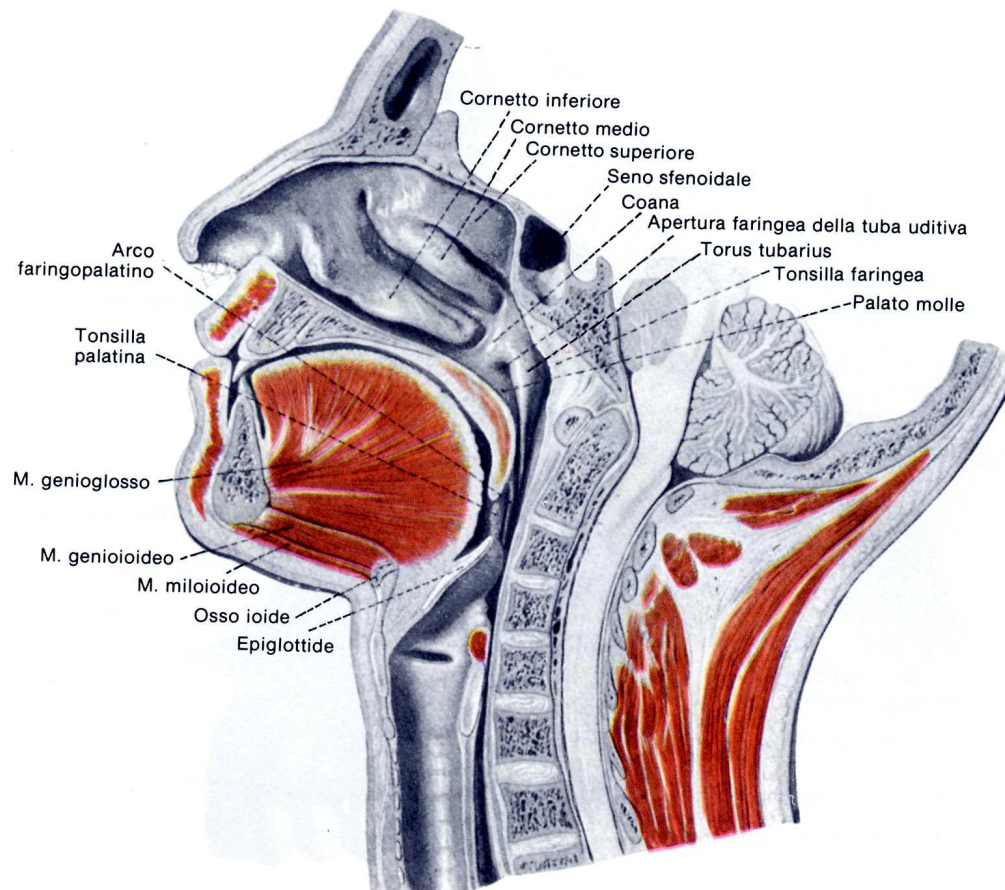


MEZZI DI FISSITA'

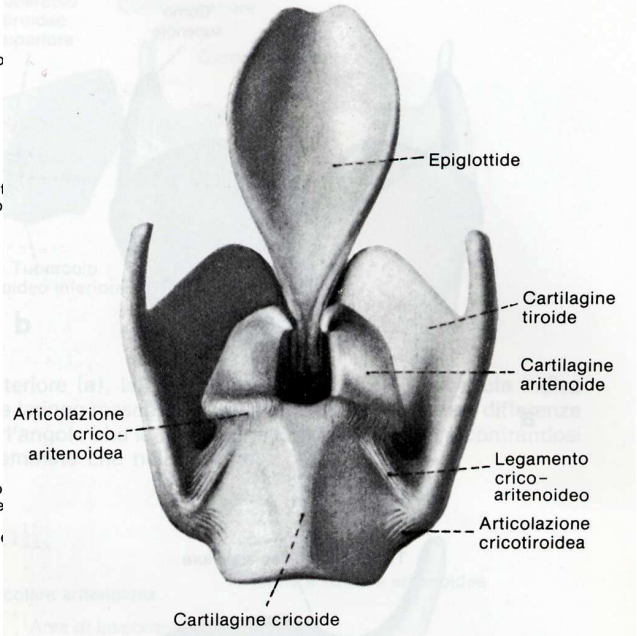
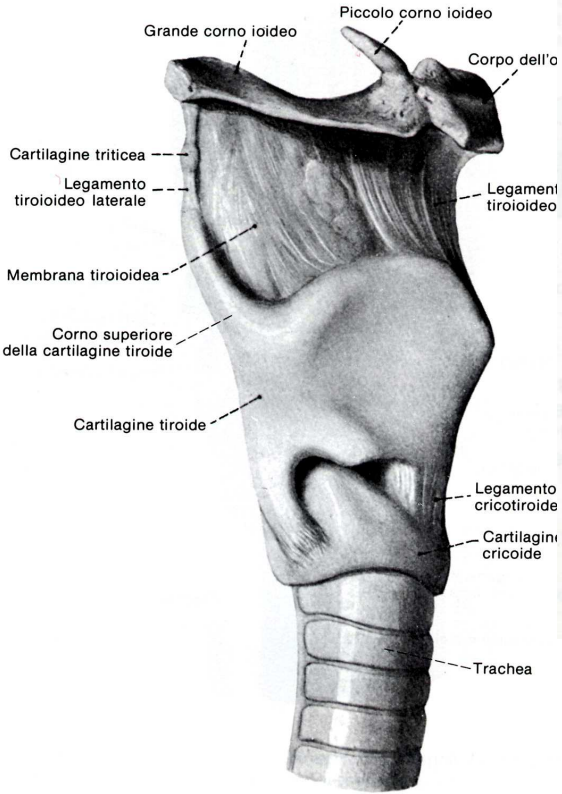
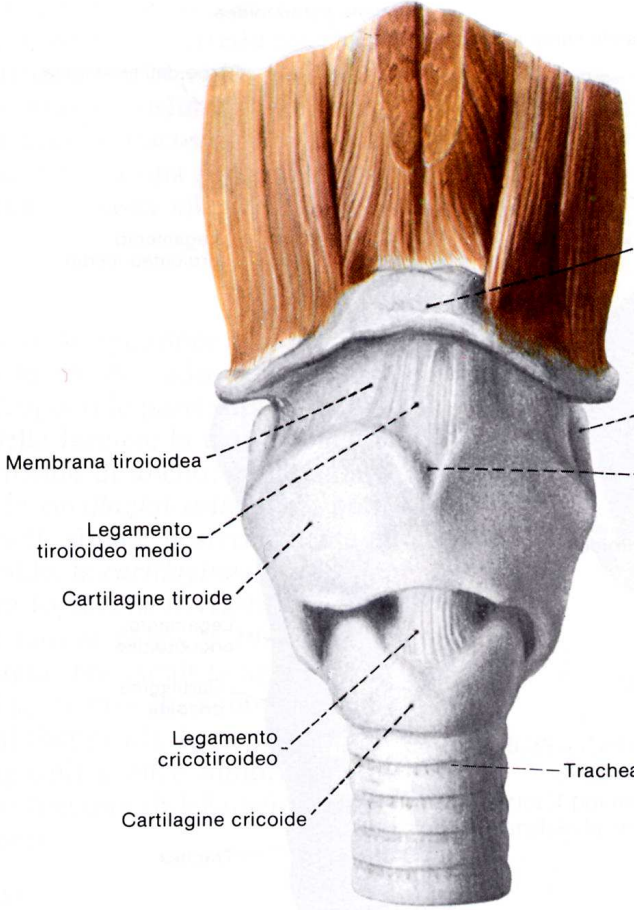
Continuità con trachea e faringe

