

Dr. M.G.R. EDUCATIONAL AND RESEARCH INSTITUTE
Deemed to be University

Maduravoyal, Chennai – 600 095, Tamilnadu, India
(An ISO 2001:2018 Certified Institution)

University with Graded Autonomy Status



SYLLABUS & CURRICULUM
for
M.S. OTORHINOLARYNGOLOGY

2020 onwards

Sponsored by
Dr. M.G.R. EDUCATIONAL AND RESEARCH INSTITUTE TRUST

M.S. in OTORHINOLARYNGOLOGY

Goal

The goals of postgraduate training course would be to train a MBBS doctor who will:

- Practice efficiently and effectively, backed by scientific knowledge and skill base.
- Exercise empathy and a caring attitude and maintain high ethical standards.
- Continue to evince keen interest in continuing education in the specialty irrespective of whether he is in a teaching institution or is a practicing surgeon.
- Be a motivated ‘teacher’ – defined as a specialist keen to share his knowledge and skills with a colleague or a junior or any learner.

Objectives

The following objectives are laid out to achieve the goals of the course. These objectives are to be achieved by the time the candidate completes the course. The Objectives may be considered under the subheadings

1. Knowledge (Cognitive domain)
2. Skills (Psycho motor domain)
3. *Human values, Ethical practice and Communication abilities*

Knowledge:

- Describe etiology, pathophysiology, principles of diagnosis and management of common problems including emergencies, in adults and children.
- Describe indications and methods for fluid and electrolyte replacement therapy including blood transfusion

- Describe common malignancies in the country and their management including prevention
- Demonstrate understanding of basic sciences relevant to this specialty
- Identify social, economic, environmental and emotional determinants in a given case, and take them into account for planning therapeutic measures.
- Recognize conditions that may be outside the area of his specialty/competence and to refer them to the proper specialist.
- Advise regarding the operative or non-operative management of the case and to carry out this management effectively.
- Update oneself by self-study and by attending courses, conferences and seminars relevant to the specialty.
- Teach and guide his team, colleagues and other students.
- Undertake audit, use information technology tools and carry out research, both basic and clinical, with the aim of publishing his work and presenting his work at various scientific fora.

Skills

- Take a proper clinical history, examine the patient, perform essential diagnostic procedures and order relevant tests and interpret them to come to a reasonable diagnosis about the surgical condition.
- Perform common operative procedures in Otorhinolaryngology.
- Provide basic and advanced lifesaving support services (BLS &ALS) in emergency situations
- Undertake complete patient monitoring including the preoperative and post-operative care of the patient.

Human values, Ethical practice and Communication abilities

- Adopt ethical principles in all aspects of his/her practice. Professional honesty and integrity are to be fostered. Care is to be delivered irrespective of the social status, caste, creed or religion of the patient.

- Develop communication skills, in particular the skill to explain various options available in management and to obtain a true informed consent from the patient.
- Provide leadership and get the best out of his team in a congenial working atmosphere.
- Apply high moral and ethical standards while carrying out human or animal research.
- Be humble and accept the limitations in his knowledge and skill and to ask for help from colleagues when needed.
- Respect patient's rights and privileges including patient's right to information and right to seek a second opinion.

Course Contents

i) Theory

1. Basic Sciences

Anatomy of the ear / physiology of hearing and equilibrium / Anatomy of nose and paranasal sinuses / Anatomy of pharynx esophagus / Deglutition / Anatomy of larynx and tracheobronchial tree / Physiology of respiration / Physiology of generation and reception of speech. Surgical anatomy of skull base / Cranial nerves / Imaging and Radiology pertaining to ear, nose and throat (ENT) / Knowledge of Immunology and Microbiology as regarding ENT / Radiotherapy and Chemotherapy in Head & Neck Cancers / Wound healing / Principles of Laser Surgery / Basics of anesthesia and Intensive Care in relation to ENT / A thorough knowledge of anatomy of head and neck region including thyroid, neck spaces and salivary glands / Physiology of smell.

2. Audiology

(A)	(B)	(C)
a) Brief knowledge of acoustics	1) Epidemiology / Prevention / rehabilitation of balance & hearing disorders	1) Diagnostic audiometry
b) Use of computers in audiological and vestibular testing and rehabilitation	2) Hearing aids 3) Cochlear implants	2) Diagnostic testing of vestibular system

3. Otology

Diseases of external auditory canal and middle ear – Acute suppurative Otitis Media – CSOM.

