INTRODUCTION

Dr.Susheela Tiwari Memorial Trust Hospital in Haldwani , Uttarakhand became functional on 26^{th} December 1995, but was formally inaugurated on 28^{th} July 1996 by the then Prime minister of India Shri H.D Deve Gowda. The hospital is continuously being expanded and upgraded to keep pace with both the ever increasing dependence of the local and regional populace on its services as well as to keep in tandem with the advancements in the medical field. The foundation of the medical college was laid by Mr. Romesh Bhandari, the then governor of Uttar Pradesh.

THE SPECIALITY OF ANAESTHESIOGY, CRITICAL CARE & PAIN & PALLIATIVE MEDICINE

"Before Which in all time Surgery was Agony By Which Pain in Surgery was Averted and Annulled Since Which Science had control of Pain"



Disaster Management

Anaesthesia is an imperative backbone for many surgi Specialities procedures. It has p inevitable role in the field of medicine. Being a very surge speciality the premonition of sequelae such as pain during procedure or even death, have reduced over the years.

The fundamental basis of this speciality involves manipulation of the functionality of prime organs, inducing arousable unconsciousness and control over breathing patterns. The highly well versed experts ,are trained in giving the patients utmost comfort and ease to undergo invasive and traumatic surgical procedures, keeping the patient's safety in mind.

Unlike before, Anesthesiology has become a vast speciality in medical science with its new upcoming subspecialities. Anesthetists shoulder great responsibility of taking care of patients by protecting them from any possible untoward events, best possible pain relief during procedures, enabling optimum as well as comfortable working conditons for surgeons.

In the world of modern medicine, the department has started expanding and resonates to further demands beyond operation theatres. The aid of diversification and technology has enabled the exploration towards cardiac, neuro, obstetric paed, transplant and emergency anesthesia.

The department of versatile doctors have become the mainstay and continue to be the backdrop of being the key to evolution of anesthesiology and help to contribute to the favourable aspects of modern medicine.

Department of Anaesthesiology& Critical Care at Dr. S.T.M. Hospital, GMC, Haldwani-Nainital (UK).

History

The beginning of the hospital was very humble with a single operation theatre and only a few routine and emergency cases mostly under regional or local anaesthesia were performed. There was no separate Department Of Anaesthesiology which was manned by two anaesthesiologists.



DEPARTMENT OF ANAESTHESIOLOGY & CRITICAL CARE AT DR.SUSHILA TIWARI MEMORIAL GOVERNMENT HOSPITAL

It was only after the letter of permission from Ministry of health and Family welfare, for establishment of Medical College in <u>september 2003</u> that the Department Of Anaesthesia was formed with <u>Dr. Akram</u> <u>Lal</u> being the first HOD. He later went on to become the principal of the medical college. He was followed by illustrious names like, <u>Dr. G. B Kohli</u> (February 2004- August 2004) and <u>Dr. B S Sinha</u> (September 2005- April 2006).

The role of anesthesiologists expanded further with inception of cancer and Paediatric surgeries in 2004 followed by Plastic Surgery in 2005 and cleft lip & palate surgeries under "<u>Smile Train Project</u>". Neurosurgery started in 2007 and in 2013 we saw the commencement of Brachytherapy.



The department grew manifold from inception for which a lot of credit goes to **Dr. B S Chhabra** (HOD, April 2006-March 2010) who gave a new identity to Anaesthesiology Department. He started <u>PAC clinic</u>, <u>separate departmental office and implemented strict OT protocols (No Shoes Zone, dress code for doctors, nursing staff and cleaning staff).</u>

He also started classes for technicians, undergraduate students, and weekly journals for faculty. He was instrumental in development of Departmental Library and included national and international Journals in Central and Departmental Library. Under his Patronage, ISA city branch, Haldwani was formed. He always took keen interest in organizing CMEs, Scientific meet and Seminars.

He also introduced workstations, FABIUS and FABIUS plus to the department a vast improvement from the boyle'strolly. Under the guidance of Dr GK Sinha (HOD, march 2007- February 2011) permission was granted by MCI in February 2011 for starting MD Anaesthesia with an annual intake of 4 seats per year.

Dr. Geeta Bhandari is the present HOD of Department of Anaesthesiology. She took charge of the department on 1st March, 2011. She wears many hats and is also the **Secretary of Uttarakhand Society of Anaesthesiologists (UKSA)** and **Indian society of Anaesthesiologists Haldwani city Branch**.

Newer generation Supraglottic Airway Devices like i-gel, LTS, AirQ, Emergency drugkits and newer generation Defibrillators were made available in the department.

Under her guidance, two MCI Inspections for Postgraduate degree recognition (June 2014 and September 2015) have taken place, and finally MCI (Medical Council of India) has granted recognition to postgraduate course (MD) in Anaesthesiology.