Muscoli e legamenti con lo ioide

Muscoli e legamenti con il torace inferiore



STRUTTURA DELLA LARINGE



STRUTTURA DELLA LARINGE

Cartilagini

cartilagine tiroidea

cartilagine cricoide

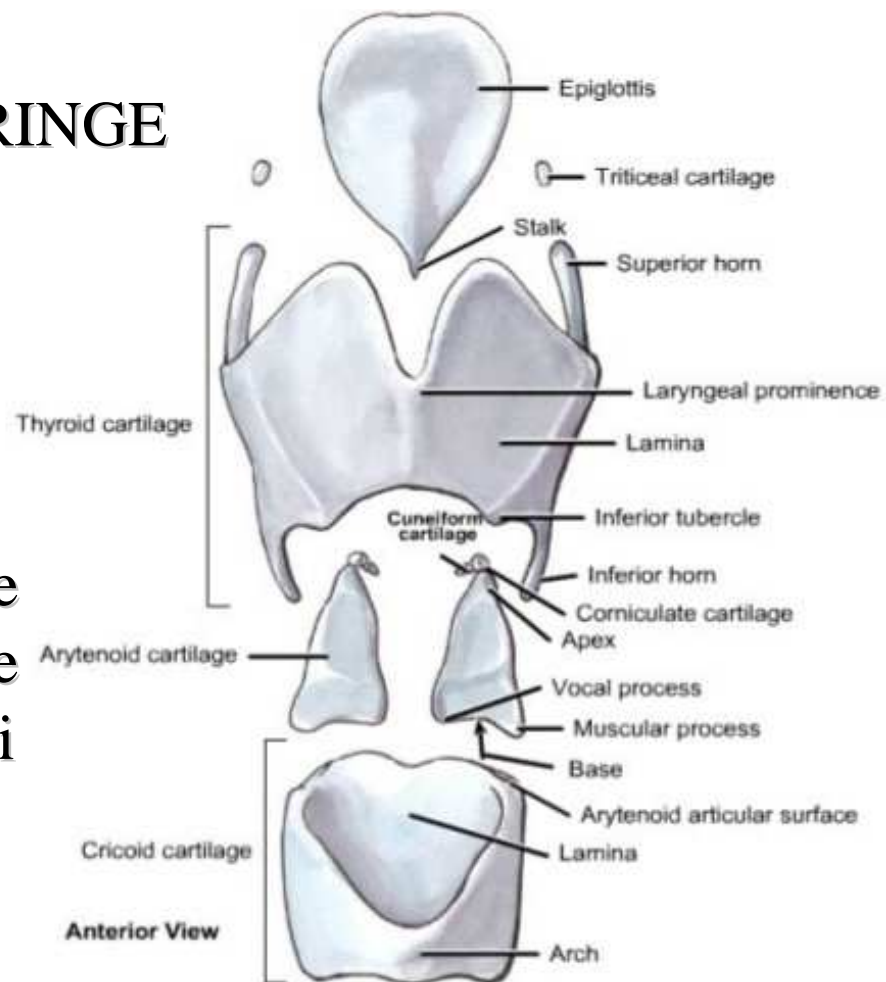
cartilagini aritenoidi

cartilagine epiglottide

cartilagini corniculate

cartilagini cuneiformi

cartilagini triticee



CARTILAGINE TIROIDE

Impari mediana

Cartilagine ialina

Due lamine quadrilatere

convergenza nella linea mediana

differenze tra uomo e donna

faccia mediale e laterale

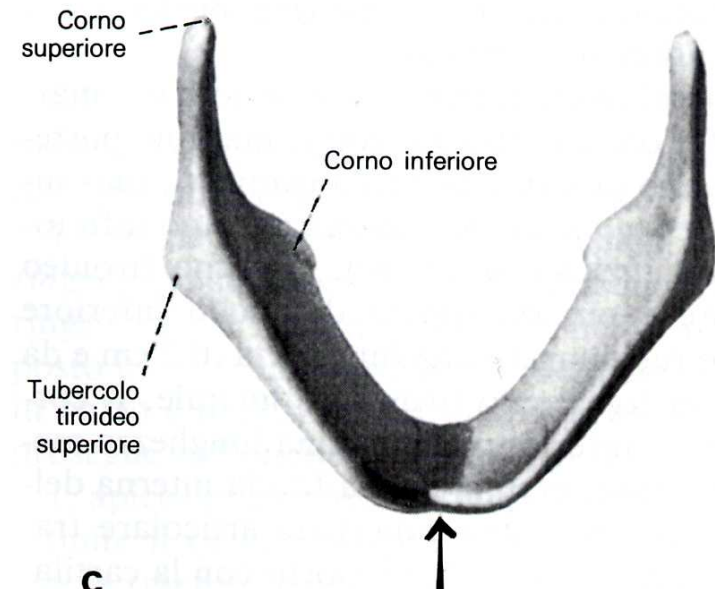
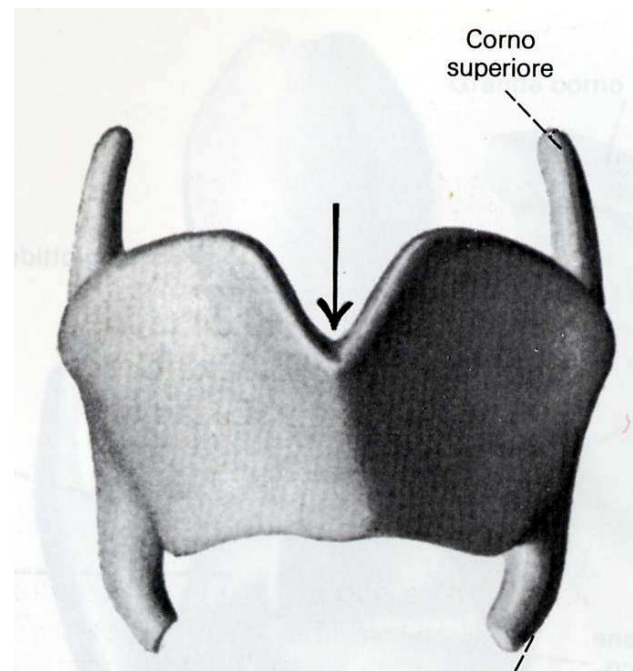
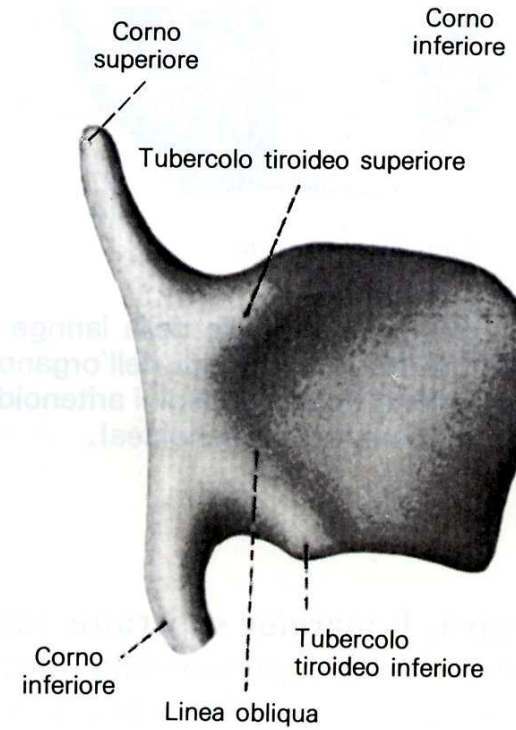
Corno tiroideo superiore

