



PDCC IN HEAD & NECK SURGERY CURRICULUM

AIIMS KALYANI



JANUARY 8, 2024

ACADEMIC SECTION
AIIMS Kalyani

Post Doctoral Certificate Course in Head and Neck Surgery

Introduction:

The Department of ENT Head Neck Surgery, AIIMS, Kalyani is well established and has trained dedicated faculty for diagnosis, evaluation and management of various head neck and skull base surgeries, benign and malignant tumors. Head and neck surgery dedicated care is currently available only at very few selected centres and INIs in India. A dedicated Head and Neck Training Programme at AIIMS, Kalyani will provide level of experience, training and conceptual tool that will enable a fellow not only expertise as a practitioner, but will give them foundation for recognizing health needs of the community and carry out professional obligations ethically and equitably following the national health policies. It is important to recognize some of these issues such as the early clinical symptoms and conditions of premalignant as well as malignant head and neck tumors and reduce the morbidity and burden of end stage of the disease, failure to which the patient may progress into palliative management if not treated timely. As a trained fellow in head and neck surgery, he / she will also be able to develop network to collect data and answer the relevant research questions.

Faculty:

Professor & Head of the Department	Prof Col Dr Ajay Malik
Associate Professor	Dr Debangshu Ghosh
Assistant Professor	Dr Rachana Prasad

Infrastructure:

AIIMS Kalyani has dedicated ENT Head Neck department (30 bedded) which caters good numbers of Head and neck cases benign as well as malignant cases of approximately 160-180 daily OPD cases. 30 cases were operated including various thyroid, parotid, laryngeal and oral cavity head neck surgeries of patients from all over the State and even outside from the initiation of operation theatre in AIIMS Kalyani. The department of ENT Head & Neck surgery is the first to start Head- Neck Tumor clinic integrated with other departments (Radiology, pathology, medical and radiation oncology, Burn & plastics, CTVS and neurosurgery) on every Thursday in collaboration with various other departments

started on 14th March 2023. Till date 30 cases of head and neck cases have been discussed in the Head and neck tumor board.



Entry requirements: -

- MS or DNB in ENT from an Institute or Medical College recognized by National Medical Commission (NMC) or Medical Council of India (MCI).

Mode of Selection:-

- The candidates will be selected on basis of Academic Profile and Interview by the Selection Board.

Duration: - 1 year

Seats: - 2 per year

Stipend: - Under head of senior resident (out of total designated posts of senior resident for department of ENT Head Neck Surgery, two posts will be diverted for PDCC)

Tuition fees:- *As per Institutional Norms*

ASSESSMENT OF TRAINING: -

As per the institutional guidelines.

Exit Examination- at the end of the training program.

Syllabus for PDCC in Head and Neck Surgery:

Introduction:

Head and neck cancer is a major public health problem in India. The age standardized incidence being 25.9% and 8% per 100,000 population respectively in males and females in India. The risk of developing head and neck cancer was 1 in 33 males and 1 in 107 females in India. Head and neck tumor surgeries differ in various aspects. With recent advances in surgery, radiation oncology, medical oncology, microvascular surgery, minimally invasive endoscopic surgery, LASER and trans-oral Robotic and robotic thyroid surgeries, the head and neck surgery is in a critical position to help developing these integrated approaches for the comprehensive management of head and neck tumors. Surgery is in a critical position to help integrate these approaches for management of each individual cases. It is likewise that the head and neck surgeon have special training, that would help him or her to understand these divergent fields and appreciate their potential roles in management. The head and neck surgeon should be well trained for screening and early detection of head and neck tumors. Management of each patient care should be coordinated with medical oncologists, radiation oncologists and other branches of medicines as needed for the highest possible standards of care for treatment of head and neck cancer patients.