In <u>May 2011</u>, 1st batch of Postgraduate students was admitted under her guidance. Daily Lectures, weekly seminars, Case and journal discussion with group discussion were started. Research by faculty and PGs on various topics were started.

Department has also conducted State Level anaesthesiology Conference – UKISACON 2013 at Government medical college, Haldwani under her guidance. <u>Pain Clinic</u> was started in <u>june 2013</u> and since then both conservative and interventional pain procedures (epidural, nerve block and tender point injection) are done. Five batches of postgraduate students have successfully completed their degree.

Emergency life support training program was started by organizing American Heart Association and American College of Cardiology (AHA/ACC) accredited BLS and ACLS courses. Under guidance of then Principal Dr. R C Purohit and with unrelenting efforts and immense hard work of Dr. Geeta Bhandari, Department succeeded in opening a 6-bedded ICU on 1st August 2014. It was a major step in providing better health care service to the community.

In <u>May 2017</u>, PG seats for MD Degree Anaesthesiology increased from four to nine in Department of anaesthesiology and critical care.

On <u>4 Feb 2018</u> Department has started palliative care unit(PCU) with the inauguration of the Pain & Palliative care OPD in swami ram cancer institute, that provides pain & palliative care to all cancer patients & patients suffering from life threatening illnesses.

The future propositions includes increasing ICU bed strength ,Centralization of all the ICUs to provide intensive critical care to pre operative and post operative patient in , establishment of State level Advanced Pain clinic with pulsed radio-frequency devices, nerve ablation and spinal cord stimulation techniques, Procurement of Advanced devices in the department like Video Laryngoscopes, BIS monitor, etc., Center of excellence for Airway, CPCR training and USG Guided nerve blocks ,Trauma and resuscitation center and training programmes, starting of DM/PDCC courses.

Faculty



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Publications :20



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Publications :02



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Publications :2

<u>Clinical</u>

The Department of Anaesthesiology covers a wide range of specialty and subspecialty in anaesthesia including

<u>Preanaesthetic Clinic:</u> The department runs a daily preanaesthetic clinic for preoperative evaluation and optimization of all the patients undergoing elective surgeries.



PREANAESTHETIC CHECK UP OPD ROOM NO.12 ANDPAIN CLINIC ROOM NO 12 A AT DR.SUSHILA TIWARI MEMORIAL GOVERNMENT HOSPITAL

Operation theatres: The hospital has 14 Major & 04 Minor Operation theatres including 02 super speciality& 03 Emergency Operation theatres. All the OT's are highly equipped with modern anaesthesia workstations, multiparametric monitors, EtCo2 monitors, and invasive monitoring like IBP/CVP.



OPERATION THEATRE (OR) AT DR.SUSHILA TIWARI MEMORIAL GOVERNMENT HOSPITAL

<u>Intensive Care Unit:</u> Since August 2018, Beds in Anaesthesiology ICU have been increased from 6 to 12. Department of anaesthesiology runs a dedicated 12 bedded Anaesthesiology ICU, admitting both post surgical as well as medical patients. Dr.Sushila Tiwari Hospital is the only government hospital in the whole state of Uttarakhand to have 12 bedded ICU



ANAESTHESIOLOGY INTENSIVE CARE UNIT (AICU BED NO 1 – 12) AT DR.SUSHILA TIWARI MEMORIAL GOVERNMENT HOSPITAL **<u>Pain Management</u>**: The department also operates a pain clinic providing inpatient as well as an outpatient chronic pain management inclusive of acute pain services, providing pre- and post-operative pain management procedures like epidural opioids, and regional nerve blocks and labour analgesia.

Pain & Palliative Care Unit(OPD and WARD)

On <u>4th february</u>, the Palliative Care Unit (PCU) was established with the inauguration of the Pain & Palliative Care OPD to commemorate "<u>The World Cancer Day</u> at "Swami Ram Cancer Hospital And Research Institute" by Principal Dr .C. P Bhaisora, professor and Dr . Geeta Bhandari, professor and head of department ,Anaesthesiology and critical care after the letter Of Permission(LOP) to start Pain & Palliative OPD was granted on 03/02/2018 by the Principal , GMC Haldwani.



PAIN & PALLIATIVE CARE OPD AT SWAMI RAM CANCER HOSPITAL AND RESEARCH INSTITUTE



PAIN & PALLIATIVE CARE IPD- 6 SIX BEDDED WARD AT SWAMI RAM CANCER HOSPITAL AND RESEARCH INSTITUTE

The Approval of narcotic license from State Drug Controller has been received and Essential Narcotic Drugs(ENDS) like MORPHINE is being prescribed and administered to the six bedded IPD patients making it the first and only government hospital in the state to prescribe and issue essential narcotic drugs for the cancer patients.

