



CME FOUNDATION OF INDIA



## EVENT REPORT

Venue: Sofitel Mumbai BKC

Date: 5<sup>th</sup> October, 2024

# ENT Workshop

The "ENT Workshop" was held on October 5<sup>th</sup>, 2024, at Sofitel Mumbai BKC. Organized by the CME Foundation of India (CMEFI), the workshop featured sessions led by renowned experts, Dr. Meenesh Juvekar and Dr. Vicky S. Khattar.

Meticulously designed to enhance participants' expertise in diagnosing and managing ear, nose, and throat (ENT) conditions, the workshop focused on practical applications. The sessions provided valuable insights into essential diagnostic techniques and treatment strategies for prevalent ENT issues, including the concepts of ossiculoplasty, simplified cochlear implant surgery, and complications associated with functional endoscopic sinus surgery (FESS). The workshop also covered surgical approaches and management techniques relevant to these conditions, ensuring that participants gained comprehensive knowledge and practical skills applicable to their clinical practice.

The workshop's primary goal was to equip participants with the knowledge and skills necessary to enhance diagnostic accuracy and improve patient outcomes in ENT care. This report summarizes the key learnings and outcomes from the workshop.

**Date: 5<sup>th</sup> October, 2024**

**Venue: Sofitel Mumbai BKC**

**Total Participants: 20**

## Agenda

**Date: 5<sup>th</sup> October, 2024**

**Time: 5:00 p.m. to 8:00 p.m.**

Topic	Speaker	Timing
<b>Lecture:</b> Concepts of Ossiculoplasty	<b>Speaker:</b> Dr. Meenesh Juvekar	5:00 p.m. to 6:00 p.m.
<b>Lecture:</b> Cochlear Implant Surgery Simplified	<b>Speaker:</b> Dr. Meenesh Juvekar	6:00 p.m. to 7:00 p.m.
<b>Lecture:</b> Complications of FESS	<b>Speaker:</b> Dr. Vicky S. Khattar	7:00 p.m. to 8:00 p.m.

# Summary of Workshop

- CMEFI welcomed the participants and introduced Dr. Meenesh Juvekar and Dr. Vicky S. Khattar.
- **Concepts of Ossiculoplasty: Dr. Meenesh Juvekar**

Dr. Meenesh Juvekar explained the concepts surrounding ossiculoplasty, a procedure used to reconstruct the middle ear's ossicular chain when disrupted or destroyed due to trauma, congenital abnormalities, cholesteatoma, or surgical manipulation. This procedure uses interposition implants to restore the mechanics of sound energy transfer to the inner ear.

## **Objectives of Ossiculoplasty**

He explained that the goal of ossiculoplasty is not solely to close the air-bone gap but to improve the patient's overall hearing capacity, enhancing their air conduction score and speech discrimination. Each case of ossiculoplasty is different, depending on factors like patient's age, condition of the ossicles, and other clinical considerations.

## **Challenges in achieving the perfect technique**

Dr. Juvekar further discussed the challenges in achieving the perfect ossiculoplasty technique. These include factors such as the position and angulation of the tympanic membrane (TM), malleus, and other ossicles, as well as limitations in prosthesis design in terms of biocompatibility, weight, safety, and stability. The complexities of different diseases and patient-specific factors, such as the duration of illness and age, also play a significant role.

## **Biomechanics of hearing**

He described key aspects of middle ear biomechanics, including pressure transformation through the hydraulic lever effect. This involves the difference in surface area between the eardrum (55 sq. mm) and the stapes (3.5 sq. mm), where the pressure is 22 times greater.

## **Factors for successful reconstruction**

In terms of reconstruction, Dr. Juvekar emphasized the importance of several factors, including:

- Age and medical condition of the patient
- Cochlear reserve and the state of the other ear
- Financial limitations and prosthesis availability
- The patient's ability to follow up

## **Ossiculoplasty techniques**

Various techniques in ossiculoplasty were discussed, including cartilage ossiculoplasty, incus interposition, malleus relocation, and titanium prostheses like TORP and PORP. The weight of the prosthesis, which should be less than 5 mg, was highlighted as critical for sound transmission.

## **Case studies in Ossiculoplasty**

Several case studies were presented to illustrate real-world applications of ossiculoplasty, such as the successful use of cartilage support and titanium prostheses in patients with chronic otitis media and ossicular necrosis. The use of innovative materials like silastic banding and glass ionomer cement (GIC) in specific cases was also highlighted, noting their biocompatibility, stability, and cost-effectiveness in reconstructing the ossicular chain and maintaining natural sound amplification.

## **Evolution of techniques and materials**

Dr. Juvekar's insights into the evolution of these techniques and materials provided a comprehensive understanding of how ossiculoplasty can improve patient outcomes despite the inherent challenges of middle ear reconstruction.

- **Concepts of Ossiculoplasty: Dr. Meenesh Juvekar**

Dr. Meenesh Juvekar has thoroughly explained the topic of cochlear implant surgery simplified, offering a step-by-step guide on the surgical procedure. He began by discussing the post-auricular incision, noting that a smaller incision, generally less than 2 inches, is often preferred for cosmetic reasons and to reduce post-operative complications. However, he highlighted the importance of ensuring that the incision is not too small, as this can prevent the proper fixation of the implant, particularly in children who are more active, thereby increasing the risk of displacement.