2 cm

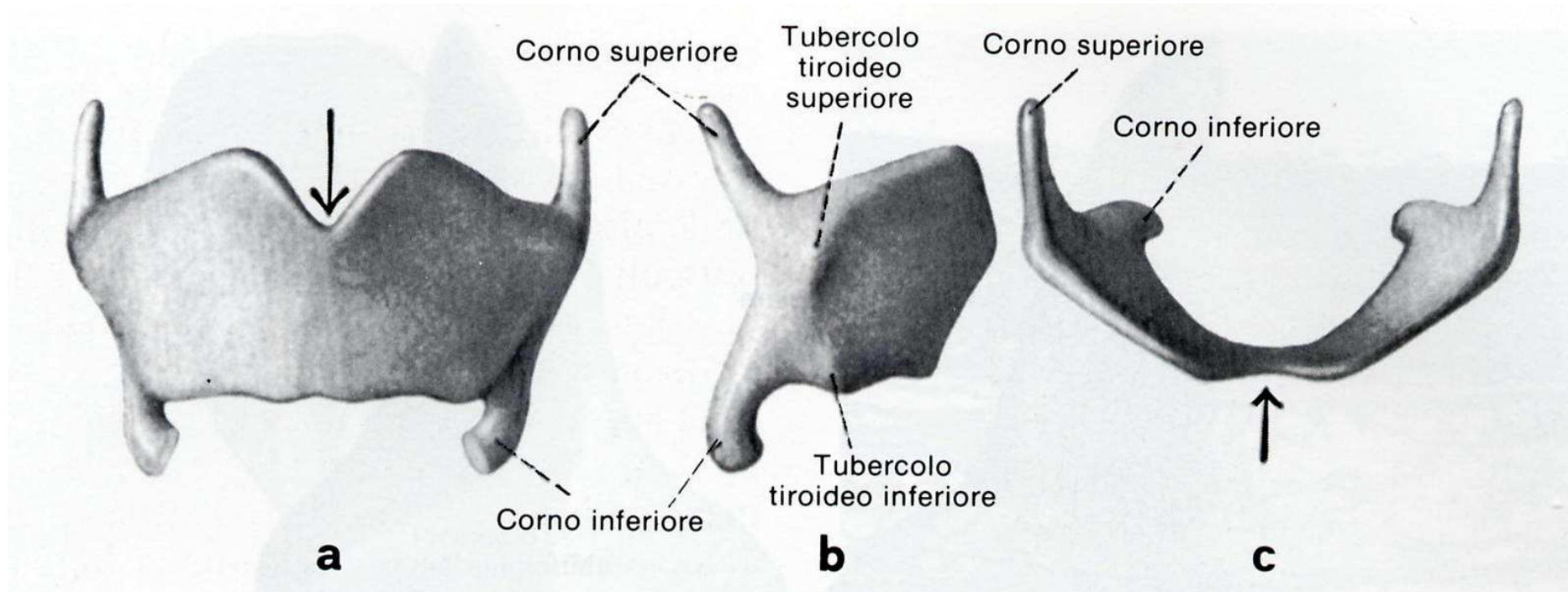
Corno tiroideo inferiore

5-8 mm

43



CARTILAGINE TIROIDE DI FEMMINA



CARTILAGINE CRICOIDE DI MASCHIO

45

Impari mediana

Di sostegno alle altre cartilagini

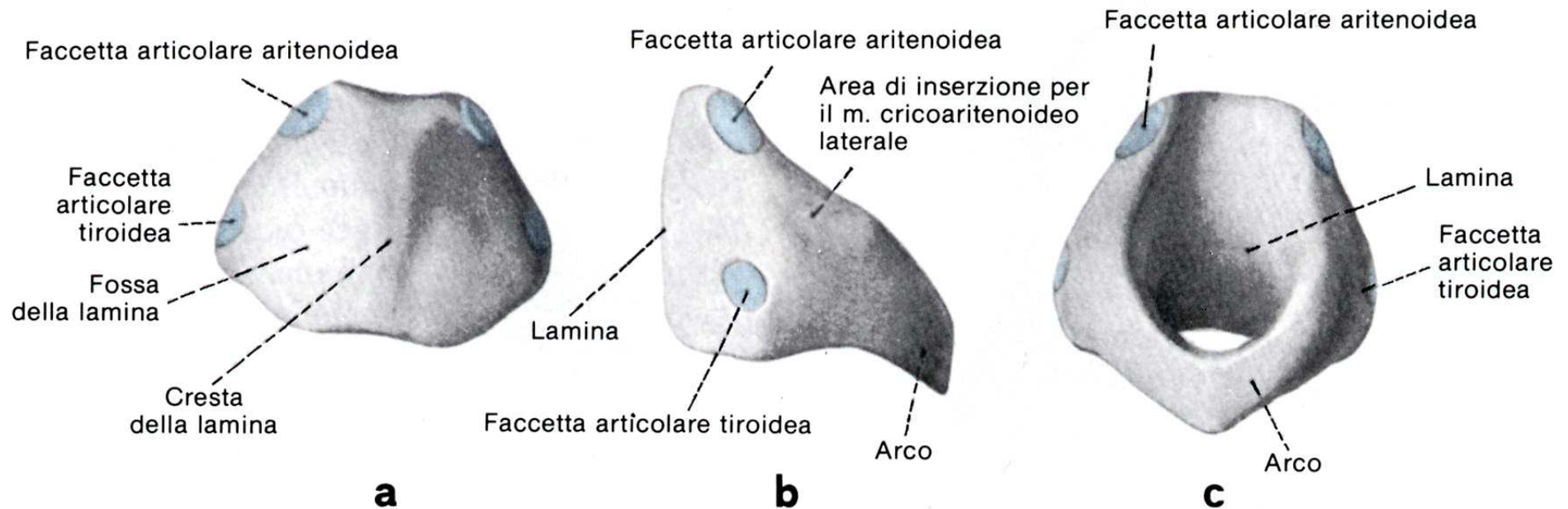
Inserzione dei muscoli della laringe

Forma anulare

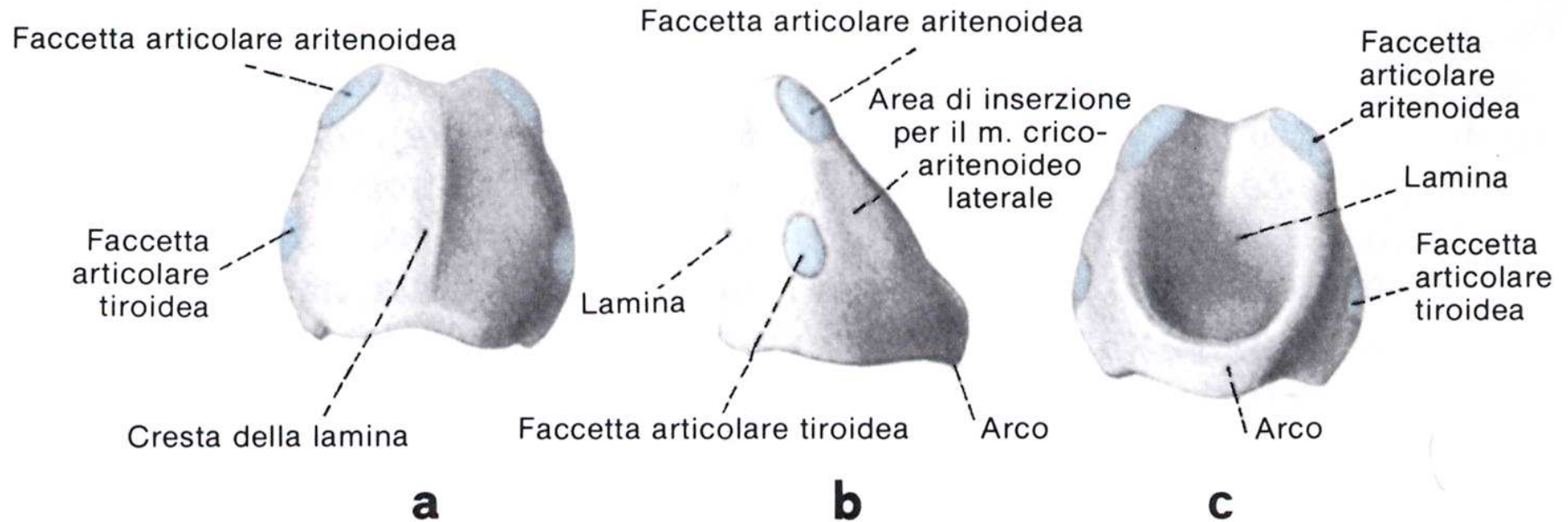
superficie esterna

cresta della lamina

superficie interna



CARTILAGINE CRICOIDE DI FEMMINA



CARTILAGINI ARITENOIDI

Pari e simmetriche

Si articolano con la cricoide

Estremamente mobili

Inserzione di numerosi muscoli

Forma di piramide triangolare

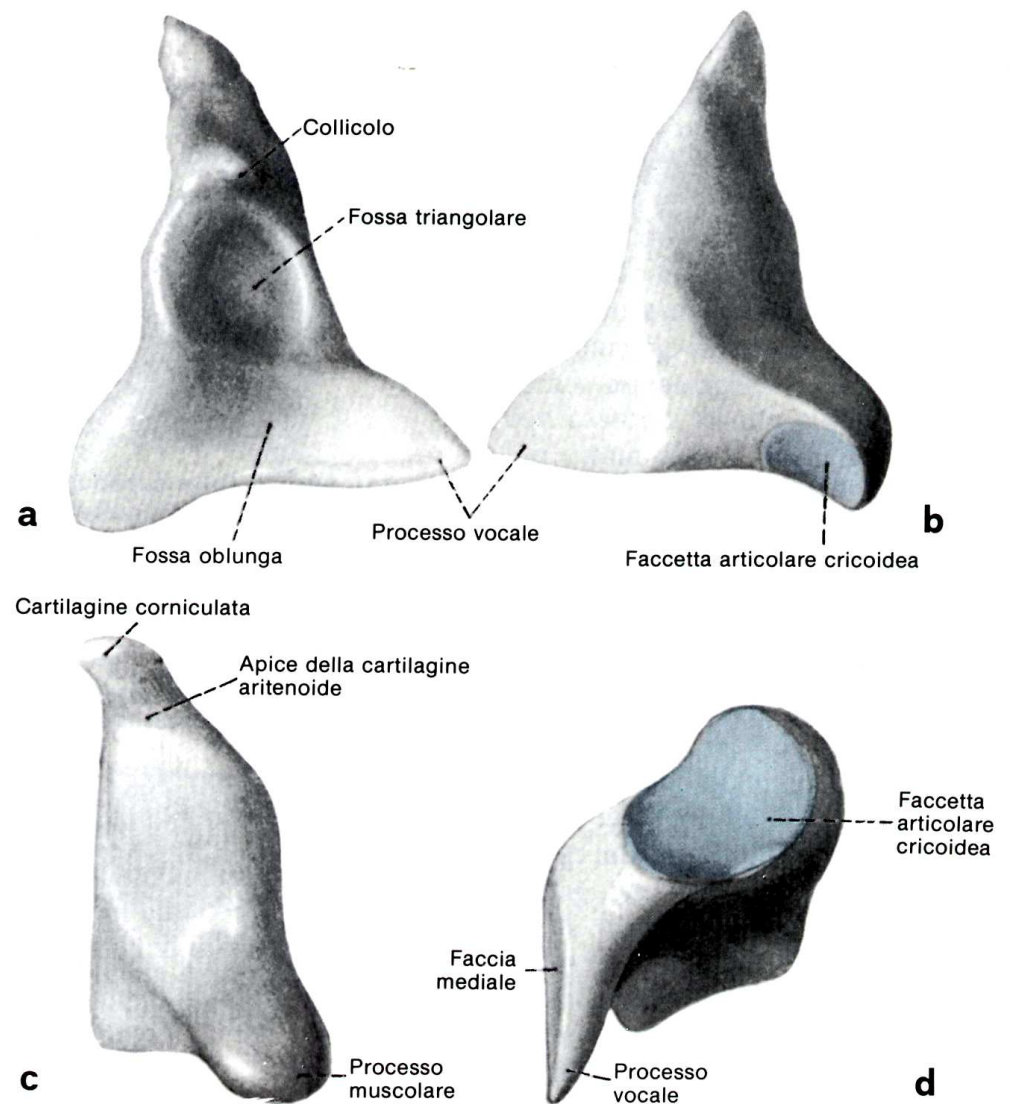
tre facce

base in basso

processo muscolare

processo vocale

apice in alto



CARTILAGINE EPIGLOTTIDE

Impari mediana

Superiormente alla cartilagine tiroidea

Forma di una foglia
due facce

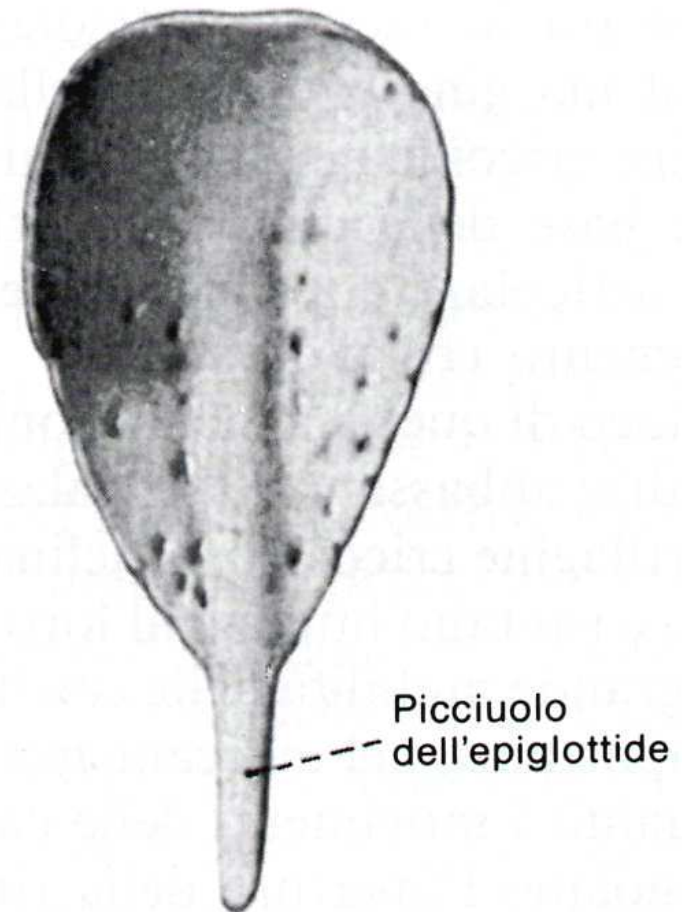
Un contorno

Articolazione (cartilagine tiroide)

Posizione a riposo

Rivestita da mucosa

Fossette delle ghiandole

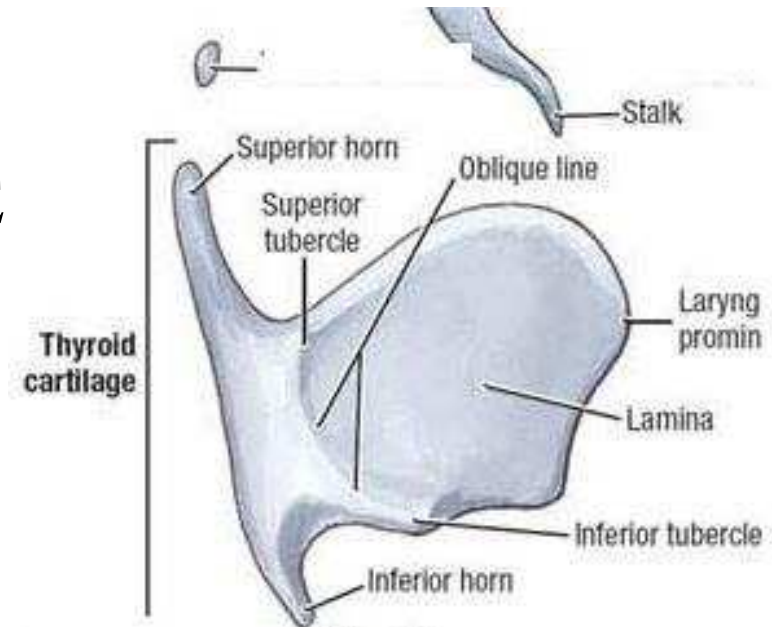


CARTILAGINI CORNICULATE

Forma di coni

Superiormente alle aritenioidi

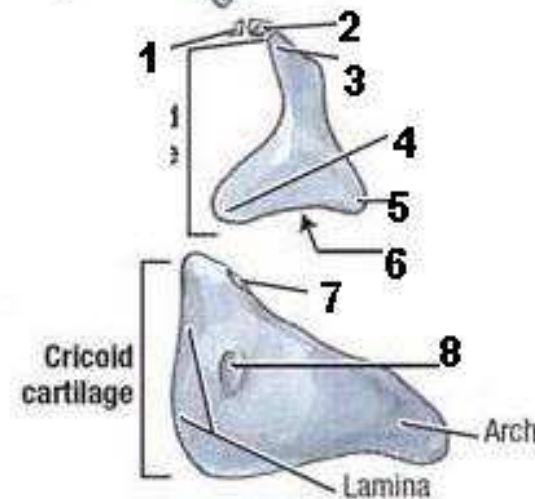
Cartilagine elastica



CARTILAGINI CUNEIFORMI

Forma di bastoncelli

Poste anteriormente alle aritenoidi



ARTICOLAZIONI E LEGAMENTI

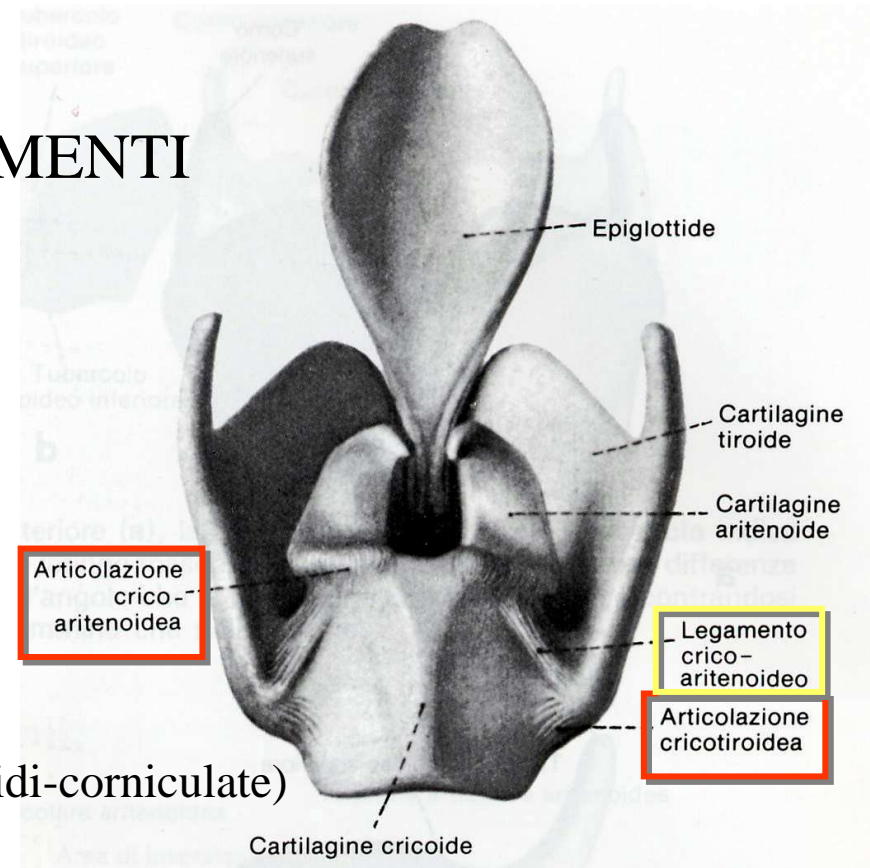
ARTICOLAZIONI LARINGEE

Cricotiroidee
 cricoaritenoidi
 aricorniculate

LEGAMENTI INTRINSECI

Cricocorniculato
 Tiroepiglottico
 Membrane elastiche

membrane quadrangolari
 epiglottide-(aritenoidi-corniculate)
 membrane elastiche
 medie e inferiori
 tiroide-cricoide