Complications of CSOM - Plastic Surgery of ear – Otosclerosis – SN Loss in adults and children – vertigo – Meniere's disease – ototoxicity – vestibular Schwannoma – tumours of middle ear cleft – glomus jugulare – Disorders of facial nerve – Cochlear implants and other audiological implants.

4. Laryngology

Acute & Chronic infections of oral cavity, pharynx, tonsils and larynx.

- Trauma & stenosis of larynx
- Management of obstructed airway and tracheostomy
- Disorders of voice
- Neurological affections of pharynx and larynx
- Pharyngeal pouch
- Tumours of larynx
- Angiofibroma and nasopharyngeal lesions
- Tumours of oropharynx and lymphoma head and neck
- Tumours of hypopharynx
- Benign diseases of the neck

- The thyroid gland and disorders
- Diseases of salivary gland – neoplastic & non-neoplastic
- Tumour of infra temporal fossa and parapharyngeal space. Cysts, granulomas and tumours of jaw, nose and sinuses.
- The esophagus in Otolaryngology, Facial Plastic Surgery and reconstructive surgery of head and neck
- Terminal care of head and neck cancer

5. Rhinology

Radiology of Nose and Para nasal sinuses

- Congenital anomalies of the nose
- Conditions of external nose
- Abnormalities of smell
- Allergic rhinitis
- Intrinsic rhinitis and nasal polypi
- Infective rhinosinusitis / Complication and surgical management
- Disorders and trauma of facial skeleton
- Disorders of nasal septum
- CSF rhinorrhoea
- Epistaxis
- Snoring and sleep apnea
- Chronic granulomas of nose and PNS
- The orbit in relation to ENT
- Transsphenoidal hypophysectomy
- Overview of facial pain and headache

ii) Practical / Clinical

Mandatory

Dissection of Head & Neck

10 temporal bone dissection which includes:

1. Cortical mastoidectomy
2. MRM & Radical mastoidectomy
3. Facial nerve decompression
4. Post tympanotomy
5. Labyrinthectomy
6. Endolymphatic sac decompression
7. Translabyrinthine approach to IAM

iii) Essential list of Surgical Procedures

Following procedures are classified as : a) to be done independently (PI)

c) to assist a senior specialist /consultant (PA)

d) To wash and observe the procedure (O)

Otology

To be done independently (PI). The minimum number to be done is given against each procedure

Cortical mastoidectomy - 5 cases

MRM – 5 cases

Radical mastoidectomy - 2 cases

Myringoplasty - 3

Myringotomy and Grommet insertion - 3 cases

Ossiculoplasty - one case

Facial N Decompression - optional

To have assisted or observed – Stapedectomy (PA/O)

Rhinology

To be done independently (PI)

- Reduction of fracture nasal bones - 5
SMR - 3 cases
- Septoplasty - 5 cases
- Diagnostic nasal endoscopy - 10 cases
- FESS a) Uncinectomy
 - b) Polypectomy - 2 cases
 - c) Anterior ethmoidal cell clearance
 - d) Middle meatal antrostomy
- Caldwell Luc - 1 case

To Assist or observe:

- FESS – Postr. Ethmoid / sphenoid / frontal sinus surgery
- Maxillo facial surgeries
- External operations of frontoethmoid sinus
- Maxillectomy - Total
- Partial

Laryngology Head and Neck

To be done independently (PI)

- Tracheostomy - 2 cases
- Tonsillectomy - 10 cases
- Adenoidectomy - 2 cases
- DL Scopy - 10 cases
- Esophagoscopy / Upper esophagus foreign body removal - 5 cases

To Assist or observe

- Bronchoscopy
- Total / Partial laryngectomy
- Block dissections of neck
- Thyroid surgery
- Salivary gland surgery
- Microlaryngeal surgery

Teaching and Learning Activities

A candidate pursuing the course should work in the institution as a full-time student. No candidate should be permitted to run a clinic/laboratory/nursing home while studying postgraduate course. Each year should be taken as a unit for the purpose of calculating attendance.

Every student shall attend teaching and learning activities during each year as prescribed by the department and not absent himself / herself from work without valid reasons.

