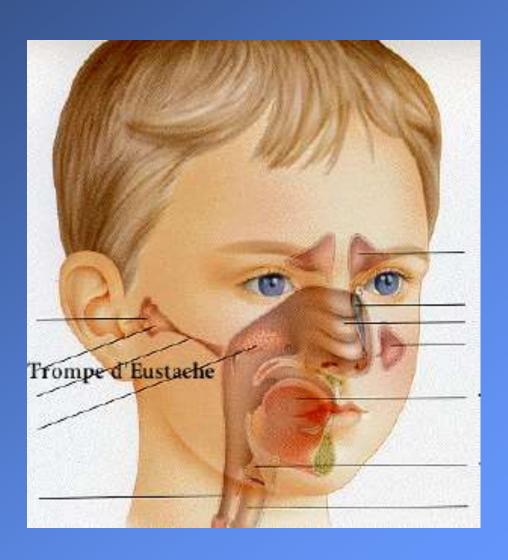
#### Anatomie en O.R.L.

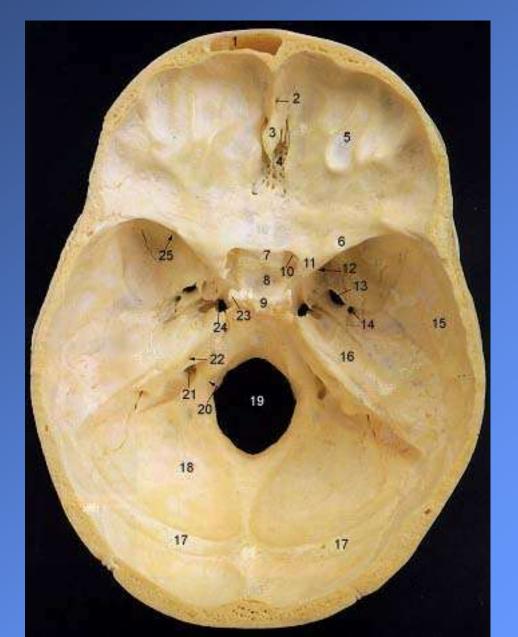
### La Sphère O.R.L.



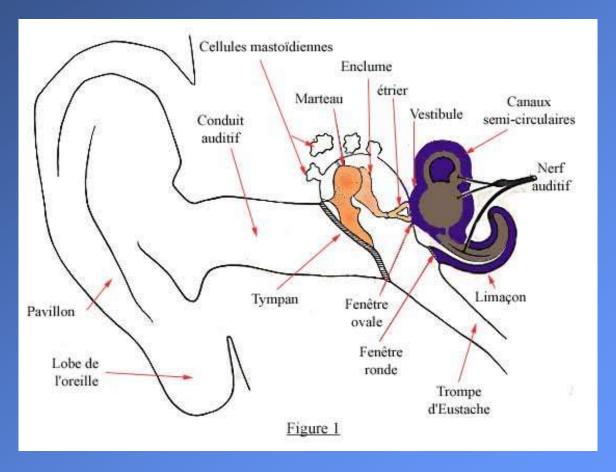
### L'oreille généralités

- Les trois oreilles
- Zone frontière : méninges
- Oreille interne pas seulement fonction auditive : vestibule labyrinthique