LEGAMENTI ESTRINSECI

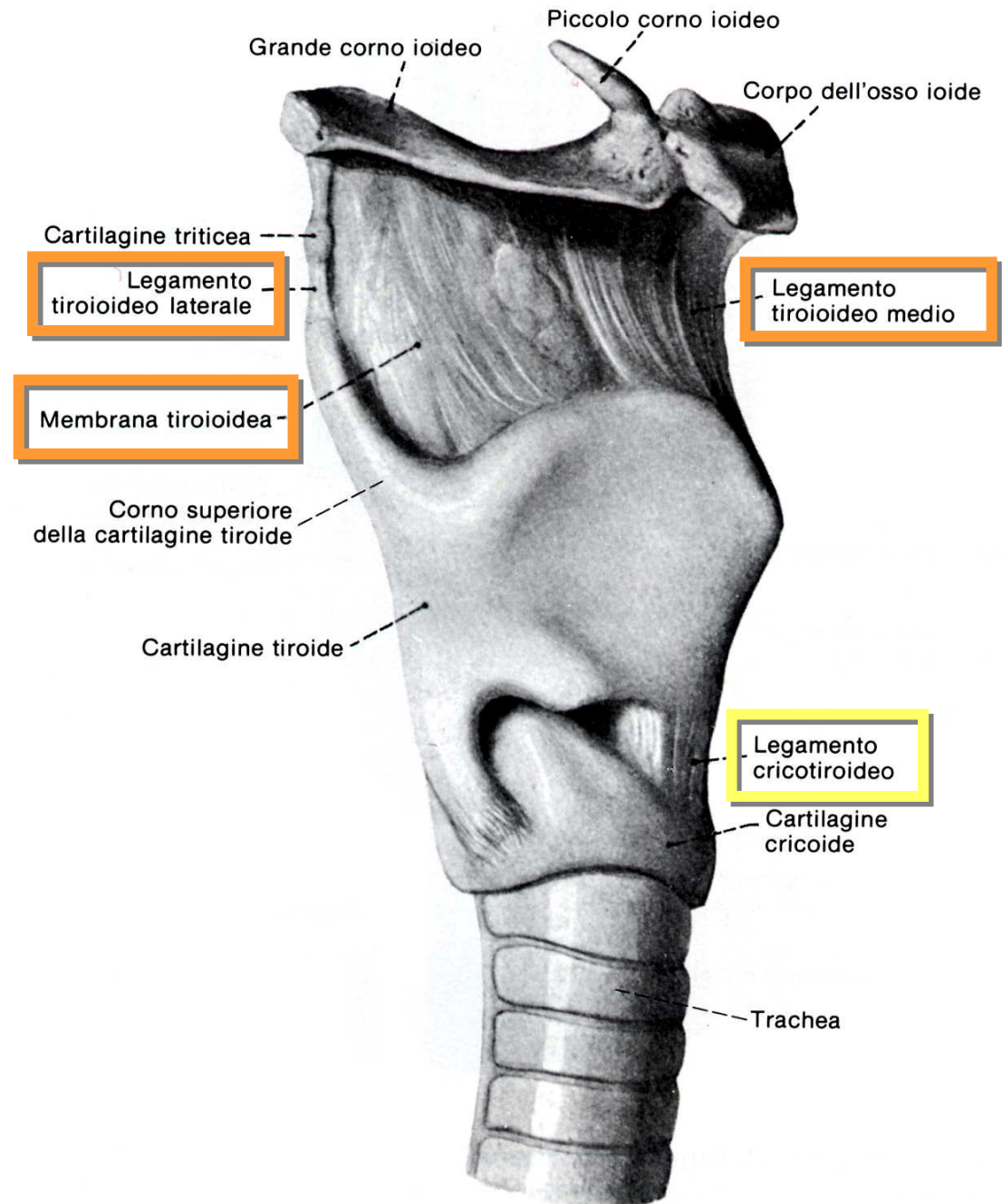
membrana tiroioidea

leg cricotracheale

leg ioepiglottico

leg glossoepiglottico

Leg faringoepiglottico



LEGAMENTI ESTRINSECI

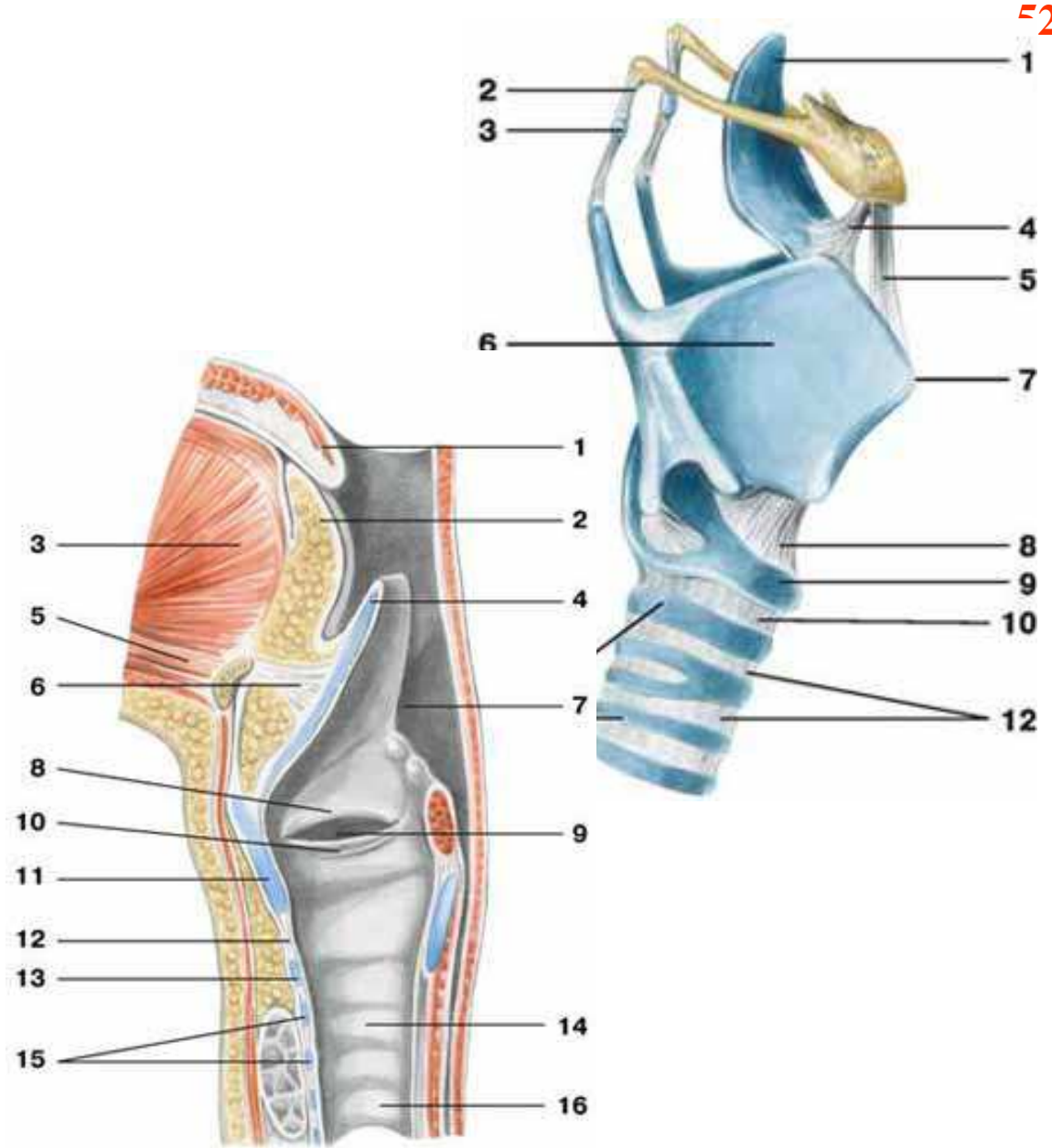
membrana tiroioidea

leg cricotracheale

leg ioepiglottico

leg glossoepiglittico

Leg faringoepiglottico

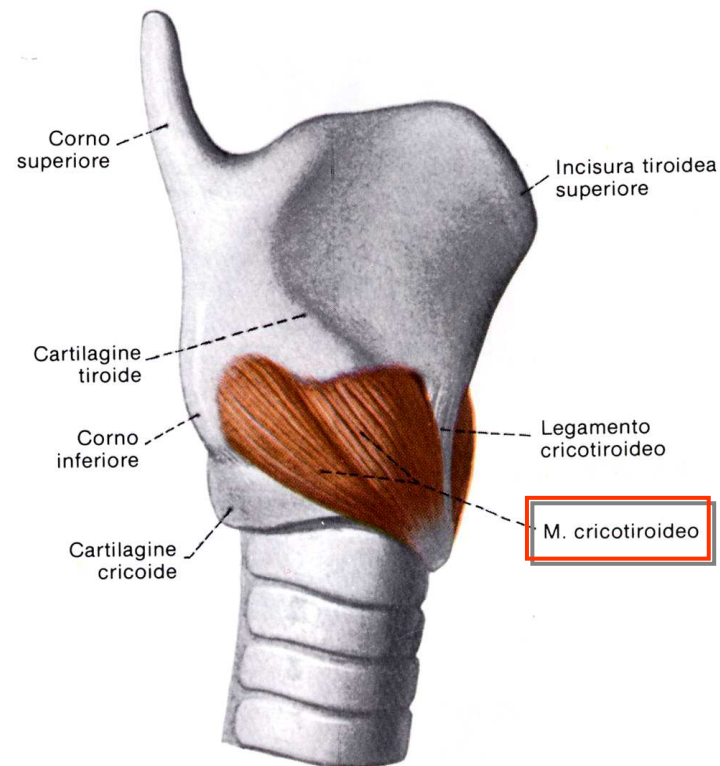
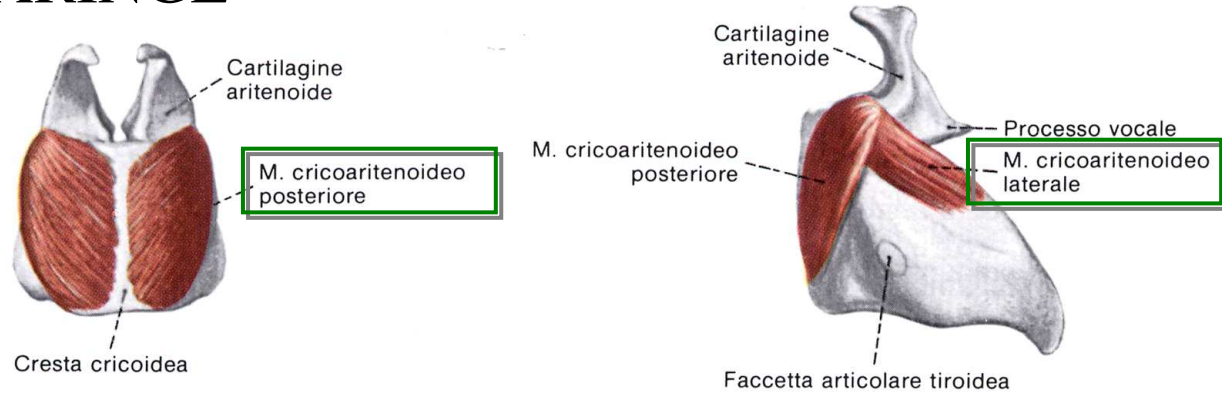