A list of teaching and learning activities designed to facilitate students acquire essential knowledge and skills outlined is given below.

1. Lectures: Lectures are to be kept to a minimum. They may, however, be employed for teaching certain topics. Lectures may be didactic or integrated.
 - a) Didactic Lectures: Recommended for selected common topics for post graduate students of all specialties. Few topics are suggested as examples:
 - 1) Biostatistics
 - 2) Use of library
 - 3) Research Methods
 - 4) Medical code of Conduct and Medical Ethics
 - 5) National Health and Disease Control Programs
 - 6) Communication Skills etc.

These topics may preferably taken up in the first few weeks of the 1st year.

- b) Integrated Lectures: These are recommended to be taken by multidisciplinary teams for selected topics, e.g. Jaundice, Diabetes mellitus, Thyroid etc.
2. Journal Club: Recommended to be held once a week. All the PG students are expected to attend and actively participate in discussion and enter in the Logbook relevant details. Further, every candidate must make a presentation from the allotted journal(s), selected articles at least four times a year and a total of 12 seminar presentations in three years. The presentations would be evaluated using check lists and would carry weightage for internal assessment. A timetable with names of the student and the moderator should be announced in advance.
3. Subject Seminar: Recommended to be held once a week. All the PG students are expected to attend and actively participate in discussion and enter in the Logbook relevant details. Further, every candidate must present on selected topics as least four times a year and a total of 12 seminar presentations in three years. The presentations would be evaluated using check lists and would carry weightage for internal assessment. A timetable for the subject with names of the student and the moderator should be announced in advance.
4. Dissection Head and Neck
Temporal bone dissection which includes:
 - Cortical mastoidectomy
 - MRM and Radical mastoidectomy
 - Facial nerve decompression
 - Posterior tympanotomy
 - Labyrinthectomy
 - Endolymphatic sac decompression

5. Ward Rounds: Ward rounds may be service or teaching rounds.
 - a) Service Rounds: Postgraduate and Interns should do every day for the care of the patients. Newly admitted patients should be worked up by the PGs and presented to the seniors the following day.
 - b) Teaching Rounds: Every unit should have 'grand rounds' for teaching purpose. A diary should be maintained for day to day activities by the students.

Entries (a) and (b) should be made in the Logbook.
6. Clinico-pathological Conference: Recommended at least once in three months for all post graduate Students. Presentation be done by rotation. If cases are not available due to lack of clinical postmortems, it could be supplemented by published CPCs.
7. Clinical cases (minimum of 40 cases) to be presented, which will be assessed by using Check lists.
8. Inter Departmental Meetings: With departments of Pathology and Radio-Diagnosis at least once a week. Radio-diagnosis: Interesting cases and the imaging modalities should be discussed. These meetings should be attended by post graduate students and relevant entries must be made in the Logbook.
9. Teaching Skills: Post graduate students must teach undergraduate students (E.g. Medical, nursing) by taking demonstrations, bed side clinics, tutorials, lectures etc. Assessment is made using a checklist by surgery faculty as well students. Record of their participation be kept in Logbook. Training of post graduate students in Educational Science and Technology is recommended.
10. Continuing Medical Education Programs (CME) : Recommended that at least 2 state level CME programs should be attended by each student in 3Years.

11. Conferences: Attending two conferences and presentation of 1 Poster, 1 Paper - either in national or state conference and one publication to be submitted.

Dissertation

1. Every candidate pursuing MS degree course is required to carry out work on a selected research project under the guidance of a recognized post graduate teacher. The results of such a work shall be submitted in the form of a dissertation.
2. The dissertation is aimed to train a post graduate student in research methods and techniques. It includes identification of a problem, formulation of a hypothesis, search and review of literature, getting acquainted with recent advances, designing of a research study, collection of data, critical analysis, comparison of results and drawing conclusions.
3. Every candidate shall submit to the Registrar (Academic) of Dr.M.G.R Educational and Research Institute (Deemed to be University) in the prescribed proforma, a synopsis containing particulars of proposed dissertation work six months from the date of commencement of the course on or before the dates notified by the University. The synopsis shall be sent through the proper channel.
4. Such synopsis will be reviewed, and the dissertation topic will be registered by the University. No change in the dissertation topic or guide shall be made without prior approval of the University.
5. The dissertation should be written under the following headings:
 - i. Introduction
 - ii. Aims or Objectives of study
 - iii. Review of Literature
 - iv. Material and Methods
 - v. Results

