



# SGRD Synapse

Vol. 5 / No. 2  
March - April 2024

SRI GURU RAM DAS UNIVERSITY  
OF HEALTH SCIENCES, SRI AMRITSAR

Monthly update of Sri Guru Ram  
Das University of Health Sciences,  
Sri Amritsar



## 1st Alumni Meet



SGRD University of Health Sciences, Sri Amritsar recently hosted its Alumni Meet, an exciting and long-awaited event that brought together former students from across the institution's rich history. This milestone gathering provided a wonderful opportunity for graduates to reconnect with one another, reminisce about their shared experiences on campus and reflect on how their time at SGRD had profoundly influenced their personal & professional journeys. Attendees were treated to a warm welcome as they arrived at the picturesque university grounds, greeted by the familiar sights and sounds that had shaped their formative years. As guests mingled and exchanged contact information, a palpable sense of camaraderie and college pride filled the air, underscoring the enduring bond that links this diverse community of scholars, healers and leaders.



*Dear Friends,*

Achieving true success in life is not merely a matter of having a job or career that provides financial stability and security - it's about finding a deep, abiding passion that fuels our drive and motivates us to reach our full potential. When we have a genuine passion for the work we do, it becomes a wellspring of inspiration that propels us ever forward, even in the face of challenges and setbacks. This passion must be carefully tended and "irrigated" through consistent effort and sacrifice, much like a garden that requires regular watering and nourishment to thrive. When we align our work with our deepest values and enthusiasms, we unlock a wellspring of energy, creativity and commitment that carries us ever closer to our most cherished goals. To maintain this drive we must love our work. So follow your passion.

*Dr. Manjit Singh Uppal*  
Vice Chancellor



# SGRD Synapse

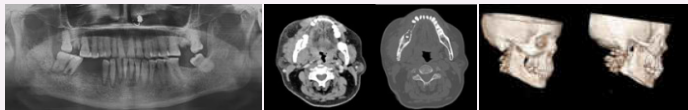
## 1st North Zone Pedicriticon 2024



SGRD University of Health Sciences, Sri Amritsar in collaboration with IAP Intensive Care Chapter India and IAP Intensive Care Chapter Punjab, hosted '1st North Zone Pedicriticon'. The event revolved around the theme "Improving Critical Care: Basic & Beyond" saw monumental participation of both renowned and aspiring intensivists and paediatricians. Dr. GV Basavaraja, National President of the Indian Academy of Paediatrics, was the Chief Guest on the occasion, while Dr. Sunit Singhi, former head of PGI's department of pediatrics, was the Guest of Honor. The 3-day conference hosted over 400 delegates, six intensive skill development workshops were held on April 26th at various medical colleges and hospitals throughout the city.

### ► Clinical Snippet

#### A Classical Case of Mandibular Osteogenic Sarcoma



Pantomogram of the patient showing rarefaction with sieve like pattern of body and ramus of right mandible (arrows) with 1-2 floating teeth (arrowhead)

A sixty-year-old female presented in the Department of Radiodiagnosis for evaluation of the soft tissue swelling on the right side of lower jaw. It was slow growing, non-tender and firm in nature. The pantomogram was done which showed rarefaction of mandible on right side with about two floating tooth. On CECT mandible, a soft tissue mass was seen in relation to right mandibular body and ramus causing expansion and rarefaction. It showed enhancing intraosseous component with soft tissue extension in right jaw region. Osteosarcoma is a primary malignant bone tumor with a worldwide incidence of 3.4 per million people per year and is classified as primary and secondary. The common site of involvement of osteosarcoma are the metaphyseal region of long bones (91%) with its occurrence in descending order as the lower end of femur, upper end of tibia, upper end of humerus and the upper end of the femur. Involvement of other bones like jaw, pelvis, scapula, spine, and skull increases with age and is seen in elderly patients. The differential diagnosis of osteogenic sarcoma of jaw may be various expansile lesions with bony destruction like metastasis, adamantinomas, infective pathologies etc. The current standard for response in osteosarcoma, is attainable with surgery and neoadjuvant chemotherapy. CECT shows an expansile soft tissue mass in relation to the body and ramus of right mandible rarefaction with intraosseous and soft tissue components. On bony algorithms, the mandibular alveolar processes shows erosion/destruction with adjacent bony "sun burst" type of periosteal reaction. CT 3D Recon expansion of right mandibular region with sieve-like bony perforations involving body of the mandible.

**Dr. Arvinder Singh**  
Prof. & Head, Department of Radiodiagnosis

## NW Chapter of IAPM 2024 Conducted



SGRD University of Health Sciences and Indian Association of Pathologists and Microbiologists (IAPM) conducted the conference on 'NW Chapter of IAPM 2024'. Dr. Anita Borges, Lab Director, Centre Oncopathology & Head of Histopathology, SL Raheja Hospital, Mumbai. More than 450 delegates and dignitaries participated in the multifaceted deliberation, distinguished illuminaries from various parts of the country led the discussion on topics pertaining to challenges in diagnosis of diseases especially cancer and recent advancements in the field of medical sciences, especially in the field of oncology, pathology. Dr. Karamjit Singh Gill, HoD, Department of Pathology spearheaded the event from conception to completion under the stewardship of Dr. A.P. Singh, Dean, SGRDUHS.