MUSCOLI DELLA LARINGE

Muscoli intrinseci

- cricotiroideo
- cricoaritenoideo
- posteriore
- laterale

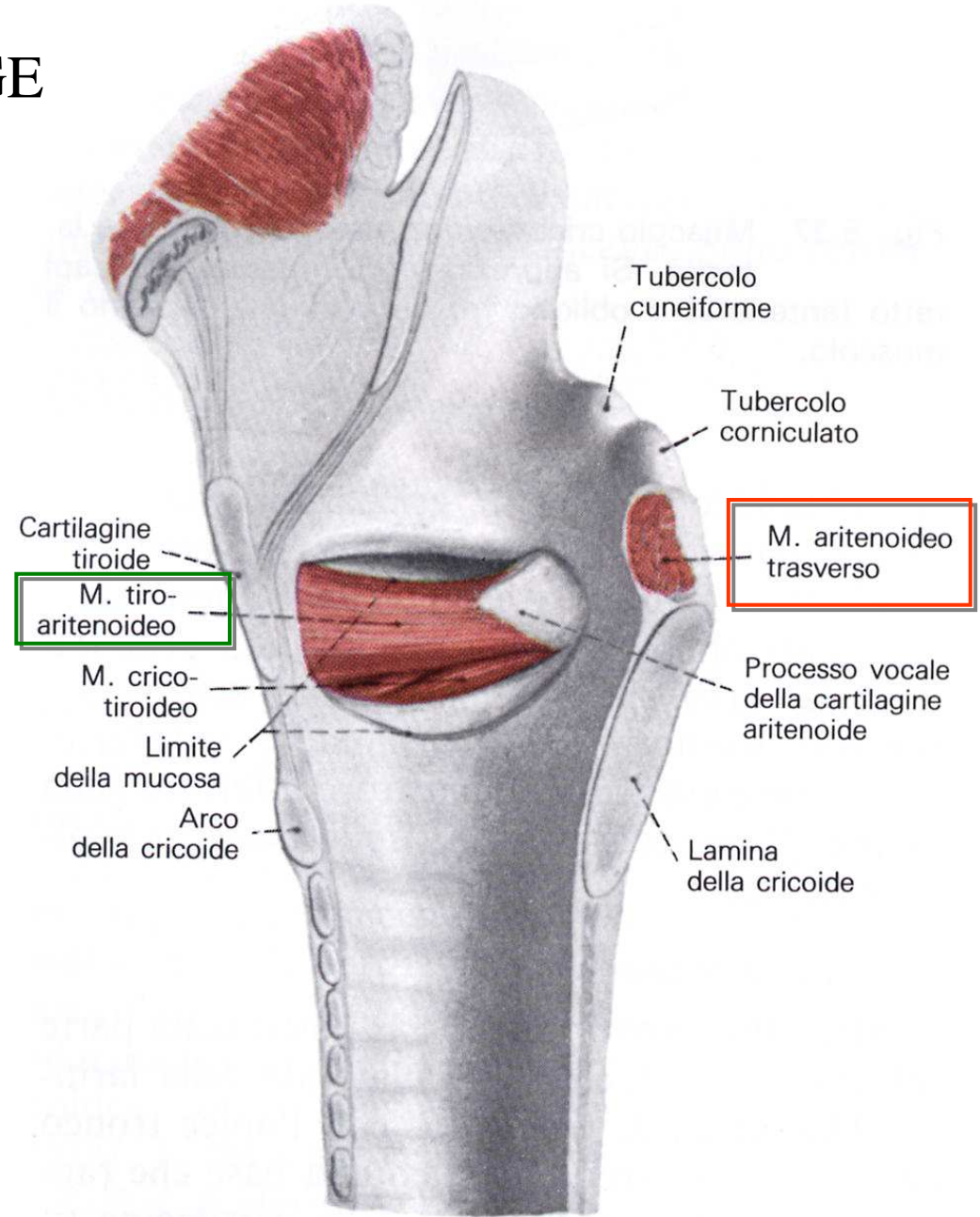
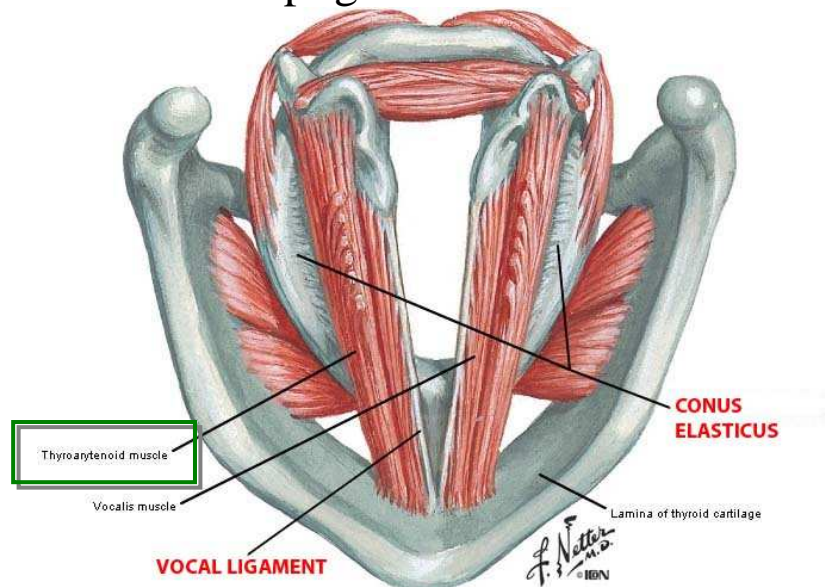
- tiroaritenoideo
- aritenoideo trasverso (*)
- aritenoideo abliquo
- ariepliglottico



MUSCOLI DELLA LARINGE

Muscoli intrinseci

- cricotiroideo
- cricoaritenoideo
 - posteriore
 - laterale
- tiroaritenoideo
- aritenoido trasverso (*)
- aritenoido abliquo
- ariepliglottico



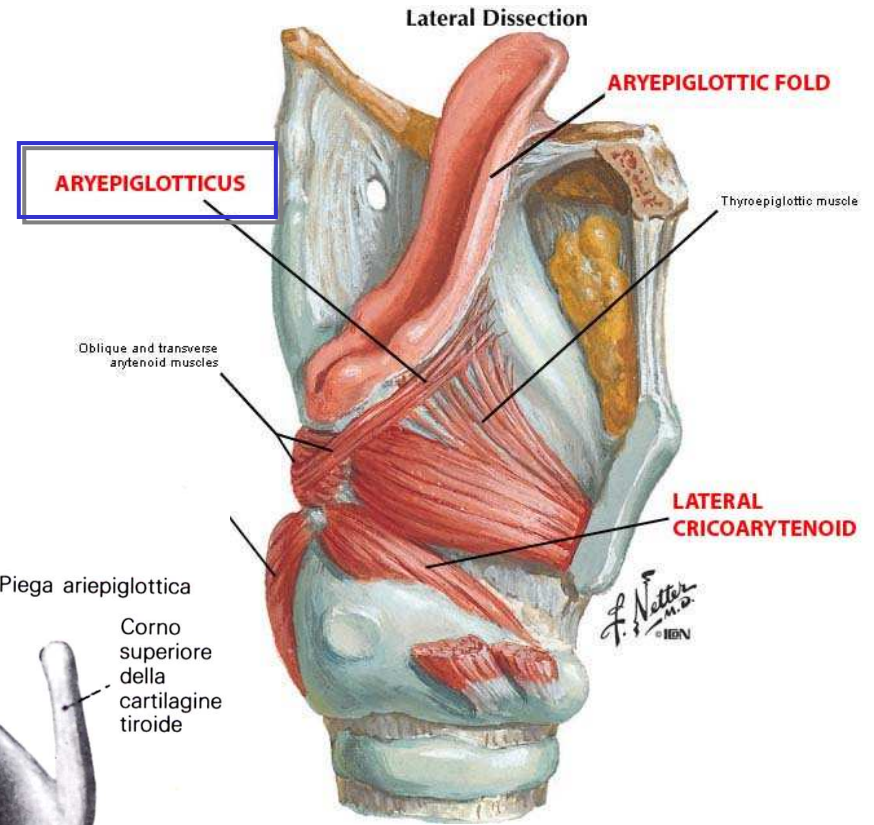
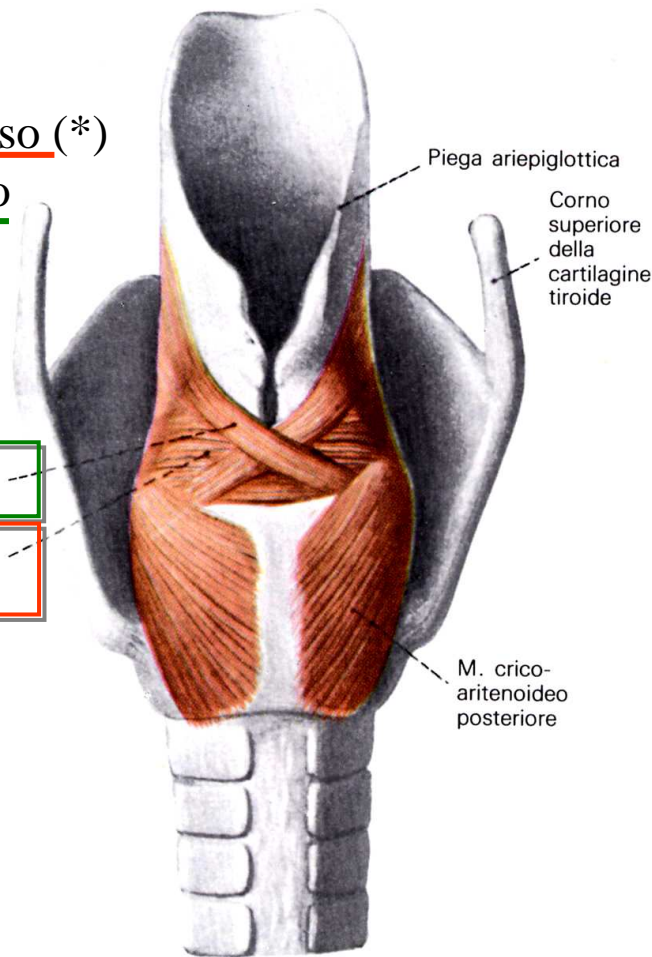
MUSCOLI DELLA LARINGE

Muscoli intrinseci

- cricotiroideo
- cricoaritenoideo
 - posteriore
 - laterale
- tiroaritenoideo
- aritenoideo trasverso (*)
- aritenoideo abliquo
- ariepiplottico

