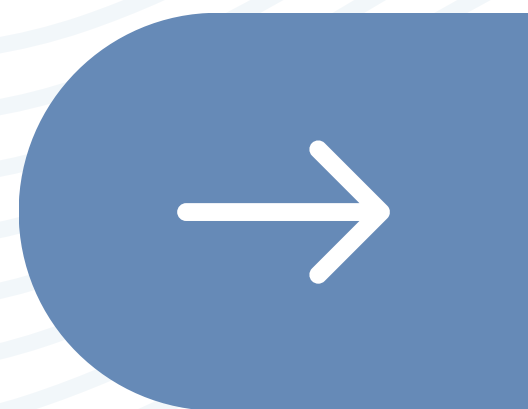


#DIBS BY NEXTILLO

DAILY INFORMATION BULLETIN SERVICE

EUSTACHIAN TUBE- INFANT VS ADULT





#DIBSBYNEXTILLO

DAILY INFORMATION BULLETIN SERVICE

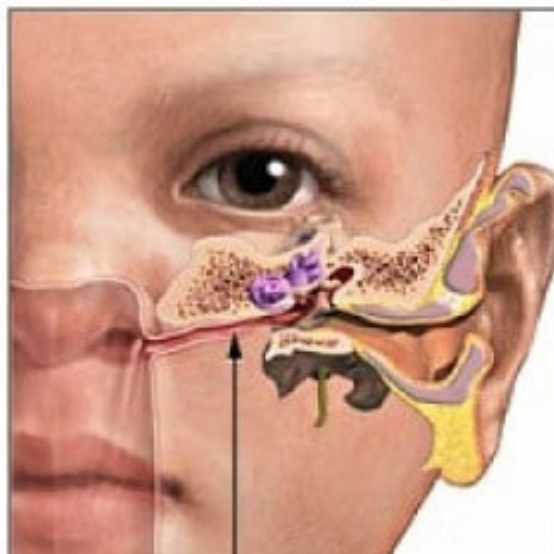
EUSTACHIAN TUBE- INFANT VS ADULT

The external auditory canal is an S- shaped osseo-cartilaginous structure that extends from the auricle to the tympanic membrane. Congenital, inflammatory, neoplastic, and traumatic lesions can affect the EAC.



VISUAL REPRESENTATION

Infant



Adult





EUSTACHIAN TUBE (ET)

- **Length and Orientation**
- **Infant ET: 13-18 mm, more horizontal (10°).**
- **Adult ET: 36 mm, less horizontal, normalizes at 7 years.**
- **Isthmus Characteristics**
- **Infant ET: Straight isthmus.**
- **Adult ET: Wider bony part, narrow isthmus.**
- **Cartilage Composition**
- **Infant ET: Flaccid cartilage.**
- **Adult ET: Rigid cartilage.**
- **Elastin Density at Roof**
- **Infant ET: Less dense elastin.**
- **Adult ET: Very dense elastin.**
- **Infant ET: Less volume in Ostmann's pad of fat.**
- **Adult ET: More volume in Ostmann's pad of fat.**





EUSTACHIAN TUBE DEVELOPMENT

- ***Length Evolution***
- ***Infant ET: Initial 13-18 mm.***
- ***Adult ET: Grows to 36 mm, normalizes at 7 years.***
- ***Angle with Horizontal***
- ***Infant ET: More horizontal (10°).***
- ***Adult ET: Normalizes to a less horizontal position.***
- ***Isthmus Changes***
- ***Infant ET: Straight isthmus.***
- ***Adult ET: Develops a wider bony part and a narrower***





FUNCTIONAL SIGNIFICANCE

- ***Impact on Infections***
- ***Infant ET: Prone to infections due to flaccid cartilage.***
- ***Adult ET: Reduced susceptibility with rigid cartilage.***
- ***Age-related Functionality***
- ***Infant ET: Higher risk due to length and orientation.***
- ***Adult ET: Improved drainage and function after normalization.***
- ***Diagnostic Considerations***
- ***Infant ET: Consider straight isthmus in diagnostics.***
- ***Adult ET: Wider bony part may affect diagnostic procedures.***





MCQ

QUESTION

The Eustachian tube, also known as the auditory tube, plays a crucial role in the functioning of the auditory system. It connects the middle ear to the nasopharynx and is essential for maintaining proper pressure balance within the ear. What is the primary function of the Eustachian tube in this context?

- A) To produce earwax, which protects the ear canal***
- B) To equalize air pressure between the middle ear and the atmosphere, allowing for proper hearing***
- C) To transmit sound vibrations from the outer ear to the inner ear, facilitating auditory perception***
- D) To drain fluid from the inner ear, preventing infections and blockages***

Correct Answer: B) To equalize air pressure between the middle ear and the atmosphere.