Dr. Juvekar then elaborated on the technique of elevation of suprapariosteal scalp flaps. He explained that these flaps are elevated anteriorly, towards the external auditory canal, and posteriorly, ensuring that the pericranium and temporalis fascia remain intact. This approach allows for optimal exposure to perform periosteal incisions, which are necessary for accessing the subperiosteal pocket. He detailed the creation of a short, anterosuperiorly based periosteal flap, formed between three incisions—one made along the temporal line at the lower border of the temporalis muscle (approximately 2–3 cm long), another just above the mastoid tip, and a third posteriorly curved incision connecting the two.

When discussing insertion Tips, Dr. Juvekar stressed the careful and secure placement of the receiver on the well, with the electrode array directed towards the cochlea. He described the standard insertion location as the scala tympani of the cochlea, which allows the electrodes to stimulate the auditory nerve fibers effectively. He emphasized the importance of gently and slowly inserting the electrodes to avoid any damage to the cochlea or misplacement. Once the array is fully inserted, the most apical electrode is typically 20–30 mm from the scala tympani entrance, with the electrodes covering a cochlear length of 13–26.4 mm, depending on the type of electrode used. This placement corresponds to an acoustic frequency range of 185–11,800 Hz, assuming an average cochlear length of 35 mm in humans.

Through this detailed explanation, Dr. Juvekar has simplified the complexities of cochlear implant surgery, emphasizing the critical steps and considerations to ensure successful implantation and optimal hearing outcomes for patients.

- **Complications of Functional Endoscopic Sinus Surgery (FESS): Dr. Vicky S. Khattar**

Dr. Vicky S. Khattar detailed the various complications associated with Functional Endoscopic Sinus Surgery (FESS), emphasizing the importance of understanding and mitigating these risks for successful outcomes.

### **Infiltration techniques:**

- During infiltration, it is crucial to avoid injecting into the turbinates, the upper third of the septum, and lateral nasal wall.
- Always aspirate prior to injecting, to ensure safety, and it is advisable to avoid using small-gauge needles to minimize complications.

### **Orbital entry complications:**

- Accidental injuries can occur during procedures like uncinctomy, which may lead to silent sinus syndrome or issues arising from congenital lamina dehiscence.
- Tumor decompression may happen by invitation, necessitating precautions to prevent traction.

**Mucosal hemorrhage:**

- To prevent mucosal hemorrhage, adequate pre-surgical preparation is essential, including selecting the appropriate type of anesthesia and utilizing styptic agents.
- Attention to patient head positioning, infiltration techniques, and the use of topical vasoconstriction can help minimize bleeding.
- Employing sound surgical techniques is vital to managing this complication effectively.

**Cerebrospinal fluid (CSF) leakage:**

- CSF leakage may occur both intraoperatively and post-surgically, with additional risks linked to congenital factors.

**Congenital issues:**

- Various congenital complications should be considered, including vocal fold paralysis, congenital subglottic stenosis, laryngeal web and atresia, subglottic hemangioma, and congenital tracheal anomalies.

**Key principles:**

- Dr. Khattar emphasized the importance of not violating any existing scar tissue and incorporating existing scars into the framework of any expansions.
- The use of mucosal or perichondrial-covered cartilage for framework expansion is recommended.
- Stenting the airway whenever necessary is crucial to overcoming the tissue's memory of previous structures.

Through these detailed explanations, Dr. Khattar provided a comprehensive overview of the complications that may arise during FESS and highlighted best practices to enhance surgical safety and patient outcomes.

**At the end of this workshop, the CME Foundation of India extended its gratitude to the attending delegates and acknowledged Aristo Pharmaceuticals Pvt. Ltd., the academic industry partners for their valuable support and contribution to the success of this workshop.**

# Snapshots of ENT Workshop

## Welcome to the ENT Workshop



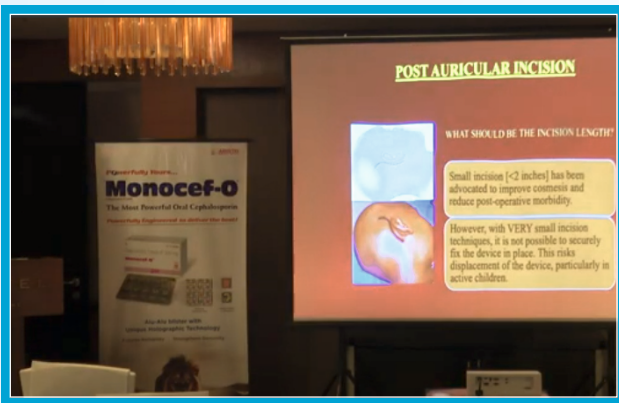
## Registration Counter



## Lecture on Concepts of Ossiculoplasty



## Lecture on Cochlear Implant Surgery Simplified



## Lecture on Complications of FESS



## Empowering Attendees with a Scientifically Enriching and Joyful Conclave Experience



## Branding Opportunity