### Les rochers

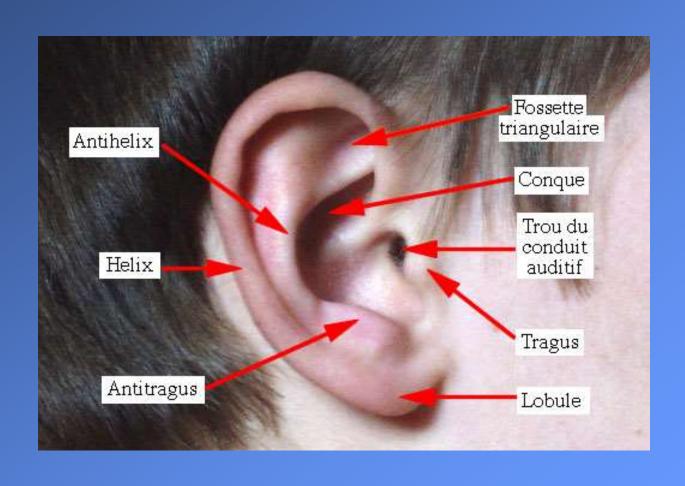


# Les trois Oreilles anatomie

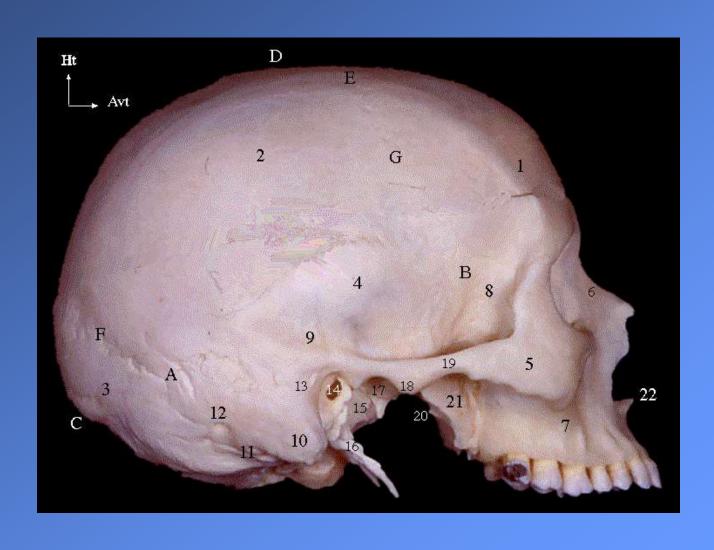


Oreilles externe, moyenne et interne

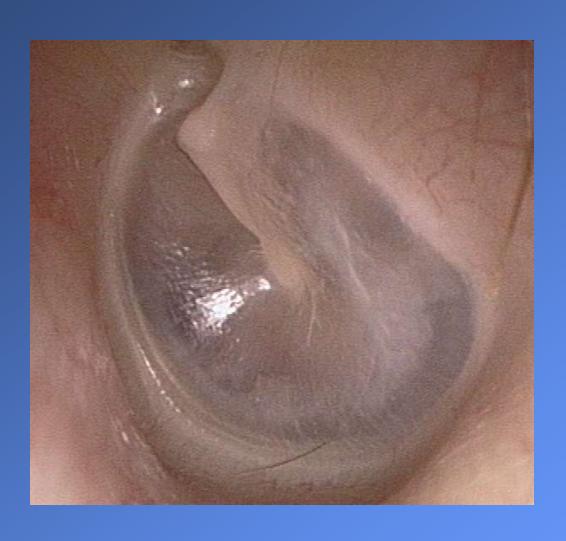
#### Pavillon de l'oreille



#### La mastoïde et le CAE osseux



### La membrane tympanique



membrane de schrapnel

Apophyse externe du marteau

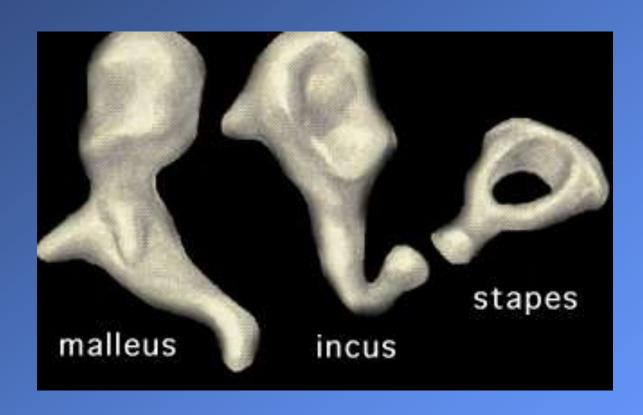
Umbo du marteau

Pars tensa

Bourrelet

CAE

# Les trois osselets de l'oreille moyenne



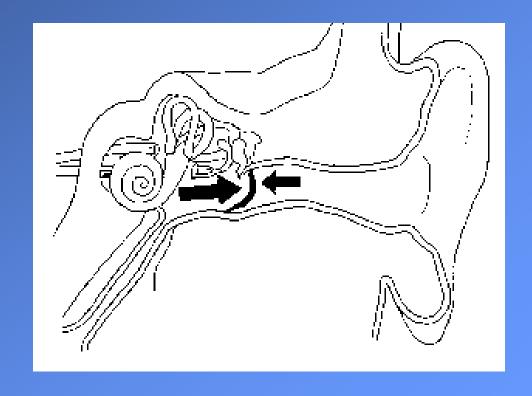
Marteau, enclume, étrier

#### Dimension de l'étrier



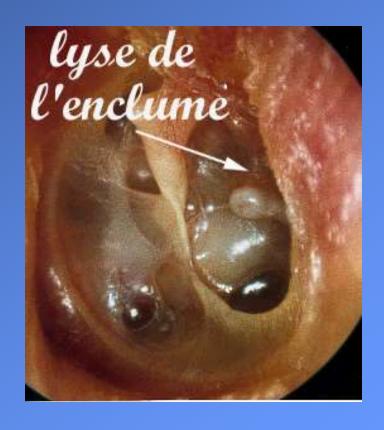
# La trompe d'Eustache : maneuvre de Valsalva (équipression)





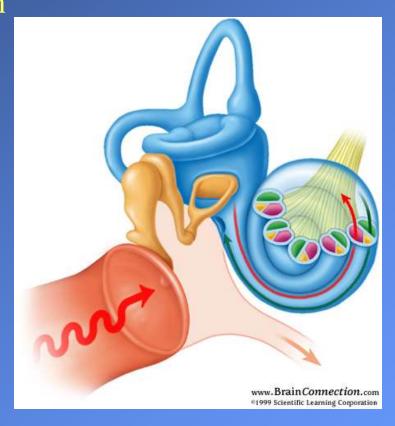
### Dysfonction tubaire



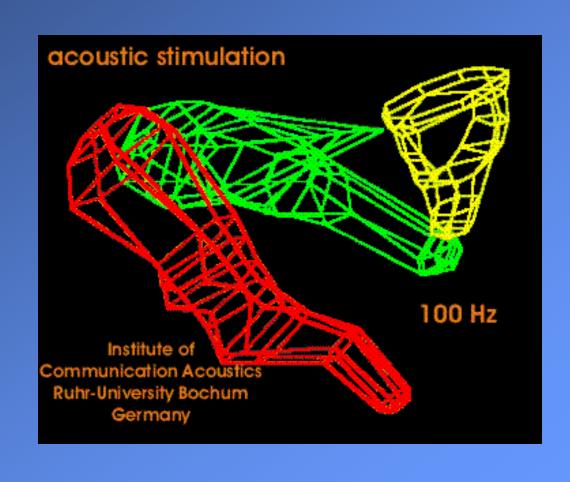


### Propagation du message sonore

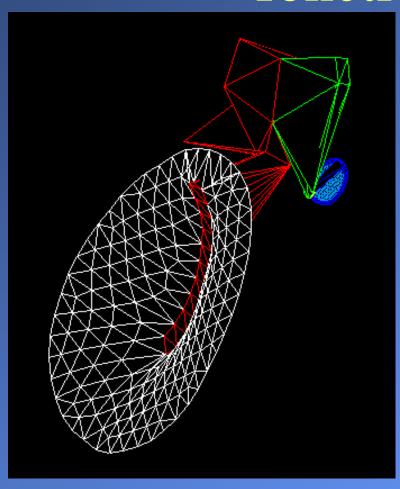
Onde de pression acoustique, mouvement mécanique, onde électrophysiologique

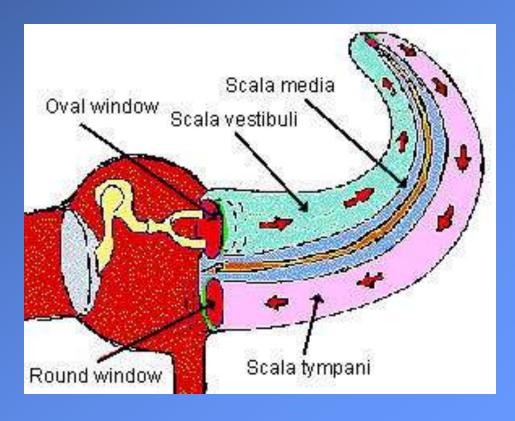


# Chaîne ossiculaire: bras de levier amplificateur



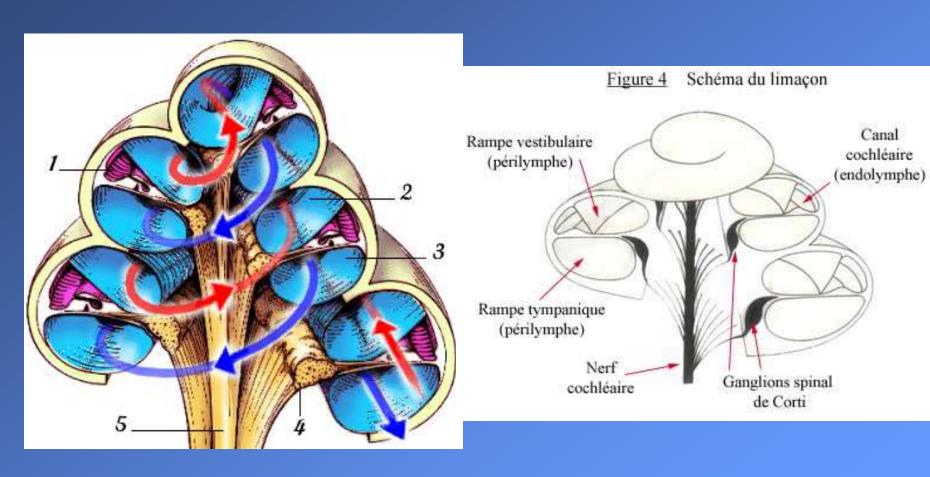
# Les trois Oreilles fonctionnement





#### La cochlée

Canal



### Cochlée : tour de spire



# 1 rampe vestibulaire Organe de Corti

(F ovale)