- vi. Discussion
 - vii. Conclusion
 - viii. Summary
 - ix. References (Vancouver style)
 - x. Tables
 - xi. Annexures
6. The written text of dissertation shall be not less than 50 pages and shall not exceed 150 pages excluding references, tables, questionnaires and other annexures. It should be neatly typed in double line spacing on one side of paper (A4 size, 8.27” x 11.69”) and bound properly. Spiral binding should be avoided. The dissertation shall be certified by the guide, head of the department and head of the Institution.
 7. Four copies of dissertation thus prepared shall be submitted to the Registrar (Evaluation), six months before final examination on or before the dates notified by the University. 2 soft copies in CD to be submitted one to Digital library and other to the university.
 8. The dissertation shall be valued by examiners appointed by the University. Approval of dissertation work is an essential precondition for a candidate to appear in the University examination.

Rotation posting in other Departments

Neurosurgery	2 weeks
Plastic Surgery	2weeks
Head & Neck Oncology	4 weeks
Anesthesia	2 weeks
Speech & Hearing*	2 weeks

*Recommended Centers for Speech & Hearing:

- a) All India Institute of Speech & Hearing, Mysore
- b) National Institute of Mental Health and Neurosciences (NIMHANS)
- c) Institute of Speech & Hearing , Lingarajpuram, Bangalore

Monitoring Learning Progress

It is essential to monitor the learning progress of each candidate through continuous appraisal and regular assessment. It not only also helps teachers to evaluate students, but also students to evaluate themselves. The monitoring be done by the staff of the department based on participation of students in various teaching / learning activities. It may be structured, and assessment be done using checklists that assess various aspects.

The learning out comes to be assessed should include: (i) Personal Attitudes, (ii) Acquisition of Knowledge, (iii) Clinical and operative skills, (iv) Teaching s Organizational Dissertation.

i) ***Personal Attitudes.*** The essential items are:

- Caring attitudes
- Initiative
- Organizational ability
- Potential to cope with stressful situations and undertake responsibility
- Trust worthiness and reliability
- To understand and communicate intelligibly with patients and others
- To behave in a manner which establishes professional relationships with patients and colleagues
- Ability to work in team
- A critical enquiring approach to the acquisition of knowledge

The methods used mainly consist of observation. It is appreciated that these items require a degree of subjective assessment by the guide, supervisors and peers.

ii) ***Acquisition of Knowledge*** : The methods used comprise of 'Logbook' which records participation in various teaching / learning activities by the students. The number of activities attended and the number in which

presentations are made are to be recorded. The logbook should periodically be validated by the supervisors. Some of the activities are listed. The list is not complete. Institutions may include additional activities, if so, desired.

Journal Review Meeting (Journal Club): The ability to do literature search, in depth study, presentation skills, and use of audio- visual aids are to be assessed. The assessment is made by faculty members and peers attending the meeting using a checklist

Seminars / Symposia: The topics should be assigned to the student well in advance to facilitate in depth study. The ability to do literature search, in depth study, presentation skills and use of audio- visual aids are to be assessed using a checklist .

Clinico-pathological conferences : This should be a multidisciplinary case study of an interesting case to train the candidate to solve diagnostic and therapeutic problems by using an analytical approach. The presenter(s) are to be assessed using a check list similar to that used for seminar.

iii) Clinical skills

Day to Day work : Skills in outpatient and ward work should be assessed periodically. The assessment should include the candidates' sincerity and punctuality, analytical ability and communication skills.

Clinical meetings : Candidates should periodically present cases to his peers and faculty members. This should be assessed using a check list.