M. aritenoideo obliquo

M. aritenoideo trasverso

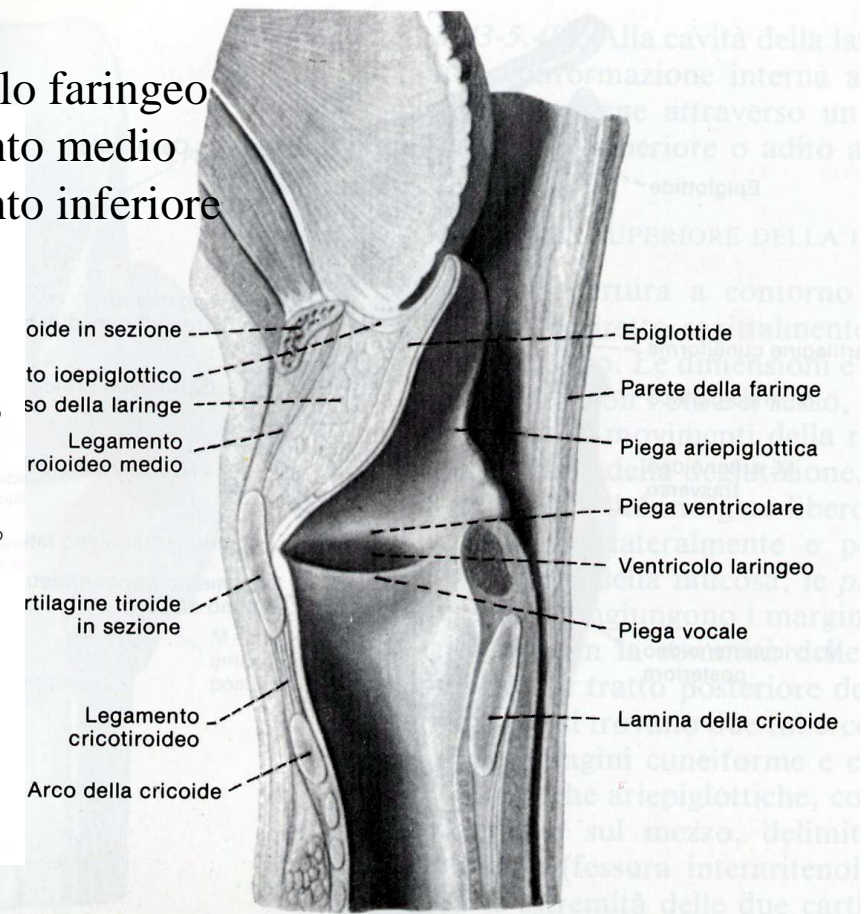
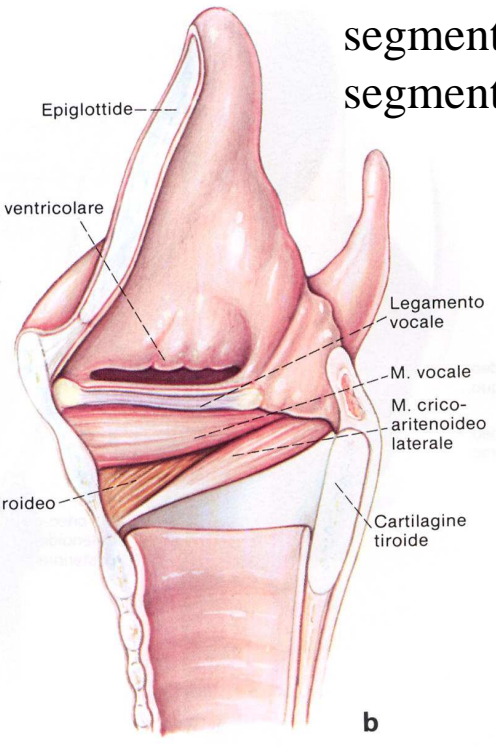
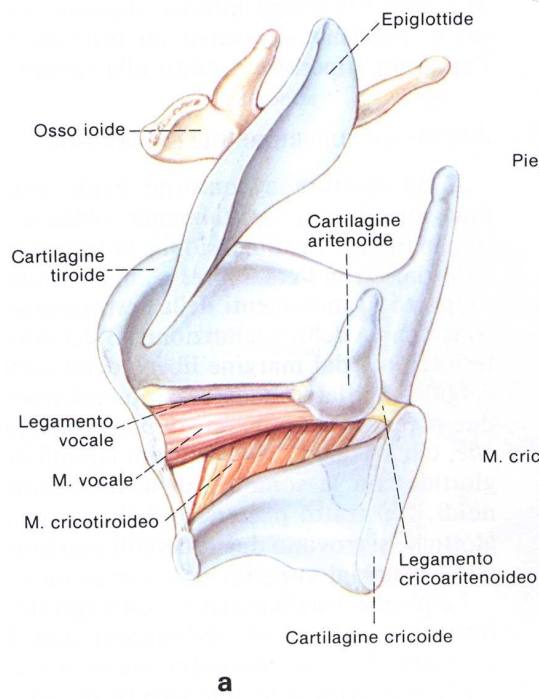


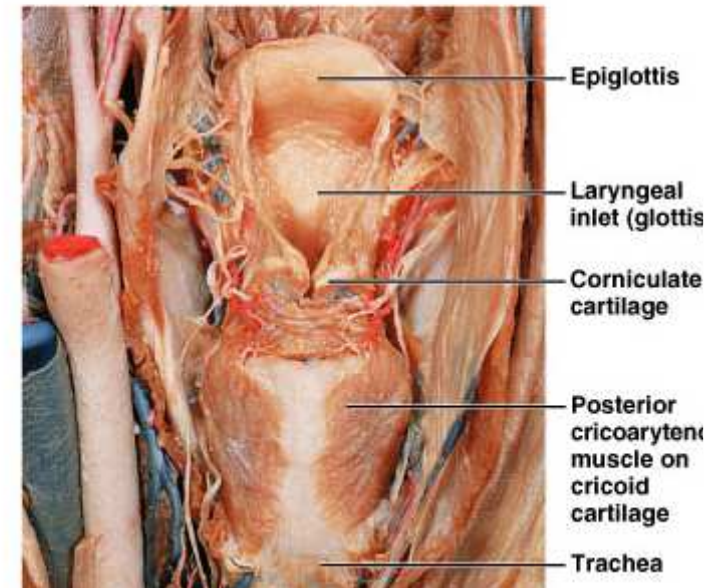
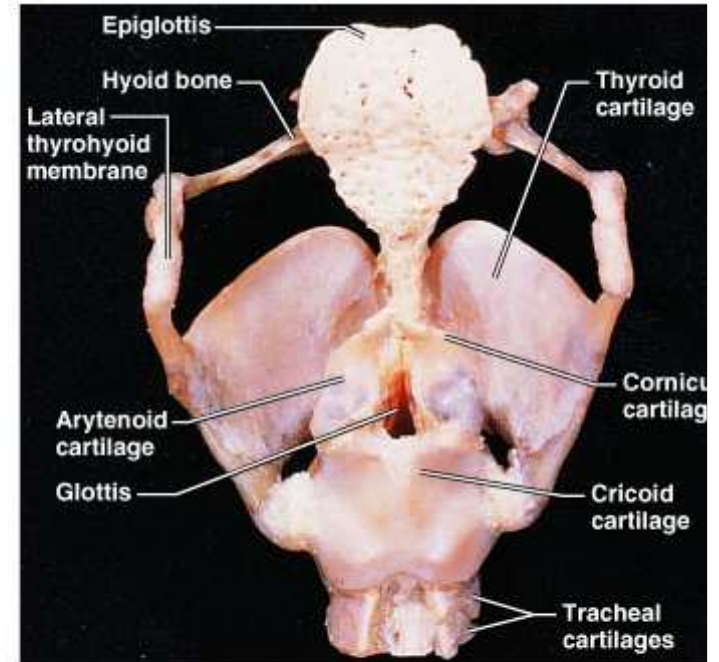
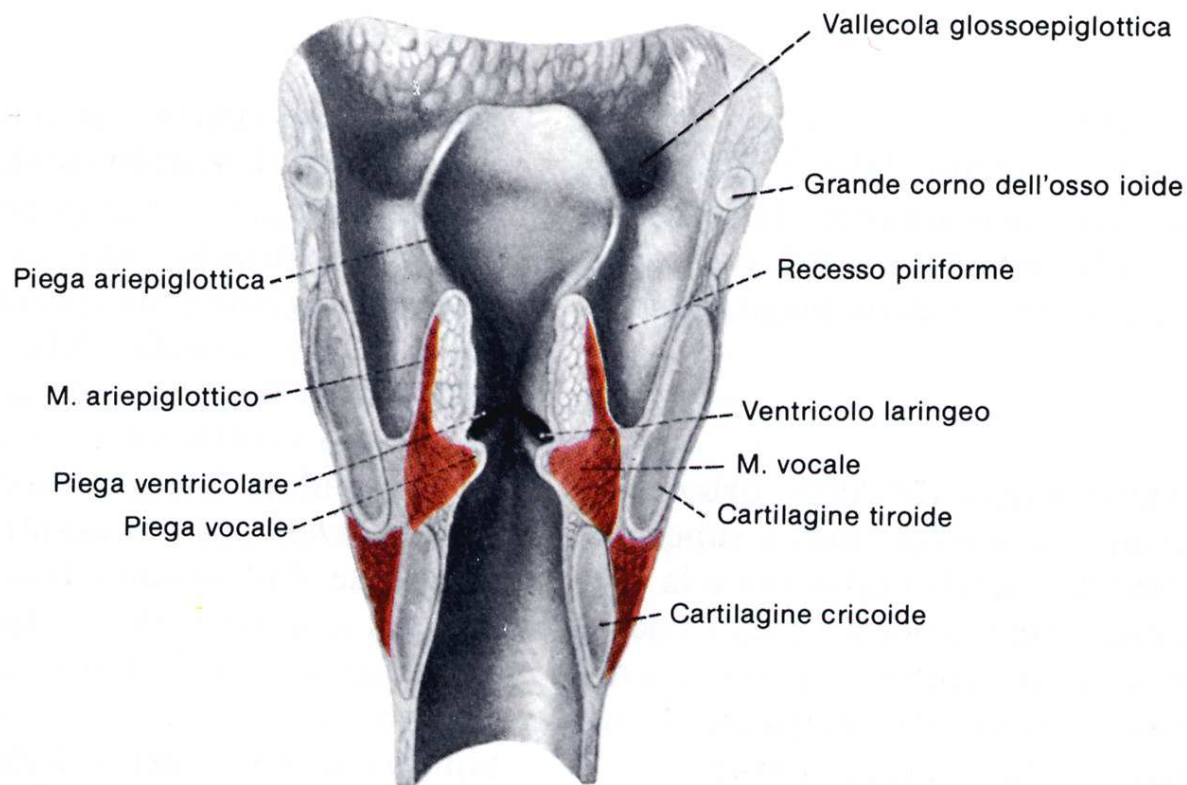
CONFIGUARZIONE INTERNA