2 canal cochléaire

3 rampe tympanique (F ronde)

4 membrane de Reissner

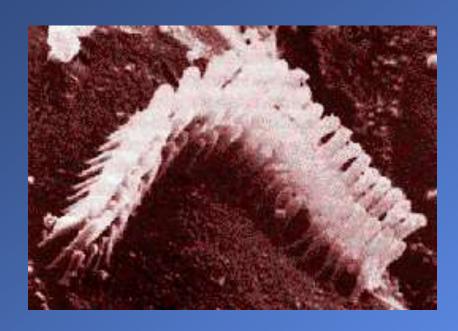
5membrane tectoriale

6 membrane basilaire

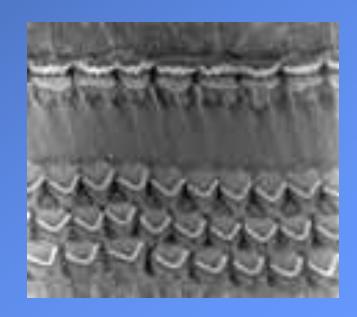
7 cellules ciliées internes

8 cellules ciliées externes

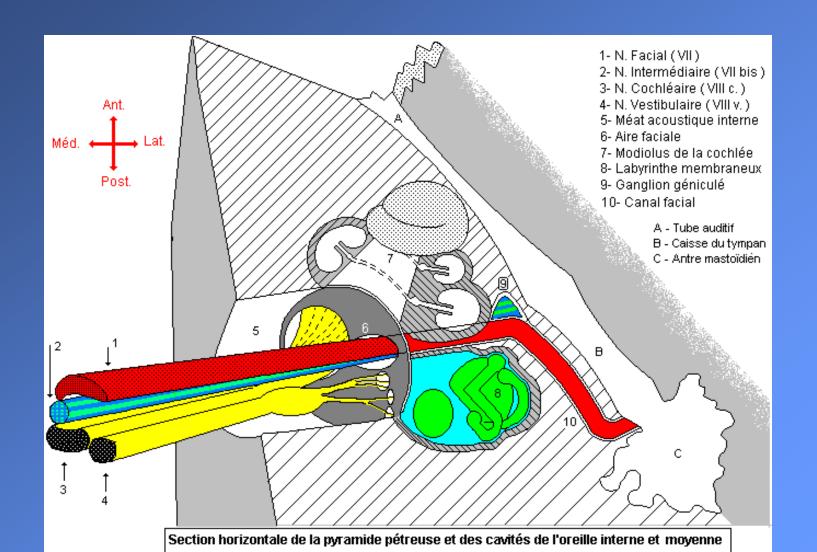
#### Les cellules ciliées



CCE trois rangées amplifient CCI une rangée sensorielles avec tonotopie fréquentielle: clavier



#### Paquet acoustico-facial et CAI



# Les trois Oreilles explorations



otoscopie

audiométrie

Potentiels évoqués auditifs

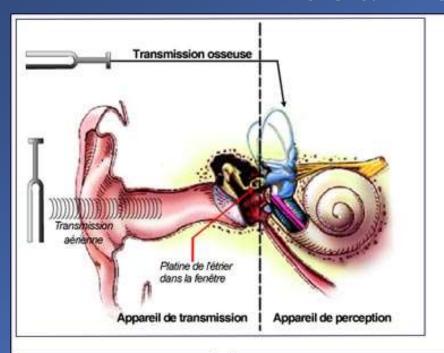


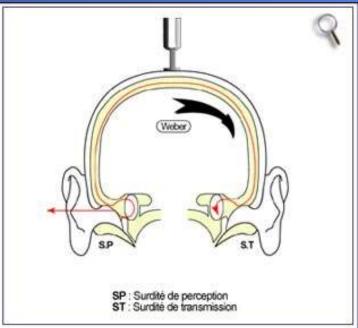


## Otoscopie

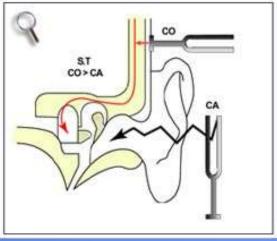


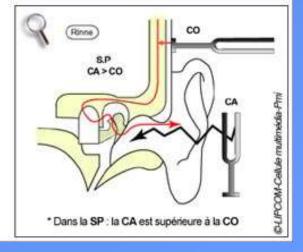
#### acoumétrie





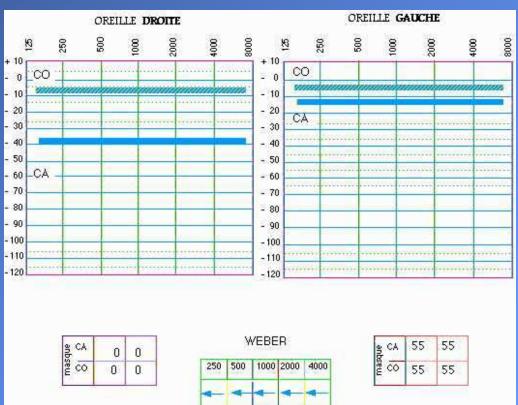




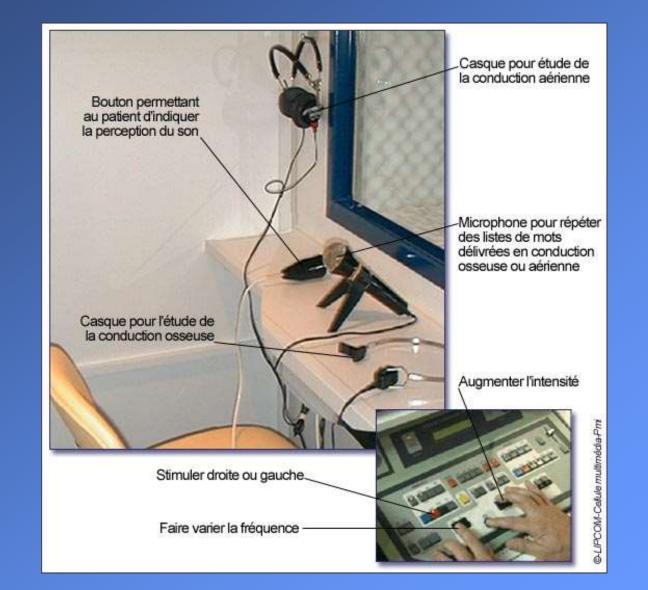


#### audiométrie





#### audiomètre



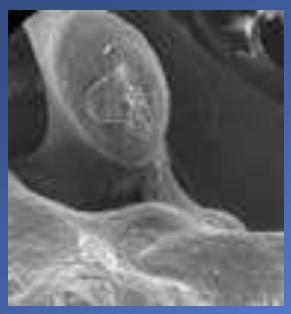
# Courbe osseuse (vibrateur) et aérienne