The burden of Head and neck cancer patients in India is increasing every year and the number of patients requiring surgical and medical management are on a rise owing to not only the lack of availability of multimodality oncology centers but also trained head and neck surgeons. Head and neck region tumor comprises approximately about 30% of all cases in adult population and most of them are preventable. Most of the head and neck cancers are squamous cell carcinoma. Tobacco addiction and alcohol consumption excessively are the common risk factors helps in developing head and neck cancer. Head and neck surgeons have special obligation to educate public for cancer prevention and tobacco deaddiction.

Most of the ENT surgeons are either not trained to or are unable to diagnose these cases early. It is important that ENT surgeons are specially trained for screening and early detection of the head and neck tumors. We need people who can create access for early diagnosis and management of head and neck tumors as per proper guidelines and protocols. This in its own sense would go a long way in decentralizing the care of these cancer patients requiring highly specialized care.

AIIMS, Kalyani was established by the Government of India with the aim of correcting regional imbalance in quality tertiary level health care. AIIMS, Kalyani is a Centre of excellence in medical education, training, health care and research imbued with scientific culture, compassion for the sick

and commitment to serve the underserved. The Department of ENT Head and Neck surgery, AIIMS, Kalyani is well established and has faculty having dedicated exposure to head and neck tumors during their training.

Comprehensive multimodality management of head and neck cancers are available only at selected centres in India. Starting a dedicated Head and neck surgery PDCC program at AIIMS, Kalyani will provide level of experience, training and conceptual tool that will enable fellow not only expertise as a practitioner, but will give them foundation for evidence based comprehensive management of head and neck tumors. As a trained fellow in head and neck oncology, he / she will be able to develop network to collect data and answer the relevant research questions. There are wide variations and regional imbalances in care of head and neck tumor patients which are concentrated in Metropolitan cities. It is important to recognize the head and neck tumors early by proper screening and early detection to reduce the morbidity and mortality of end stage cancer to which the patient may progress if not treated timely. Early detection will also help in the proper surgical clearance, if possible, thus improving overall survival and quality of life.

Definition:

Fellows in Head and neck surgery will be fully qualified who will have a further period of training in Head and Neck surgery PDCC program which will be practical and evidence based. The development of such educational programs will adequately prepare ENT resident for Head and neck surgeries in their practice.

Aim of the training:

The aim of the fellowship is to provide to the candidate an intellectual environment conducive to learning the exemplary practice of head and neck surgery and inculcating evidence based practice.

Objectives of the training:

The trainee requires a sound understanding of Head and neck surgery including:

- **Knowledge:**

1. Describe etiology, pathophysiology, principles of diagnosis and management of various head and neck pathologies including emergencies in adults and pediatric population
2. Understanding the basic sciences relevant to this specialty
3. Genetics associated with the conditions

4. Identify environmental, socioeconomic and emotional determinants for all the cases and take them into account for planning therapeutic management
5. Recognise conditions that may be associated with other specialities
6. Update by self-study and by attending Conferences, seminars, CMEs and hands on training workshops relevant to specialty
7. Teach and guide his team, colleagues and other students
8. Use information technology tools to carry out research (basic and clinical)
9. Cadaver dissection of head and neck region

○ **Skills:**

1. Proper detailed clinical history, examine the patient, perform essential diagnostics procedures and other relevant tests and to interpret them properly to diagnose and stage the disease
2. Perform common procedures relevant to the speciality
3. Undertake complete monitoring of the patient
4. Resident will be performing and assisting under supervision – Thyroidectomies, partial glossectomy, wide local excision of buccal mucosa, mandibulectomy, neck dissections, total laryngectomy, airway reconstruction surgeries, Transoral laser microsurguries, Endoscopic CO2 LASER assisted excision of laryngeal and tracheal stenosis, local and microvascular flap (in collaboration with Dept of Burn & Plastics), etc

○ **Communication abilities:**

1. Adopt ethical principles in all aspects of practices
2. Professional honesty and integrity
3. Develop communication skills- counselling of patients and their relatives, to explain various available modalities for the management of the condition
4. To obtain a true informed consent from the patient and breaking of bad news
5. Apply ethical and moral standards while carrying out human research
6. Respect patient's right and privileges including patient's right to information and right to seek a second opinion.