First Responders in Emergency: Round the clock on call services are provided for emergency airway management, Cardio Pulmonary Cerebral resuscitation and ventilator management.

<u>Anaesthesia at Remote location</u>: Anaesthetic Services are provided for CT scan, MRI, USG guided radiological interventions

Academic Activity

PG Courses	: M.D (Anaesthesiology)
Intake	: 9 students per year
Course Duration	: 03 years

Academic Curriculum

P.G degree in M.D (Anaesthesiology)

- 1. Basic Sciences related to anaesthesia including anatomy, physiology, Pharmacology and Biochemistry.
- 2. Medicine applied to Anaesthesiology, Physics in Anaesthesiology including electronics, computers and lasers.
- 3. History of Anaesthesiology.
- 4. Pre anaesthetic evaluation and preparation.
- 5. Principles and Practice of Anaesthesiology including pre, per and post operative care.
- 6. Different methods of Anaesthetic Techniques.
- 7. Regional anaesthesia including nerve blocks, management of chronic pain.
- 8. Anaesthesia for Gen. Surgery and specialties like Cardiothoracic, Neurosurgical, Orthopaedics, Geriatrics, Plastic Surgery and surgical endocrinology, Paediatric anaesthesiology and Obstetrics and Gynaecological procedures.
- 9. Blood Transfusion Fluid and electrolyte balance.
- 10. Fires and explosion.
- 11. Theatre sterilization procedures
- 12. Oxygen therapy and Management of both acute and chronic respiratory insufficiencies, and ventilator commitments in I.C.U.
- 13. Critical care Anaesthesiology.
- 14. Anaesthesia in abnormal environment like high altitude anaesthesia etc.
- 15. Complication in Anaesthesiology and their management both and post operatively.

Pedagogy:

- 1. Daily lectures.
- 2. Weekly Seminar, journal club & Group discussions, Case presentation.
- 3. Fortnightly CME.
- 4. MBBS Lectures.
- 5. Lectures for OT Technician.

PG seats for MD degree Anaesthesiology have been increased from 4 to 9 in the department of Anasethesiology & Critical Care .

All the postgraduates are rotated in the various surgical specialities, Intensive care unit, pain clinic and PAC. Residents are also sent to SGPGI lucknow for training in Cardio thoracic and vascular anaesthesia.

Daily teaching activities are conducted in form of lectures, journal club, seminars, case discussions and mortality and morbidity meets. This is in addition to the case based daily teaching in the operation theatres and Intensive Care Unit.

Post graduate students & faculty also participate in various national and state conferences, workshops and continuous medical education programmes.

Department has a library with over 150 textbooks and reference book and also subscribes various national and international journals for department personnel and students. The department also has an anaesthetic museum describing history of anaesthesia and display of equipments in a systematic manner.

Apart from postgraduate teaching the faculty and the residents are also involved in various teaching activities for the undergraduates, paramedical staff and nurses. Various CME's workshop are frequently conducted to provide continuous update in the field of anaesthesiology, critical care and pain medicine.

The department is actively involved in both clinical and basic research.

Conferences, Workshops & CMEs

CMEs

2018

Pain & Palliative care CME - April 29th 2018CME On Septic Shock - 28th August 2018Image: August 2014Image: August 2014Imag

CME On Compression Only CPR, Importance Of Intensive Care & Palliative Care – 16th AUGUST 2018

CME On Septic Shock - 28th August 2018



<u>2017</u>

CME ON ROBOTIC SURGERY & ANAESTHESIOLOGIST ON 10TH JUNE 2017

<u>2015</u>



<u>Guest Lecture on " 80/20 A Way Of</u> <u>Life " – Major General H.S Nanda</u>

<u> 4013</u>



<u>CME on Cancer & Pain Syndromes – 13th</u> <u>November ,2013</u>

WORKSHOPS

<u>2018</u>

23rd October 2018 – Workshop on Compression Only Life Saving CPR (COLS)



<u>Workshop Or</u> <u>day</u> Pain & Palliative Care Workshop April 29th 2018 – Coeliac plexus block & Hypogastric nerve block





Workshop On Airway Management On 13th August 2017



<u>Anaesthesia Updates – 13th march</u> <u>2016</u>

<u>2015</u>



Life Saving Intubation /Airway Management Programme: 4-14th FEBRUARY 2015



Emergency Resusitation Programme, 25th May-13th June 2015.



<u>2012</u>



Workshop on BLS & Airway Management - 9th April 2012

World Anaesthesia Day Celebration -16 th October

2014



2017

2016

2015



2018

CONFERENCES



UKISACON 14TH – 16TH NOVEMBER - 2013



UKISACON 24TH – 25TH SEPTEMBER -2016