#### Niveaux sonores



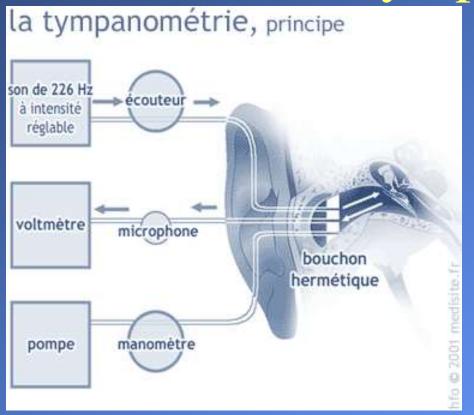
### impédancemétrie

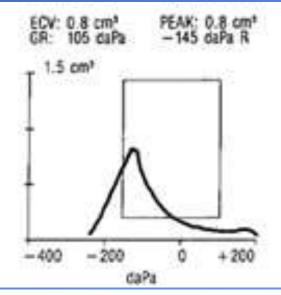


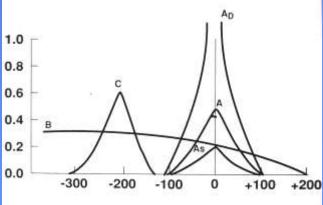


# Tympanométrie (mesure de l'élasticité ou impédance du

tympan)

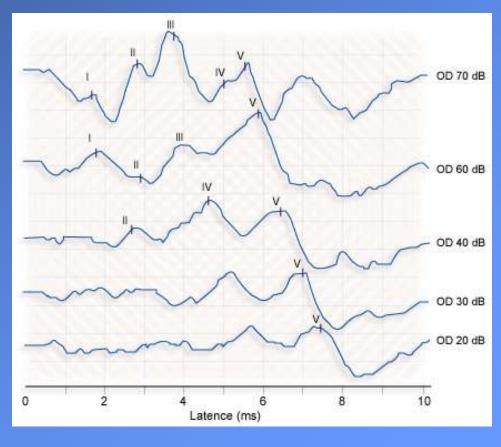






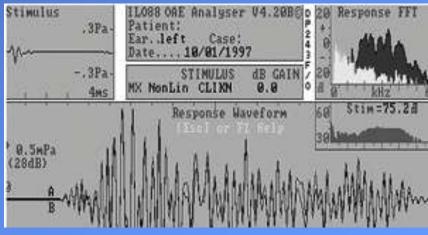
### Potentiels Evoqués Auditifs



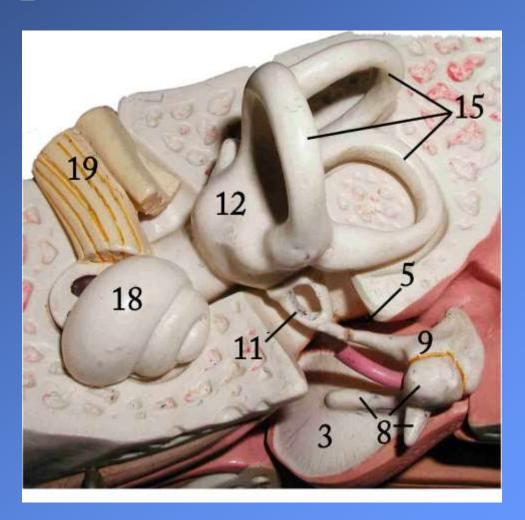


# Oto-émissions acoustiques (CCE) dépistage nouveau-né





# Le vestibule (labyrinthe postérieur) anatomie

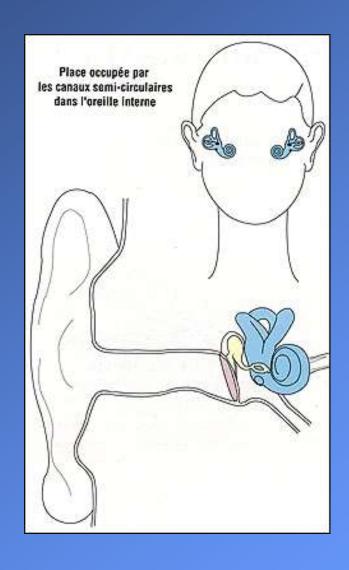


### Equilibre

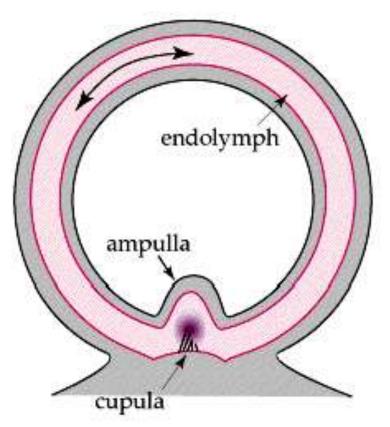
- Vestibule
- Proprioception
- Vision

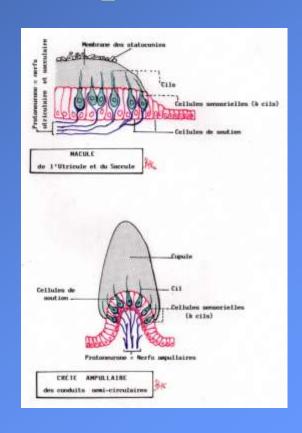


#### Le vestibule

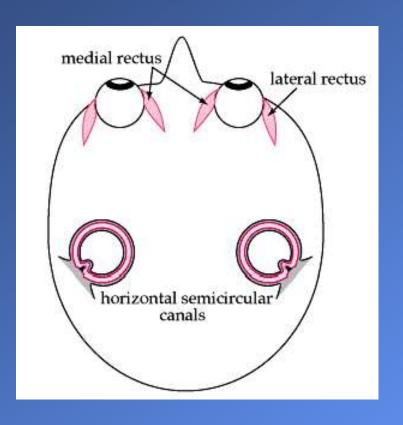


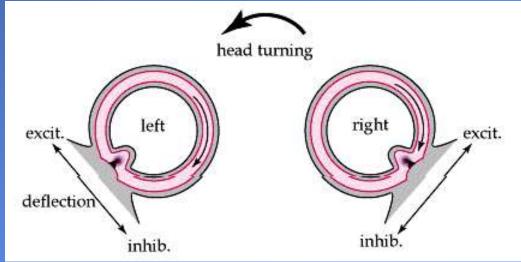
# Principe de fonctionnement des canaux semi-circulaireset du système otolithique