ORGANIZATION OF TRAINING:

A. Training program would be in a multidisciplinary centre and organized by trained specialist in Head Neck Surgeries.

B. The centre would use the guidelines and protocols of national and international professional bodies [such as AJCC (American Joint Committee on cancer) / NCCN (National Comprehensive Cancer Network)/ WHO (World Health Organisation) / ATA (American Thyroid Association)] which are reviewed at regular intervals.

THE MEANS OF TRAINING:

Entry requirements:-

- MS or DNB in ENT Head Neck Surgery from an Institute or Medical College recognized by National Medical Commission (NMC) or Medical Council of India (MCI).
1. The trainees would participate in all relevant activities as deemed suitable by the department. Participation in audit and clinical or basic research is essential.
 2. The duration of training would be 1 year approved program and would cover the clinical and research aspects.
 3. Educational tools
 - Text books written by leading and experienced Authors
 - Video tapes / CD ROMS
 - Simulators
 4. The training would be structured throughout with clearly defined targets to be met after specified intervals. An education plan would be drawn up in consultation with the trainees at the beginning of each attachment and progress would be monitored regularly, by means of log book.

ASSESSMENT OF TRAINING:-

- Each student to be evaluated every 3 months by program coordinator.

COURSE EVALUATION:-

- The trainee gets the opportunity to evaluate the course.

LOG BOOKS:-

- The log books are to be submitted for monthly evaluation of the progress and to evaluate the learning curve.

EXIT EXAMS:-

The degree would be awarded after a final exit examination, at the end of the 1 year training period.

TRAINING PROGRAMME SYLLABUS:-**A: General Principles:**

Each PDCC student is required to possess a comprehensive knowledge in the diagnosis and management of Head and neck patients. This includes both inpatient and outpatient experience. The fellow would have extensive exposure to the interpretation of pathological and radiological investigations associated with diagnosis of the Head and neck pathologies. He or she would gain experience in management of head and neck cancer surgeries, postoperative ICU management and medical management of cases along with the associated complication management during treatment. He /she should have a detailed knowledge of principles of radiation oncology, cancer pathology, genetics, rehabilitation related to head and neck patients. He/she would also possess sufficient knowledge and experience in research methodology and development and is expected to complete a research project during the tenure of his fellowship.

CLINICAL SKILLS FOR PDCC

1. Management of Head and neck pathologies as per recent guidelines and protocol
2. Proper history taking and clinical examination of head and neck patients
3. Interpretation of head and neck pathological and radiological investigations
4. Performance of necessary clinical, bedside investigations and interpreting the same to establish the diagnosis and inculcate evidence based practice.
5. Assisting and performing various head and neck surgical procedures and managing patients in ICU
6. Managing Head and neck patients related emergencies of Indoor, ICU as well as patients

visiting emergency

7. Detailed knowledge of principles of medical oncology, cancer pathology, radiation oncology and rehabilitation in head and neck cancer
8. Head and neck tumor screening and early detection
9. Cadaveric dissection of head and neck region

Duration and Rotation:

- Attend to the Head and neck tumor clinic every week consisting of the patients from ENT OPD, as well as the follow up of previously diagnosed cases under the supervision of consultants. To assist in maintaining record of all head and neck cancer patients and their follow up. Supervising the care of head and neck cancer patients admitted in ward.
- One month rotation to the Burn & plastics, Intensive care unit, medical oncology unit, pathology and Radiodiagnosis along with closely supervising all cases of head and neck cancer patients being conducted by the department.
- Assist various head and neck surgical procedures along with reconstruction procedures.
- Take responsibility of arranging and managing other procedures of patients admitted under ENT head neck surgery
- To present Journal clubs and seminar pertaining to recent developments in Management of Head and Neck Cancer and discuss the same with faculty.
- Candidate has to submit one research proposal of 6 months duration with publication which is a mandate for exit exam.
- Cadaveric dissection of head and neck region

Total: One Year

Supervision:

Initially, the fellow will be fully supervised by the Faculty posted in the area. In the course of training, the level of supervision will be tapered according to the experience and confidence gained.