Clinical and Procedural skills : The candidate should be given graded responsibility to enable learning by apprenticeship. The performance is assessed by the guide by direct observation. Particulars are recorded by the student in the logbook.

iv) Teaching skills : Candidates should be encouraged to teach undergraduate medical students and paramedical students, if any. This

performance should be based on assessment by the faculty members of the department and from feedback from the undergraduate students.

v) ***Dissertation in the Department*** : Periodic presentations are to be made in the department. Initially the topic selected is to be presented before submission to the University for registration, again before finalization for critical evaluation and another before final submission of the completed work.

vi) ***Work diary / Logbook*** - Every candidate shall maintain a work diary and record his/her participation in the training programs conducted by the department such as journal reviews, seminars, etc. Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, if any conducted by the candidate. The work diary shall be scrutinized and certified by the Head of the Department and Head of the Institution and presented in the university practical/clinical examination.

vii) ***Periodic tests***: The departments may conduct three tests, two of them be annual tests, one at the end of first year and the other in the second year. The third test may be held three months before the final examination. The tests may include written papers, practicals / clinicals and viva voce.

viii) ***Records***: Records, logbooks and marks obtained in tests will be maintained by the Head of the Department and will be made available to the University or MCI.

Logbook

The logbook is a record of the important activities of the candidates during his training, Internal assessment should be based on the evaluation of the logbook. Collectively, logbooks are a tool for the evaluation of the training program of the institution by external agencies. The record includes academic activities as well as the presentations and procedures carried out by the candidate.

Procedure for defaulters: Every department should have a committee to review such situations. The defaulting candidate is counselled by the guide and head of the department. In extreme cases of default the departmental committee may recommend that defaulting candidate be withheld from appearing the examination, if she/he fails to fulfill the requirements in spite of being given adequate chances to set himself or herself right.

Scheme of Examination

i) Theory

There shall be four question papers, each of three hours duration, carrying 100 marks. Each paper shall consist of 10 short essay questions carrying 10 marks each. Questions on recent advances may be asked in any or all the papers.

Paper I	= 100 Marks
Paper II	= 100 Marks
Paper III	= 100 Marks
Paper IV	= 100 Marks
Total	400 Marks

Questions on recent advances may be asked in any or all the papers.

Details of distribution of topics for each paper will be as follows:

Paper I: Basic Sciences – related Otolaryngology	100 marks
Paper II : Principles and practices of Otolaryngology	100 marks
Paper III: Recent Advances in Otolaryngology and Head Neck Surgery	100 marks
Paper IV: General surgical principles and Head-Neck Surgery	100 marks

Note: The distribution of chapters / topics shown against the papers are suggestive only.

ii) Clinical **200 marks**
 There shall be one long case and two short cases to be examined and presented by each candidate.

Type of cases

Long case 1 80 marks

Short cases 2 (40x2) 80marks

OSCE 40 marks

(10 stations of 4 marks each comprising Histopathology slides, specimens, audiology charts, Radiological images like CT, MRI, USG etc., Dissected temporal bones and instruments)

iii) Viva voce **100 marks**

1) Viva-voce Examination: (80 marks)

All examiners will conduct viva-voce conjointly on candidate's comprehension, analytical approach, expression and interpretation of data. It includes all components of course contents. Questions on operative surgery and use of instruments will be asked. It includes discussion on dissertation also.

2) Pedagogy Exercise: (20 marks)

A topic be given to each candidate in the beginning of clinical examination. He/she is asked to make a presentation on the topic for 8-10 minutes.

Maximum marks for M.S. Otorhinolaryngology	Theory	Practical & Viva	Grand Total
	400	300 (Practical – 200 & Viva – 100)	700

MARKS QUALIFYING FOR A PASS

Obtaining a minimum of 40% marks in each theory paper and not less than 50% cumulatively in all the four papers for degree examination. Obtaining of 50% marks in Practical examination shall be mandatory for passing the examination as a whole in the degree examination

Recommended Books

1. Scott Brown's Otolaryngology – 8th edition Five Volumes
 2. Cummings textbook of otorhinolaryngology . 3 Volumes.
 3. Endoscopic sinus surgery by PJ Wormald 2nd edition / MV Kirtane
 4. Ballenger – Diseases of the Nose, Throat, Ear, Head and Neck
 5. Mawson's Diseases of the Ear.
 6. Glasscock and Shambaugh – Surgery of the Ear.
 7. Learning Ear Surgery by Temporal Bone Dissection by Dr. K.K. Ramalingam and Dr. B. Sreeramoorthy
 8. Yearbook of Otolaryngology, Head and Neck Surgery Edited by Michael M. Paperella and Byron J. Bailey.
 9. Tumours of the Head and Neck – Clinical and Pathological Considerations by John. G. Batsakis.
 10. Rob and Smith – Operative Surgery – Three volumes Recent Advances in Otolaryngology
 11. Jacksons Textbook of Broncho – Oesophagology
 12. Radiology of Head and Neck by Valvassori
 13. Diseases of the facial nerve by Mark May
 14. Otology Neurology by D. Brackmann
- ** Note : The editions are as applicable, and the latest editions shall be the part of the syllabi.