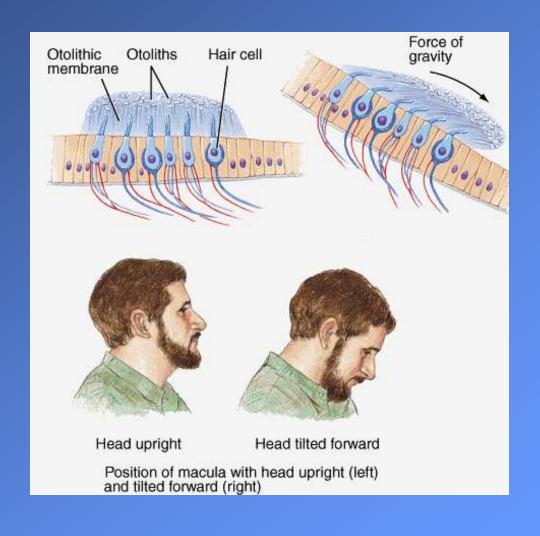


### Accéléromètre angulaire





#### Accéléromètre linéaire



## Inhibition de la fixation : lunettes de Frentzel



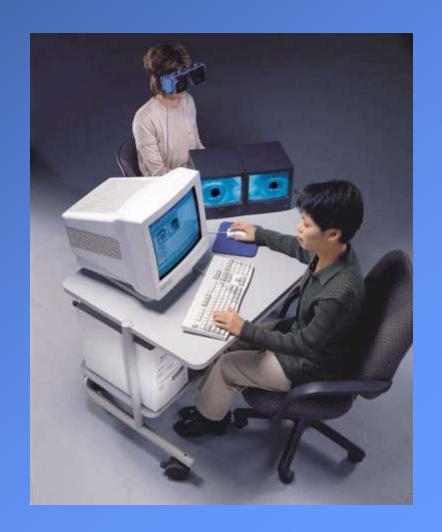
## Nystagmus (vertical)