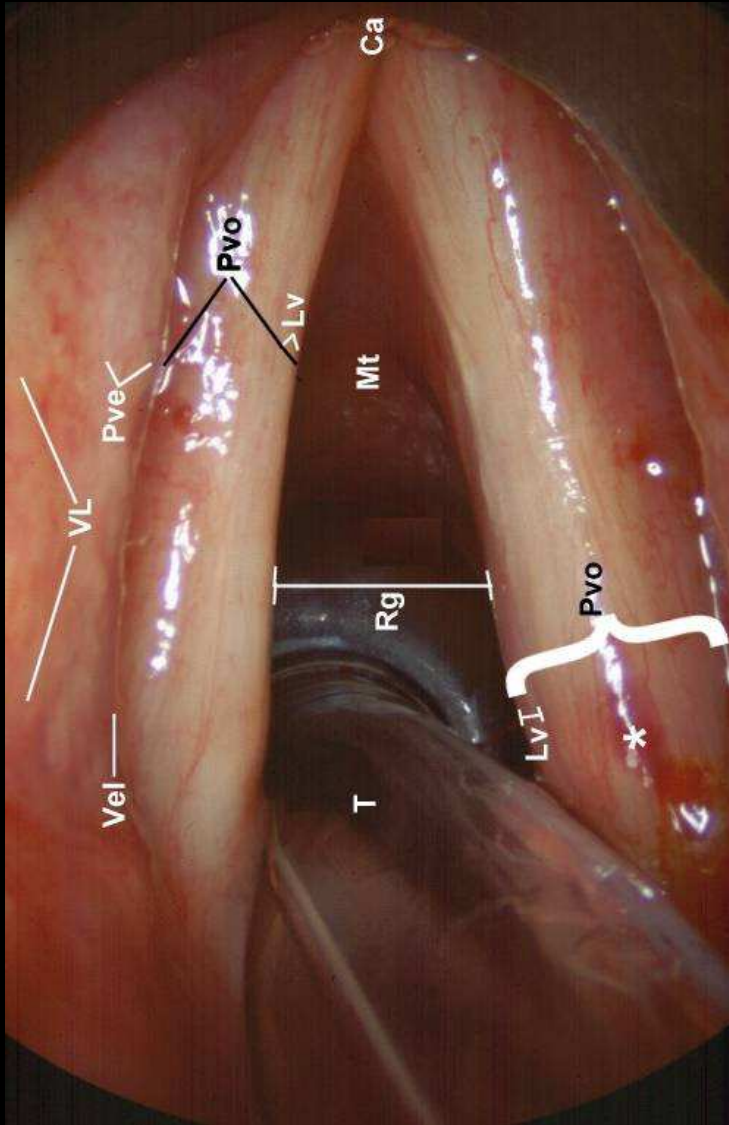
Apertura superiore della laringe
Cavità della laringe
pieghe interne

pieghe ventricolari
corde vocali

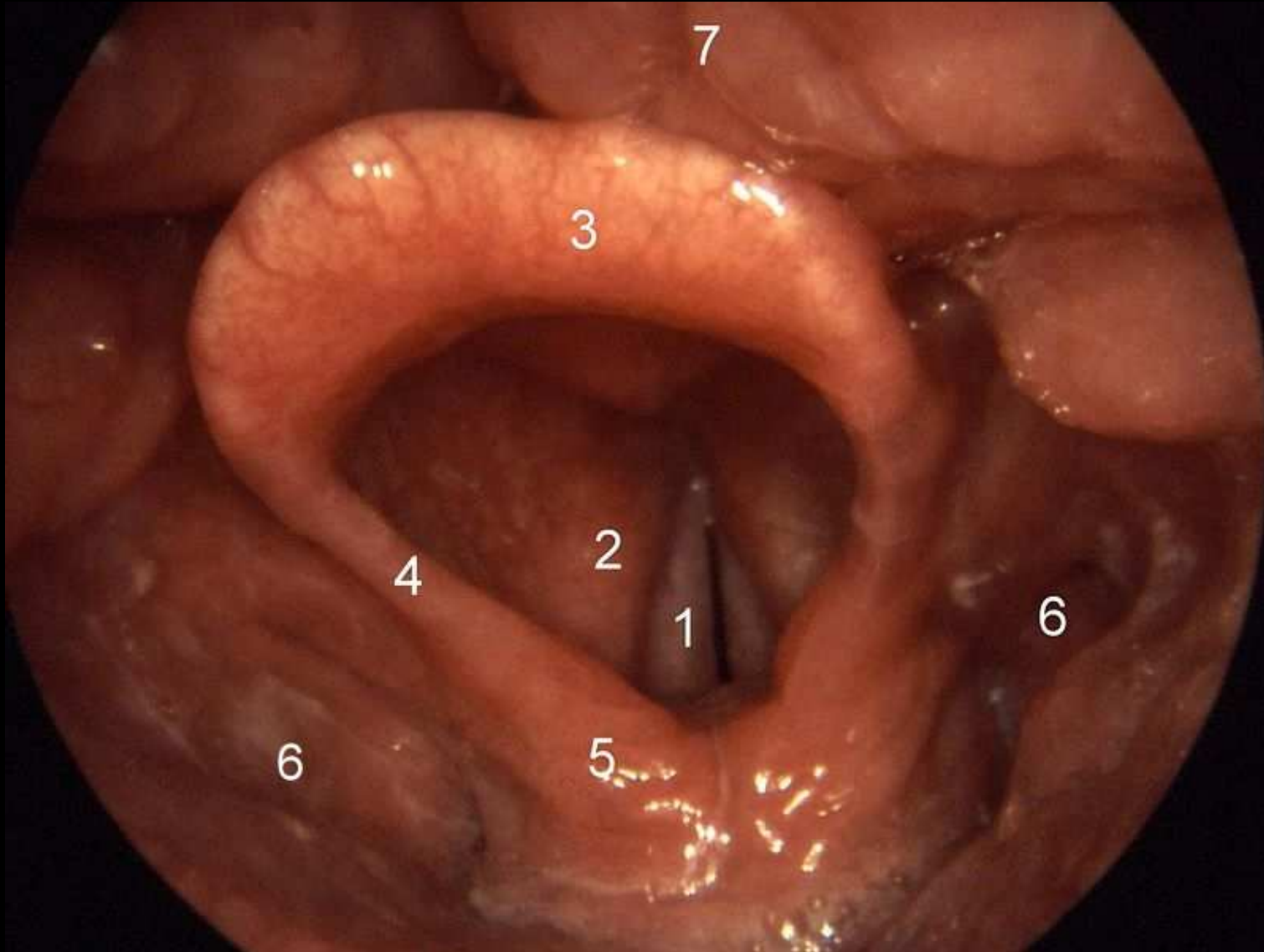
vestibolo faringeo
segmento medio
segmento inferiore

