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ENDOSCOPIC EAR SURGERY

A New Horizon





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Foreword
Renuka Bradoo

JAYPEE

Contents

SECTION 1: ENDOSCOPIC EAR SURGERY—A NEW HORIZON

Chapter 1: Introduction 3

- *Concept and Execution of Functional Endoscopic Ear Surgery 3*

Chapter 2: History 4

SECTION 2: THE EAR THROUGH AN OTOENDOSCOPE

Chapter 3: Equipment and Set Up 9

- *Camera System and Monitor 9*
- *Endoscopes 9*
- *Position of the Patient and the Surgeon 10*
- *Principles of Endoscope Placement During Surgical Procedure 10*

Chapter 4: Endoscopic Anatomy of the Ear 11

- *Anatomy 11*

SECTION 3: ENDO EAR PROCEDURES

Part 3A: Office-based Procedures

Chapter 5: Diagnostic Otoendoscopy 27

- *When the Tympanic Membrane is Intact 27*
- *When the Tympanic Membrane is Perforated 27*

Chapter 6: Office Closure Procedures 38

- *Selection Criteria 38*

Chapter 7: Endoscopic Myringotomy 41

- *Definition 41*
- *Indications 41*

- *Contraindications 42*
- *Anesthesia 42*
- *Steps of Operation 42*
- *Postoperative Care 43*
- *Pitfalls of the Operation 43*
- *Complications 43*

Chapter 8: Sudden Sensorineural Hearing Loss 44

- *Definition 44*
- *Management Options 44*
- *Advantages to IT Steroids 44*
- *Challenges for IT Steroids 45*
- *Endoscopic Intratympanic Steroid 45*
- *Meniere's Disease 45*
- *Endoscopic Intratympanic Aminoglycoside 47*

Part 3B: Otoendo Surgeries

Chapter 9: Chronic Otitis Media 48

- *Definitions 48*
- *Diagnosis and Assessment 48*
- *Investigations 49*
- *Healed Otitis Media 49*

Chapter 10: Tympanoplasty 53

- *History 53*
- *Physiology of Middle Ear 53*
- *Anesthesia 54*
- *Instruments 54*
- *Tympanoplasty 55*

Chapter 11: Endoscopic Mastoid Surgeries 59

- *Prussak's Space 59*
- *Classification of Cholesteatoma 61*
- *Methodology 62*
- *Operative Technique 62*
- *Procedure 62*
- *Points to Note 64*

Chapter 12: Endoscopic Stapes Surgery (Stapedotomy) 67

- *Instruments 68*
- *Anesthesia 68*
- *Steps of Surgery 68*
- *Suggestions 71*

SECTION 4: ENDOSCOPE VS MICROSCOPE

Chapter 13: Advantages of an Endoscope 75

Chapter 14: Limitations 76

SECTION 5: THE ROAD AHEAD

Chapter 15: Future of Otoendoscopic Surgery 79

Index *81*

3 Equipment and Set Up

Endoscopic ear surgery, being the new kid on the block, is yet to have its own specialized instruments which are widely available for use on a large scale. However, it has a distinct advantage despite its novelty. It can be performed with great success using the traditional instruments available for microscopic ear surgery. The following list enumerates the instruments used by the author and his team to perform endoscopic ear surgeries.

1. Mollison's self-retaining hemostatic mastoid retractor
2. Farabeuf's periosteal elevator with thumb rest
3. Freer's elevator
4. Jobson Horne Probe with ring curette
5. Hartmann's aural dressing forceps
6. Cartilage slicer
7. Microsuction
8. Controlled suction machine console
9. Microinstruments:
   - Micro-alligator forceps
   - Micro-cup forceps
   - Micro-scissors
   - Rosen's knife
   - Plester's D knife
   - Sickle knife
   - Triangular knife
   - Microcurette
   - Straight needle
   - Curved needle
   - 45° pick
   - 90° pick.

Additional Instruments for:

A. Mastoid surgery
   - Diamond and cutting burrs (0.6 mm, 1 mm, 3 mm, 4 mm, 5 mm, 7 mm, 9 mm)
   - Burr handle piece (straight and contrangular)
   - Micromotor
   - Malleus head nipper
   - Ossicle holding forceps
   - Irrigation suction
   - Cell seeker.

B. Stapes surgery
   - Stapes foot plate perforator
   - Measuring gauge
   - Zig
   - Piston holding forceps.

C. Myringotomy
   - Myringotome.

CAMERA SYSTEM AND MONITOR

The author and his team is at present using a Stryker™ camera system. A three-chip camera system with a suitably large monitor is advisable for better resolution and appreciation of detail.

ENDOSCOPES

Zero degree and 45° pediatric nasal endoscopes which are easily available were used by the author in the initial stages. With the wider availability of 00 and angled tympanoscopes in recent times, these instruments are the preferred choice at present.

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POSITION OF THE PATIENT AND THE SURGEON

The patient is placed on the operation table in a supine position with the head turned to one side so that the diseased ear lies above. The surgeon is seated on a stool on the side of the diseased ear and the assistant or the scrub nurse stands at the head-end of the table. The monitor console is placed on the other side of the table facing the surgeon.

PRINCIPLES OF ENDOSCOPE PLACEMENT DURING SURGICAL PROCEDURE

The surgeon holds the endoscope in his nondominant hand and uses his dominant hand to operate with the instruments. The tip of the scope is moistened by dipping it in normal saline to prevent fogging. (Savlon™ solution is better avoided to prevent potential skin reactions and otitis externa postoperatively).



Fig. 3.1: Principles of endoscope placement during surgical procedure

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ENDOSCOPIC EAR SURGERY

A New Horizon

Endoscopic Ear Surgery: A New Horizon is a new kid in the huge world of Otosurgery. This book aims at providing guidance to beginners who intend to venture into Otosurgery. With chapters ranging from diagnostic endoscopy of ear to endoscopic tympanoplasty to endoscopic intratympanic injection and stapedotomy, etc. along with colored photographs of the procedures makes this book interesting. In this book, the author guides the reader through his practical experiences in Otosurgery. This will enable readers to subvert the obstacles faced by the author during his course of various endoscopic otosurgeries. Thus, making the journey of the reader smooth and enjoyable.

Saurav Sarkar MBBS MS-ENT FACS is currently working as an Assistant Professor, Department of ENT & HNS, All India Institute of Medical Sciences, Bhubaneswar, Odisha, India. He was awarded with several national and international level awards. He has a distinguished academic and professional career. He has contributed in numerous national and international journals.



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