### Le vestibule exploration



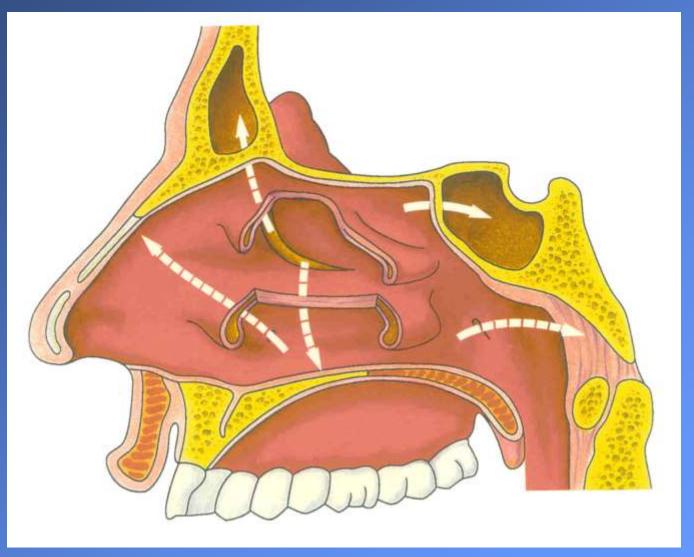
Épreuves caloriques vidéonystagmoscopie



#### Fosses nasales et sinus

- Anatomie
- Physiologie
- Exploration

### Anatomie de la fosse nasale

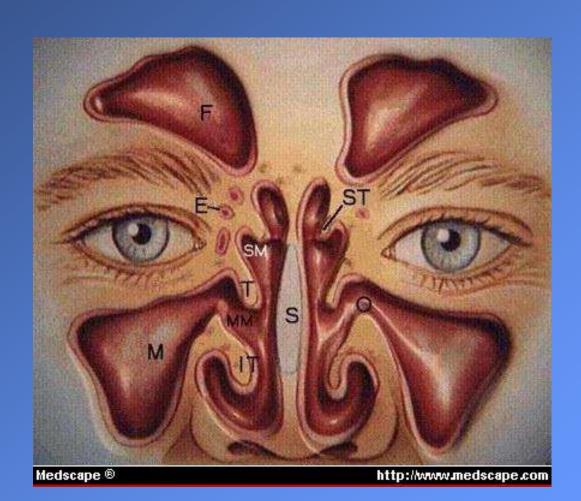


### Anatomie endonasale

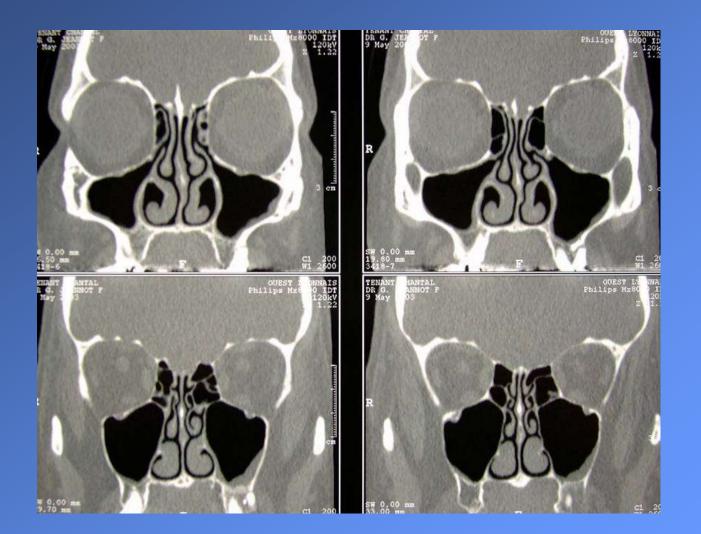




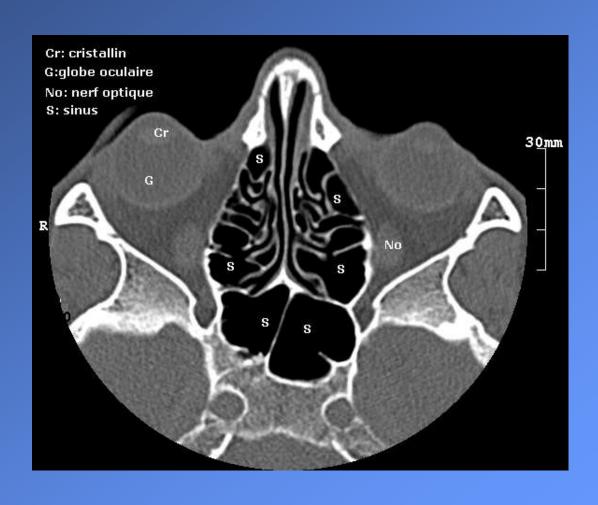
### Anatomie des sinus



#### Sinus ethmoïdaux et maxillaires



### Sinus sphénoïdaux et ethmoïdaux



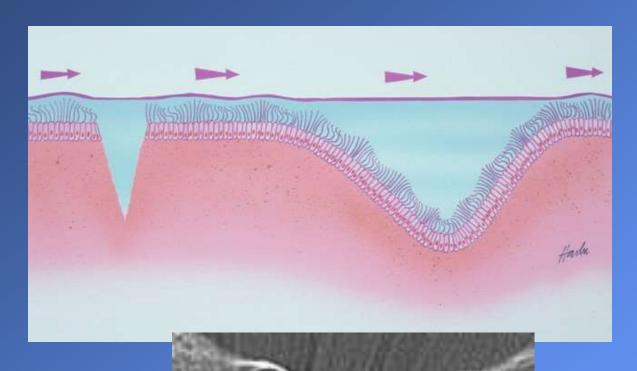
### Sinus frontal



# Physiologie des sinus drainage par les méats

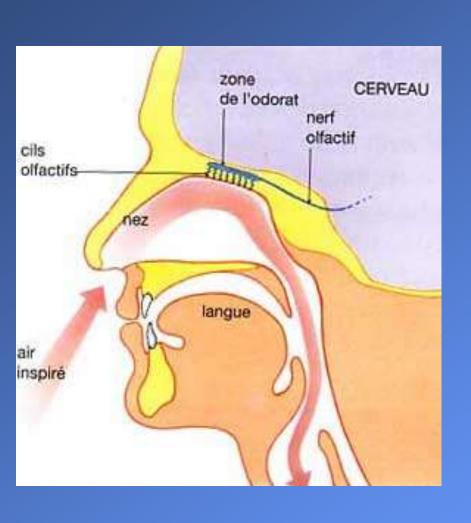


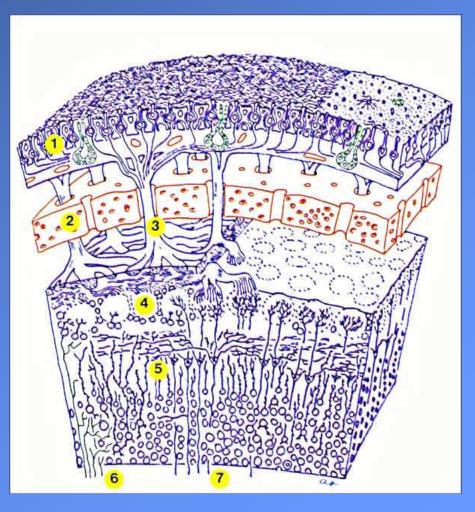
### Conditionnement de l'air



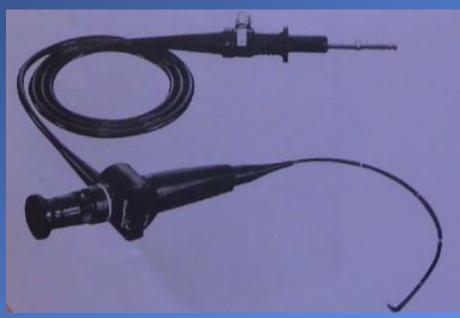
Mouvement mucociliaire, cycle nasal

### Olfaction

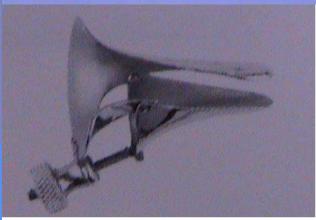