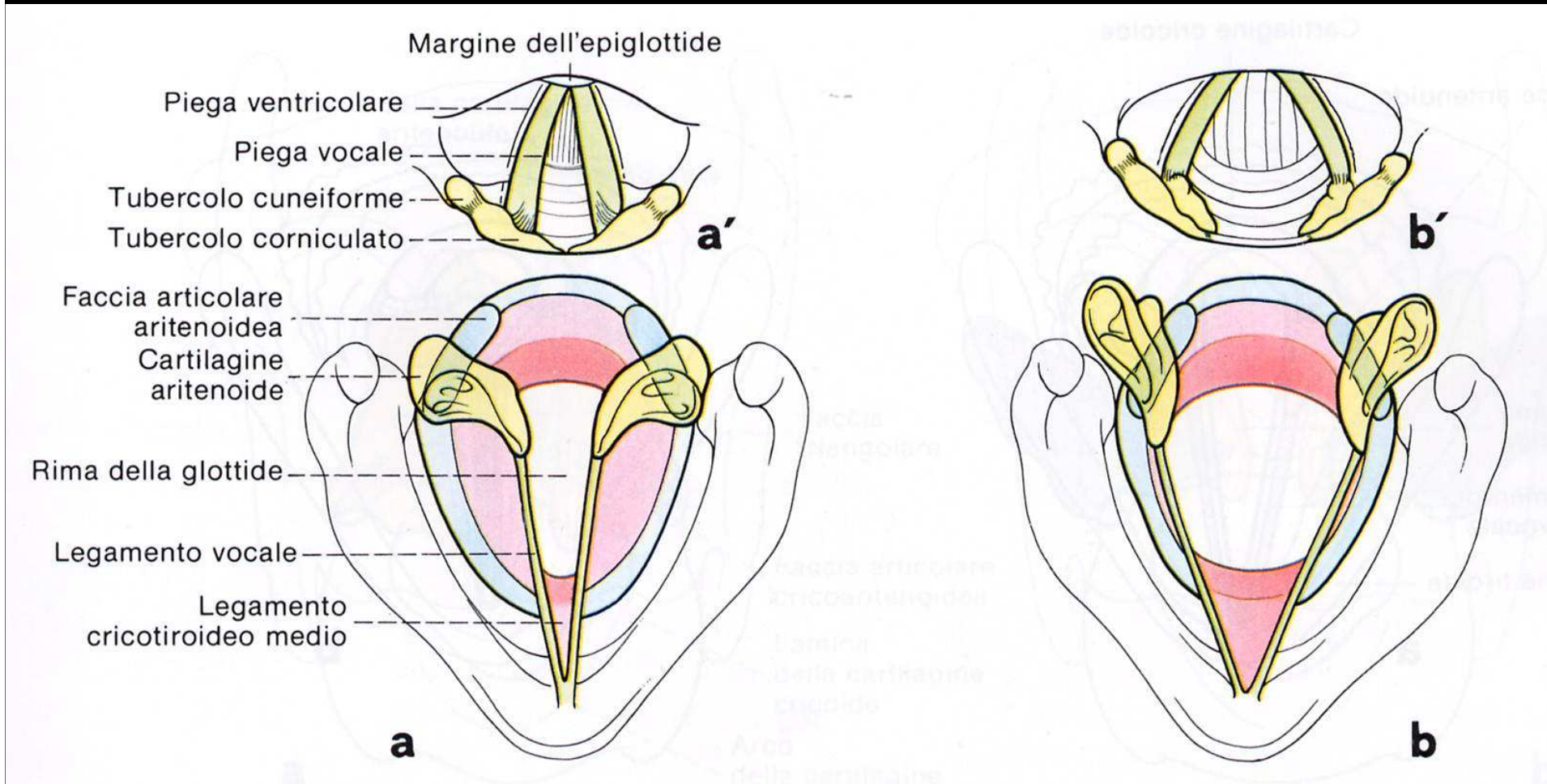






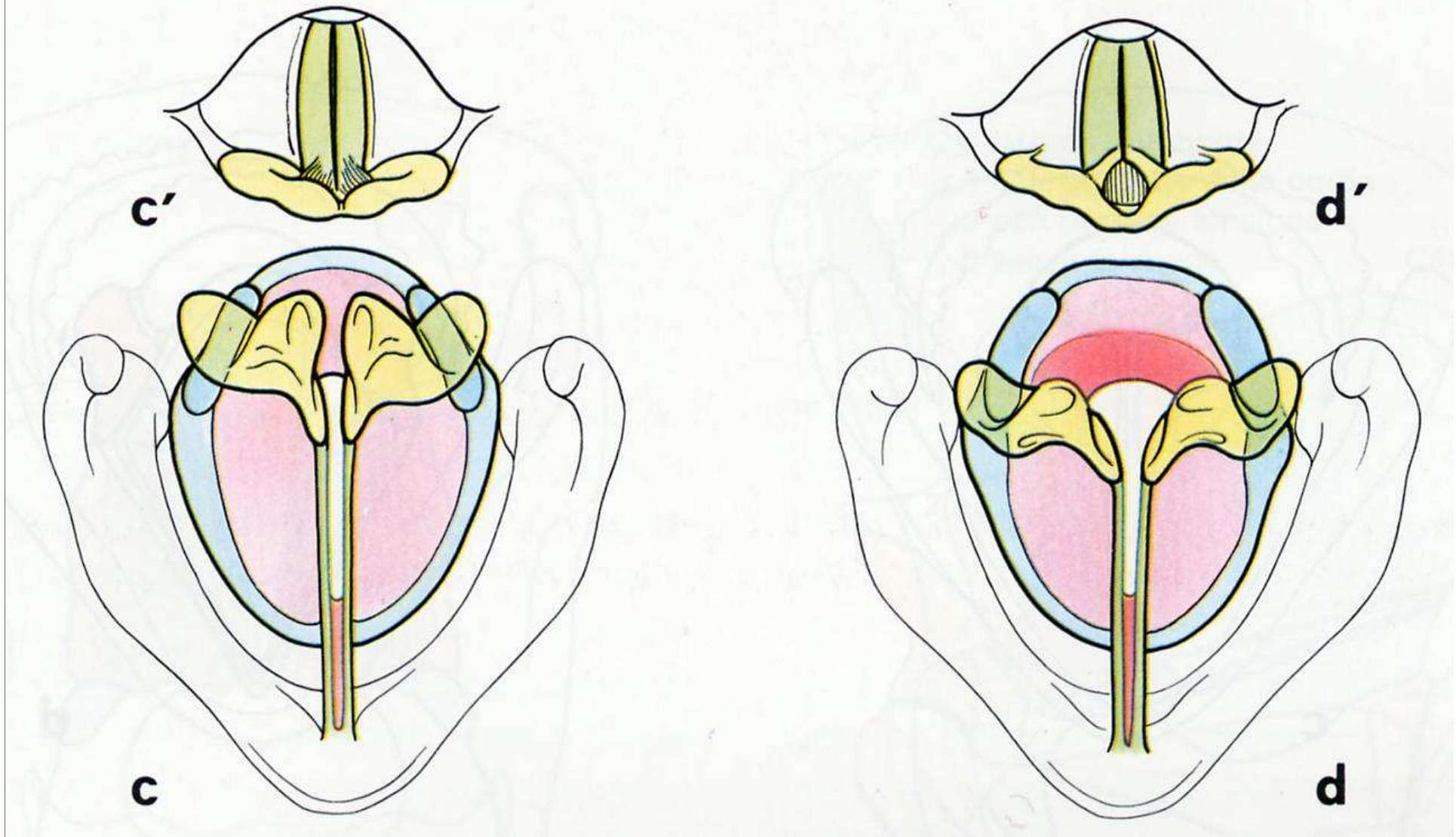
Rima della glottide





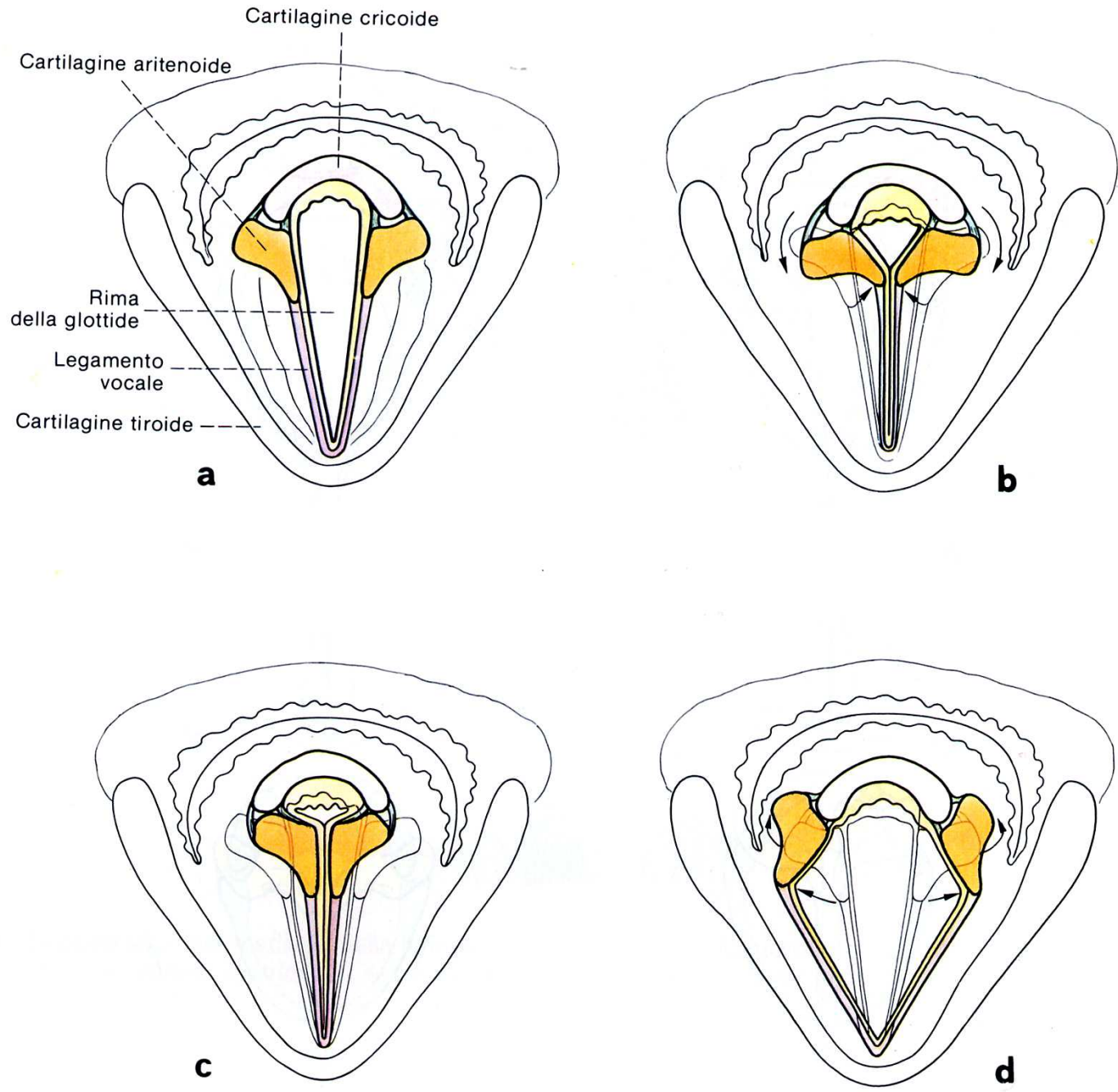
RIPOSO

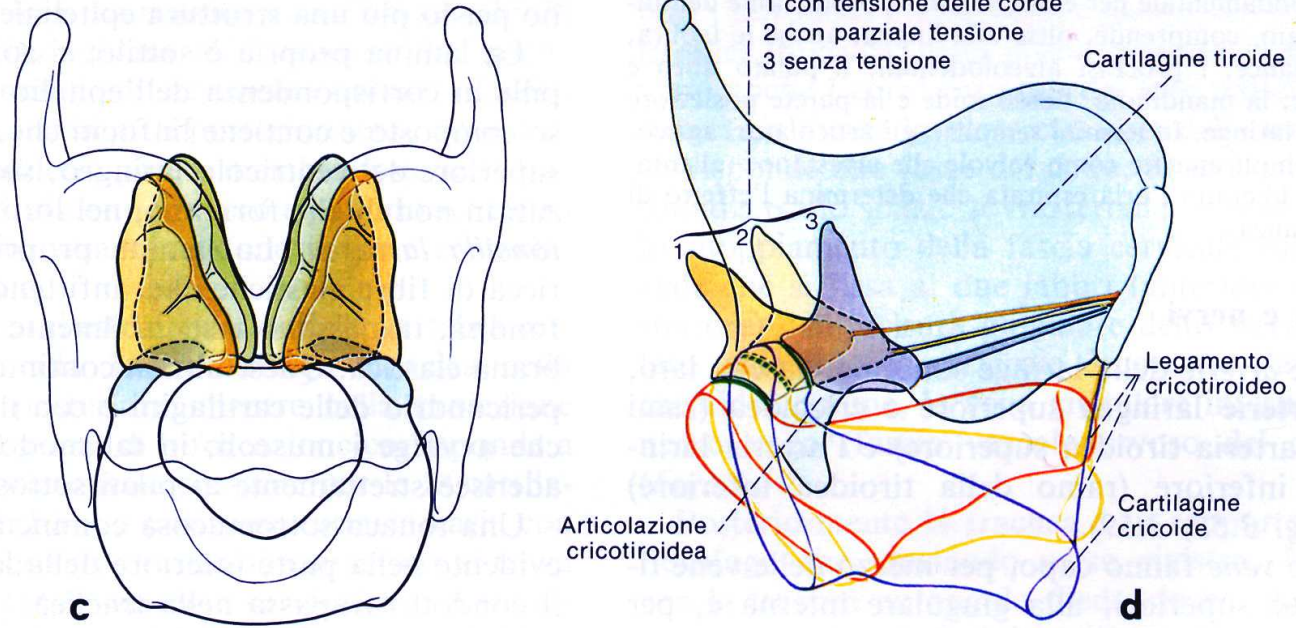
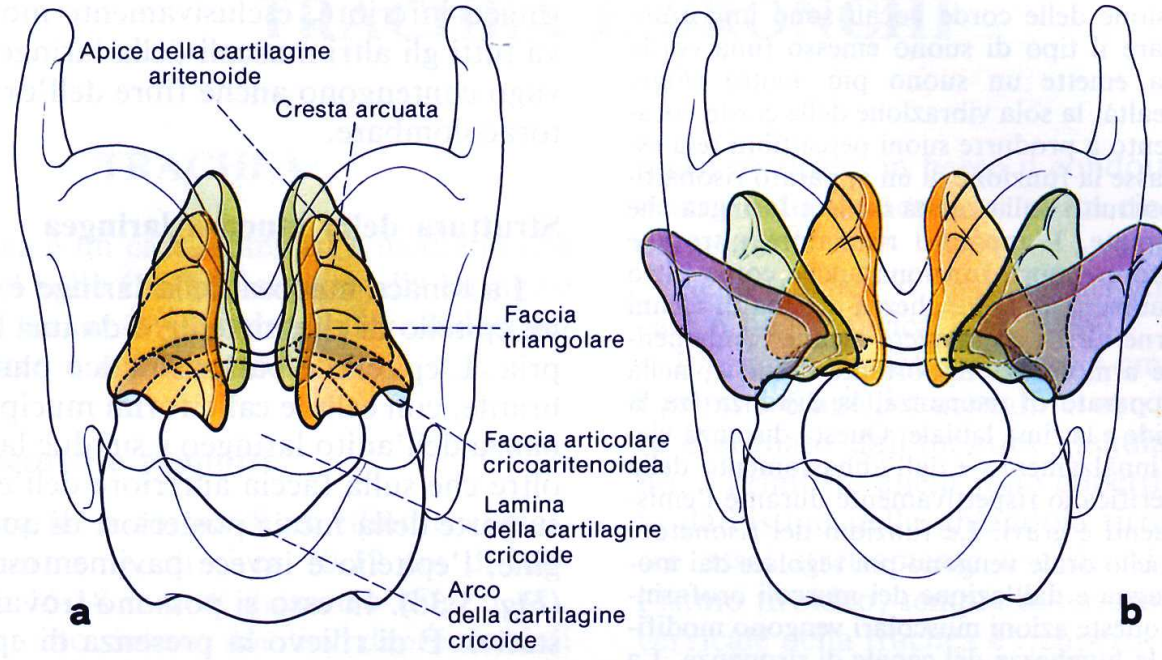
FASE RESPIRATORIA



FONAZIONE NORMALE

FONAZIONE BISBIGLIATA





VASI E NERVI DELLA LARINGE

Arteria laringea superiore

Arteria cricoidea

Arteria laringea inferiore

Vene laringe – tiroidee superiore e inferiori

Linfatici

Numerosi

superiori

inferiori