REFERENCES

- ❖ Lore's Atlas of Head and Neck Surgery
- ❖ Microsurgery of the skull base by Ugo Fisch and Douglas Matto.
- ❖ Textbook of Operative Surgery by Lee.

JOURNALS

1. Indian Journal of Otolaryngology
2. Journal of Otology
3. Laryngoscope
4. Otolaryngology Clinics of North American
5. Annals of Otology, Rhinology and Laryngology
6. Acta Otolaryngologica
7. Archives of Otolaryngology, Head and Neck Surgery
8. International Journal of Pediatric Otolaryngology
9. otolaryngology clinics of North America

MEDICAL ETHICS

Sensitization and Practice

Introduction

There is now a shift from the traditional individual patient, doctor relationship, and medical care. With the advances in science and technology and the needs of patient, their families and the community, there is an increased concern with the health of society. There is a shift to greater accountability to the society. Doctors and health professionals are confronted with many ethical problems. It is, therefore, necessary to be prepared to deal with these problems. To accomplish the Goal (i), General Objective (ii) stated in Chapter II (pages 2.1 to 2.3), and develop human values it is urged that *ethical sensitization* be achieved by lectures or discussion on ethical issues, clinical case discussion of cases with an important ethical component and by including ethical aspects in discussion in all case presentation, bedside rounds and academic postgraduate programs.

Course Contents

1. Introduction to Medical Ethics

What is Ethics

What are values and norms

Relationship between being ethical and human fulfillment

How to form a value system in one's personal and professional life

Heteronomous Ethics and Autonomous Ethics

Freedom and personal Responsibility

2. Definition of Medical Ethics

Difference between medical ethics and bioethics

Major Principles of Medical Ethics 0

Beneficence = fraternity

Justice = equality

Self-determination (autonomy) = liberty

3. Perspective of Medical Ethics
 - The Hippocratic oath
 - The Declaration of Helsinki
 - The WHO Declaration of Geneva
 - International code of Medical Ethics (1993)
 - Medical Council of India Code of Ethics
4. Ethics of the Individual
 - The patient as a person
 - The Right to be respected
 - Truth and Confidentiality
 - The autonomy of decision
 - The concept of disease, health and healing
 - The Right to health
 - Ethics of Behaviour modification
 - The Physician – Patient relationship
 - Organ donation
5. The Ethics of Human life
 - What is human life
 - Criteria for distinguishing the human and the non-human
 - Reasons for respecting human life
 - The beginning of human life
 - Conception, contraception
 - Abortion
 - Prenatal sex-determination
 - In vitro fertilization (IVF), Artificial Insemination by Husband (AIH)
 - Artificial Insemination by Donor (AID),
 - Surrogate motherhood, Semen Intrafallopian Transfer (SIFT),
 - Gamete Intrafallopian Transfer (GIFT), Zygote Intrafallopian Transfer (ZIFT), Genetic Engineering

6. *The Family and Society in Medical Ethics*
 - The Ethics of human sexuality
 - Family Planning perspectives
 - Prolongation of life
 - Advanced life directives – The Living Will
 - Euthanasia
 - Cancer and Terminal Care
7. *Profession Ethics*
 - Code of conduct
 - Contract and confidentiality
 - Charging of fees, Fee-splitting
 - Prescription of drugs
 - Over-investigating the patient
 - Low – Cost drugs, vitamins and tonics
 - Allocation of resources in health cares
 - Malpractice and Negligence
8. *Research Ethics*
 - Animal and experimental research / humanness
 - Human experimentation
 - Human volunteer research – Informed Consent
 - Drug trials
9. *Ethical workshop of cases*
 - Gathering all scientific factors
 - Gathering all human factors
 - Gathering all value factors
 - Identifying areas of value – conflict, Setting of priorities,
 - Working out criteria towards decisions

Recommended Reading

Francis C.M., **Medical Ethics**, 1 Ed, 1993, Jaypee Brothers, New Delhi, p 189