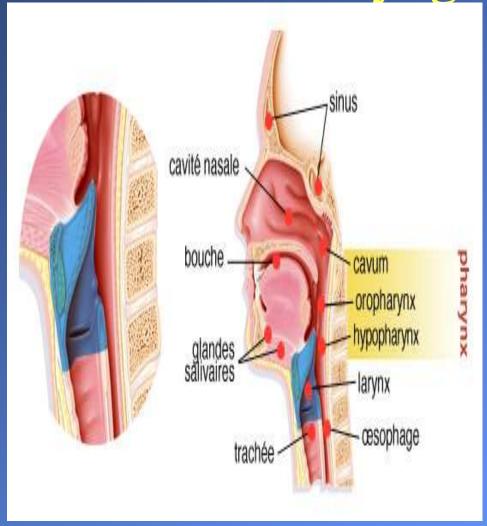
### Examen endonasal

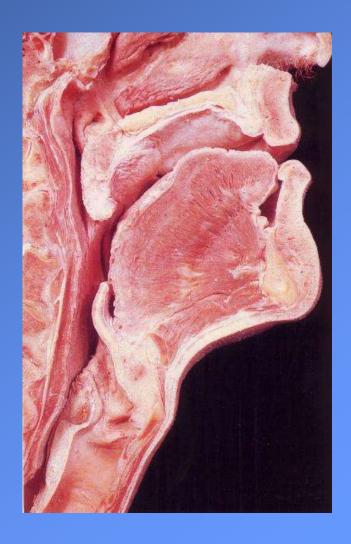




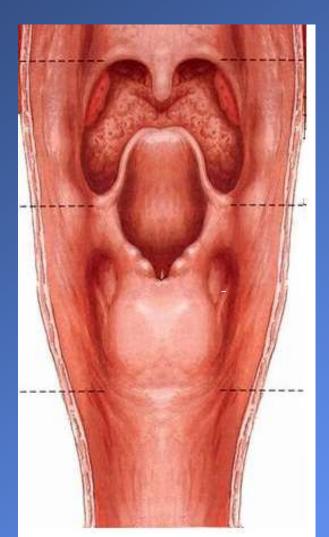


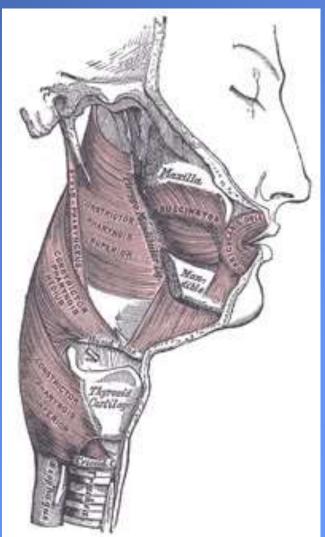
## Pharyngo-larynx



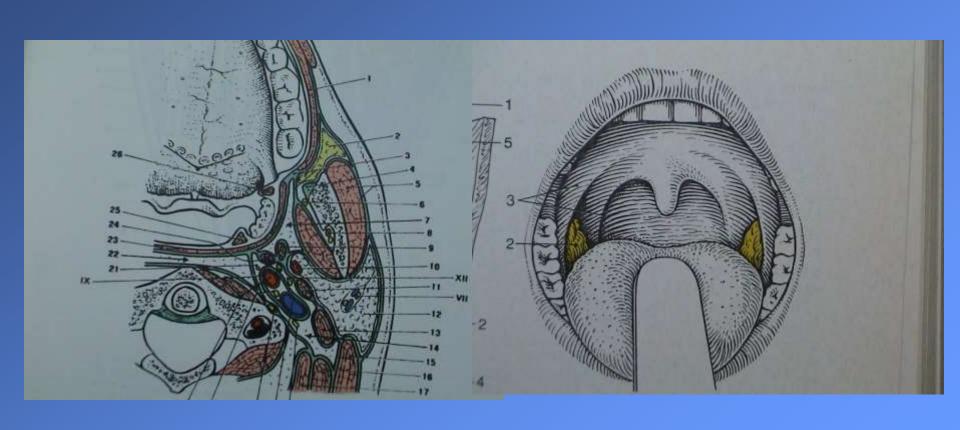


# Les trois pharynx, les muscles constricteurs





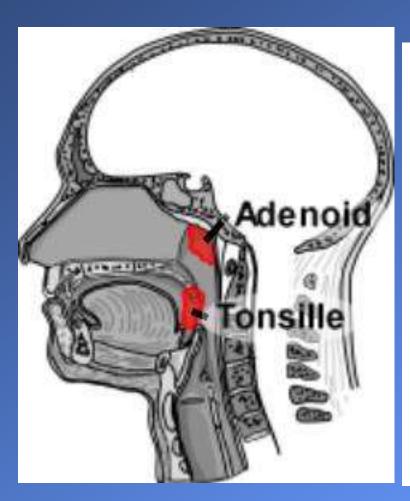
# La cavité buccale, anneau de Waldeyer



## Amygdales palatines

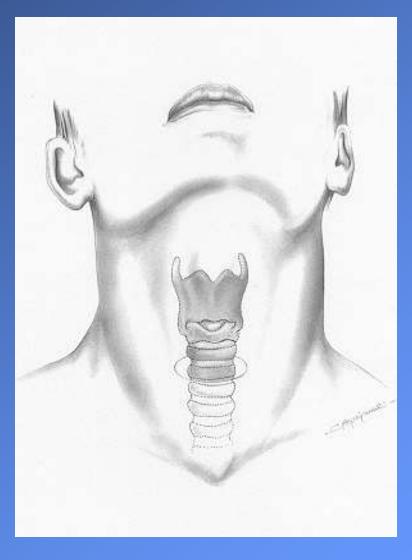


### Végétations adénoïdes

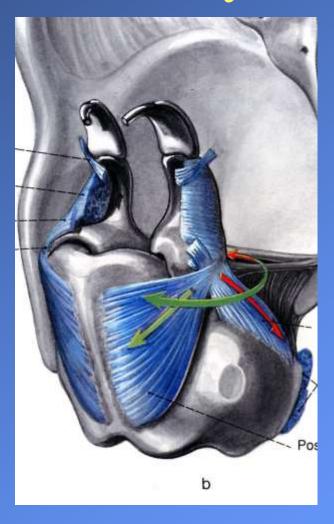




## Les reliefs laryngés



# Cartilages et muscles intrinsèques du larynx

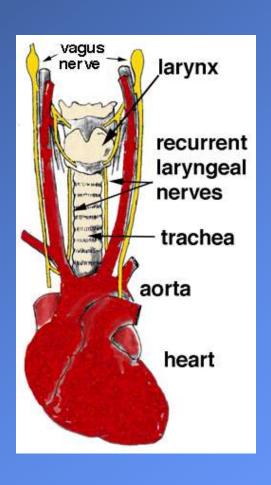


### Mobilité du plan glottique

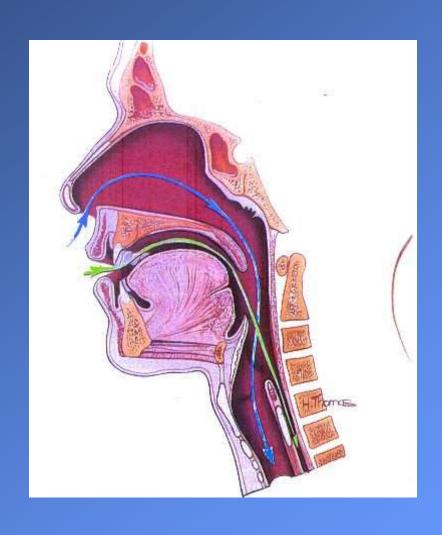




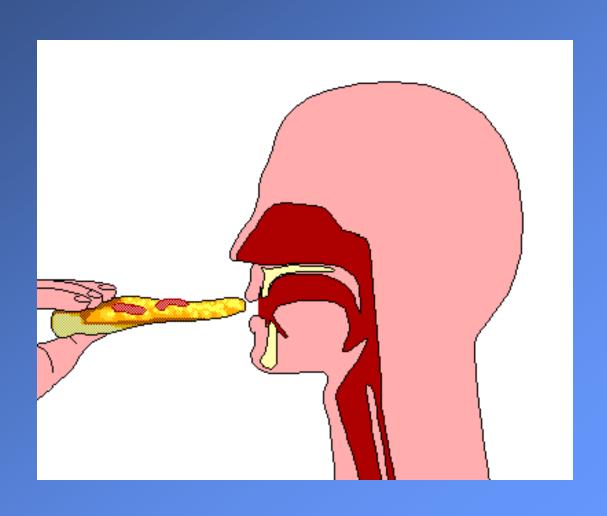
## Innervation du larynx les nerfs récurrents