On-Call:

We believe that attending to emergency and unscheduled cases outside duty hours is an essential part of training. The Fellow will be required to attend to all cases visiting the General Emergency with Head and neck patients when called to do so, and even those head and neck patients admitted in other units of the hospital (e.g. Medical oncology, Pediatric Surgery, ENT and Dermatology) who may develop any problem associated with the condition during their stay in the hospital and might need urgent care. He /

She would be required to discuss the same with faculty before taking any decisions.

Overview of training

Clinical knowledge will be acquired by a variety of means, including close liaison with appropriate medical and surgical and radiological meetings. Multidisciplinary meetings would be emphasized.

The following inter-relationships are important:

1. The trainee would be encouraged and given the opportunity to attend and lead appropriate clinico-radiological and multidisciplinary meetings.
2. The trainee would be encouraged to attend appropriate educational meetings and courses.
3. The trainee would participate in and initiate relevant clinical audit.
4. Trainees will be expected to be familiar with current protocols for management of head and neck tumors.
5. The trainee would be encouraged to participate in research, and to pursue one or more projects up to and including publication. An understanding of the principles and techniques used in research, including the value of clinical trials and basic biostatistics, would be acquired. Presentation of research and audit results at state and national meetings would be encouraged.
6. The trainee would continue to participate in the on-call rotation for management of indoor and emergency patients, with appropriate consultant back up.

The academic activities of the program in the hospital would include:-

1. Regular academic sessions
2. Case discussion and seminars
2. Paper presentation
4. Audit / Project / Research
5. Conferences / CMEs / Live workshops
6. Cadaveric dissections

Tentative schedule for fellow in Head and neck surgery:

	Morning (9.00 A.M to 13.00 P.M)	Afternoon (14.00 P.M to 17.15 P.M)
Monday	ENT Clinic to attend with faculty	Rounds / Case discussions
Tuesday	ENT OPD to attend with faculty	15:30: seminar / case presentation etc. (Alternate week)
Wednesday	Operation Theatre	15:00 -16:00: Journal Club/Seminar alternate week
Thursday	Prepare cases to be discussed in Head and neck tumor Board	15:00-16.00 Head and neck Tumor board Discussion
Friday	Operation Theatre	Post op Rounds
Saturday	9:00-10:00 A.M: Clinical Grand Round 10:00 A.M – 13.00 P.M: Integrated teaching / Ward work	

ADMINISTRATION :-**Research and audit :-**

The fellow will have to:

- Undertake a project and have at least one publication.
- Present at one regional and one national conference.
- Participate in the daily teaching sessions within the department, and make regular presentations.
- Take part in Inter-departmental meetings relevant to the area posted.

To sum up:

The goal of the PDCC in Head and neck surgery training is to familiarize the trainee with

- A) Managing Various Head and neck conditions- Benign and Malignant
- B) Diagnosis and work up of all Head and Neck cancer patients
- C) Assist and perform various Head and neck surgical and reconstructive procedures
- D) Managing postoperative patients in ward as well as in ICU
- E) Management of various head and neck emergencies in both adults and pediatric population
- F) The Fellow is expected to complete a research project by 6 months and at least one publication during the training.
- G) Cadaveric dissection of head and neck region

Recommended Readings

Author Name	Name of the Books	Publishing Company
Jatin shah, Snehal patel, Bhuvanesh Singh, Richard Wong	Jatin shah's head and neck oncology	Elsevier
Jonas T. Johnson, Clark A. Rosen	Bailey's Head and neck surgery	Wolters Kluwer
Louis B. Harrison	Head and neck Cancer- A Multidisciplinary approach	Wolters Kluwer
Eugene Myers	<u>Operative Otolaryngology</u> <u>Head and neck surgery</u>	Elsevier
John Watkinson, Ralph W Gilbert	<u>Stell and Maran's Textbook of head and neck Surgery and oncology</u>	