Emotiom

Autonomic nervous symptom vagal overactivity cause nasal obstruction

Drugs the anticholinergic effects of antihistamine can block the parasympthatic activity and produce an increase of sympthatictone ,hence improve airway

The function of the inferior turbinate is to control the passage of the air through the nose via the nasal cycle,the inferior turbinate is one side enlarged,as and as aresult the air flow through that nostril is restricted.

This reduse the drying effect of airflow and allows for rejuvenation of the nasal lining and cilliary function.

After approximately 4 hours,the turbinate on the other side swells and on previously rested side the turbinate shrinks.

This nasal cycle is a normal physiological mechanism that is present to some extent in all of us but noticed only by some people.

Nasal epithelium is a pseudostratified columnar ciliated mucous

membrane continuous throughout the sinuses. The epithelium contains

goblet cells, which produce mucus, and columnar cells with

mobile cilia projecting into the mucus, beating 12–15 times a second.

The direction of ciliary beats is organized into well-defined pathways,

present at birth. These mucociliary pathways ensure drainage of the

sinuses through their physiological ostium into the nasal cavity

المحاضره الثانيه

The middle meatus is of special significance as it contains the ostiomeatal

complex (OMC). This is an anatomical area in the bony

lateral nasal wall comprising narrow, mucosal lined channels and

recesses into which the major dependent sinuses drain. The OMC

acts physiologically as an antechamber for the frontal, maxillary

and anterior ethmoid sinuses. Irritants and antigens are deposited

there and may cause mucosal oedema. As the clefts in the OMC are

narrow, small degrees of oedema may cause outflow tract obstruction

with impaired ventilation of the major sinuses

The configuration of the structure of the middle meatus are complex and variable,in disarticulated skull ,the maxillary bone has a large opening in its medial wall,the maxillary hiatus.

In articulated skull this is filled by adjacent bones

1 inferior: maxillary process of inferior turbinate bone

2 posterior:perpendicular plate of palatine bone

3Anterosuperior:lacrimal bone

4superior:UP and Bulla ethmoidalis

So portion of maxillary hiatus is left open these osseous attachment which in life filled wth mucous membrane of

1 Mucous membrane ofMM

2Mucous membrane of maxillary sinus

3 Intervening connective tissue and membranous portion of lateral wall

It is the site for the common pathway of the anterior group of sinuses(frontal,anteriorethmoid,mawillary) structure contribute to this area:

Uncinate process

Thin bony structure runs anterosueriorlyto psteroinferioly.it articulate with the ethmoidal process of inferior turbinate,itartly cover the oening of maxillary sinuse

Hiatus similunaris

It is a semilunar groove which leads anteriorly to the ethmoidal infundibulum

Ethmoidal infundibulum

It is a short passage at the anterior end of the hiatus

Frontal sinus,maxillary and anterior ethmoid drain into it

Bulla ethmoidalis

It ia a round prominence formed buldging of ethmoid sinus

Frontal recess

Maxillary sinus

Middle Meats

Middle Meatus

Lies lateral to the MT

Structure important in the MM:

UP

HS

BE

Ethmoid infundibulum

Anterior and posterior fontanelle:

Are membranous areas between the interior turbinate and uncinated process,accessoryostia are found mostly in the posterior fontanelleArterial supply

external carotid artery- facial artery- superior labial artery nasal branch

maxillary artery- sphenopalatine greater palatine artery

internal carotid artery- anterior ethmoid artery

posteriorethmoid artery

Little`s area or Kiesselbach`s plexus

It is an area in the anterior part of the septum just behind the skin margin contain aggregation of poorly supported blood vessels represents the most important and commonest site of epistaxis

It formed by anastamasis of

\*Septal br.ofsphenopalatine artery

\*Superior labial artery

Greater palatine artery\*

\*Ant.ethmoid artery

Nerve supply

Autonomic supply either1

Sympthatic

Parasympthatic

Special sence2

 By olfactory nerve that supply olfactory mucosa which located in the sup.portion of the nasal cavity

3 sensory supply mainly by branches of trigeminal nerve

 Anterior ethmoid nerve from ophthalmic division which has medial branch supply ant.end of the septum and lateral branch supply mid.&sup. Turbinate

 Branches from sphenopalatine& greater palatine nerve which supply most of turbinate

4 motor nerves from facial neve for elevate and dilate nasal ala