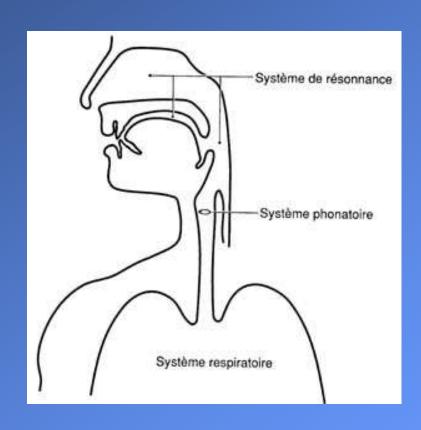
## Le carrefour aéro-digestif



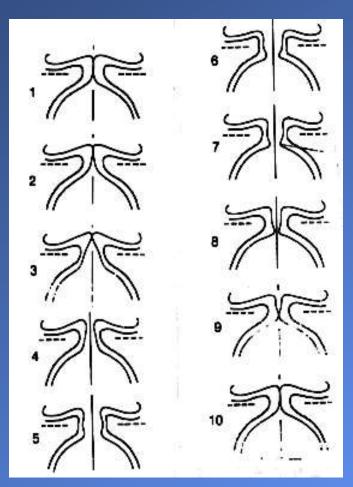
### Les temps de la déglutition



### La phonation

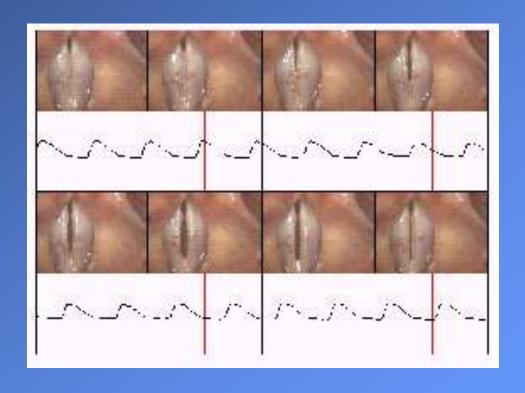


# Vibration du plan glottique bruit blanc

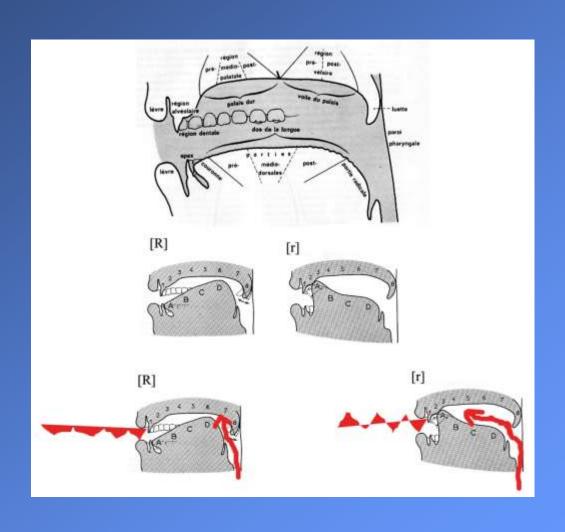




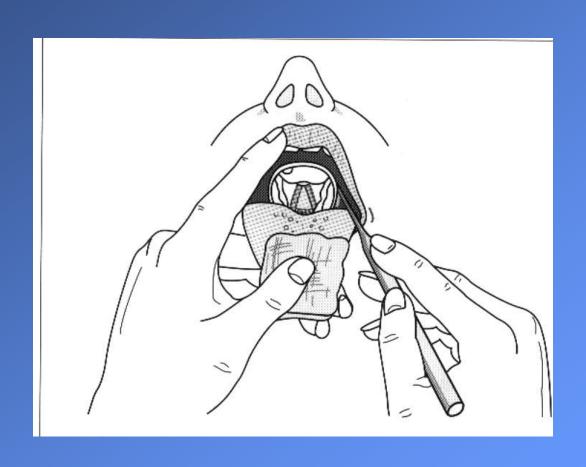
## Stroboscopie larynx



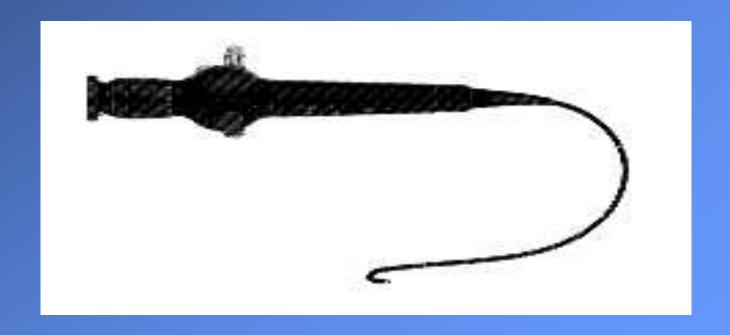
# L'articulation du langage, cavités de résonance



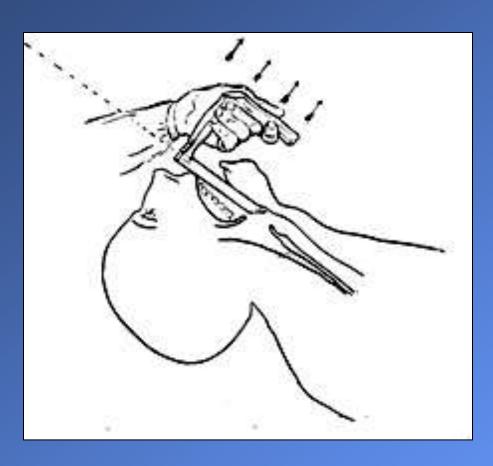
## Laryngoscopie indirecte



## Fibroscopie laryngée



## Laryngoscopie directe

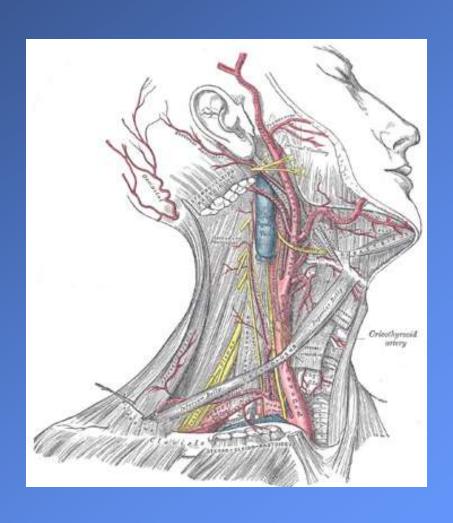




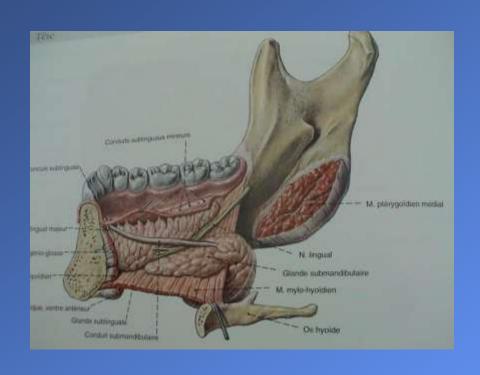
## Laryngoscopie directe

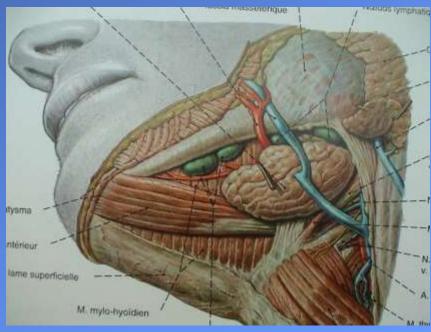


### Anatomie du cou

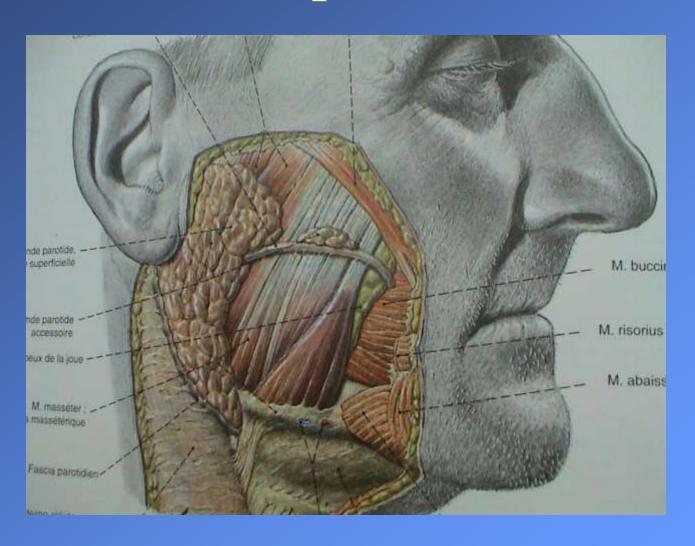


### Les glandes salivaires





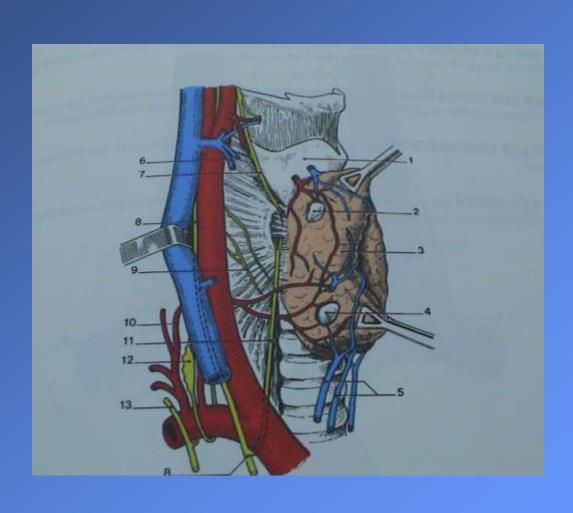
### La parotide



## Tuméfaction parotidienne



## La loge thyroidienne



## Thyroïde rapports, goitre