## Patient Safety Nurses' Perspective



SGRD College of Nursing organized a National Workshop on 'Patient Safety Nurses' Perspective' co-sponsored by Council of Scientific & Industrial Research, New Delhi. The national workshop was inaugurated by Hon'ble Chief Guest Dr. Sukhpal Kaur, Principal, NINE PGIMER, Guest of Honor Dr. Anupama Mahajan, Director Principal, SGRDIMSR and Organizing Secretary Dr. Manpreet Kaur, Principal, SGRDICON. Eminent Speakers and Chairpersons imparted knowledge on different topics on patient safety. Hands-on-Training was also organized on various topics.

## World Health Day Quiz Conducted



Department of Community Medicine conducted a World Health Day quiz under the aegis of Indian Association of Preventive and Social Medicine. Total of 81 participants (27 teams) participated in Elimination round of the quiz. Certificates of participation, merit and achievement were awarded to all participants, runners up and the winner team.

## Resource Faculty for Scientific Sessions



### Department of Anatomy

- ① Dr. Anupama Mahajan, ② Dr. Punita Salwan and ③ Dr. Monika Piplani chaired a scientific session in '12th International Conference of Society of Clinical Anatomists' and ④ Dr Anupama Mahajan & ⑤ Dr. Monika Piplani also attended Pre-conference CME on 'Anatomical Aspects of Organ Transplant' and workshop on 'Research Methodology' held at Dr D.Y. Patil Vidyapeeth, Pune.
- ⑥ Dr. Monika Piplani chaired a scientific session during '12th International Conference of Society of Clincial Anatomists' held at Pune.

### Department of Dermatology

- ⑦ Dr. Saurabh Sharma Judge and chaired session during 'Cutcion' held at Faridkot and Jammu respectively. He was a moderator during '2nd AMACON' held at Amritsar. He was also a delegate during 'Centennial celebrations & CME' held at Amritsar.

### College of Nursing

- ⑧ Dr. Manpreet Kaur was the Resource Person and ⑨ Dr. Amandeep Kaur Bajwa chaired a scientific session during conference on "Harnessing nursing potential to enhance patient safety" held at Amandeep College of Nursing, Jethuwal, Amritsar.

## Awards and Achievements



### College of Nursing

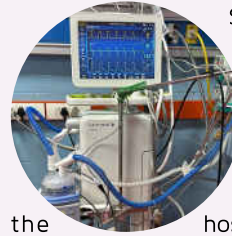
- ⑦ Ms. Gurjeet Kaur, ⑧ Ms. Akashpreet Kaur, ⑨ Ms. Onkardeep Kaur got 1st, 2nd & 3rd position respectively in Research Poster Presentation during conference on "Harnessing nursing potential to enhance patient safety" held at Amandeep College of Nursing, Jethuwal.



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## » Marching forward....

### Advanced Neonatal Ventilator



SGRD Charitable Hospital is dedicated to constantly exploring new and improved treatment methods to better serve its patients, ranging from the tiniest newborns to the most vulnerable pediatric cases and striving to make them more effective and cost-efficient. In line with this commitment, the hospital has recently acquired a cutting-edge Servo-n ventilator, a significant leap forward in respiratory care technology. Servo-n's features two advanced ventilation modes - **Neurally Adjusted Ventilatory Assist (NAVA)** and **High-frequency Oscillatory Ventilation (HFOV)**. NAVA utilizes the patient's own neural respiratory drive to automatically adjust the ventilator's pressure support, resulting in a more natural and synchronous breathing pattern that reduces the risk of over-assistance or patient-ventilator asynchrony. HFOV, on the other hand, is a specialized mechanical ventilation approach highly effective in managing severe respiratory distress in neonates, particularly when standard ventilation is inadequate or lung-protective methods are needed. HFOV utilizes high respiratory rates (up to 15 Hz or 900 breaths per minute), constant mean airway pressure (MAP) and oscillatory flow. By seamlessly alternating between these two cutting-edge modes, clinicians can adapt the ventilator's settings to the unique and evolving needs of each patient. This ultimately leads to improved outcomes and a more comfortable, less invasive treatment experience.

**Dr. AP Singh**  
Dean, SGRDUHS

## Glimpse of Alumni Meet





Dr Saurabh Sharma, Professor Department of Dermatology

### Case Scenario Scleroderma



A 53-year-old female presented to Dermatology OPD with complaint of recurrent ulceration over digits for 6 months. It was gradual in onset, slowly progressive and associated with complaints of pain and bluish discoloration of digits in winters and on exposure to cold temperature. Cutaneous examination revealed tightening of skin over the fingers as well as the face. There was a characteristic mask-like appearance of the face, along with loss of wrinkles on the forehead, parrot-beak like pinched nose, thin lips and purse-string like puckered appearance of the mouth with reduced mouth opening. Along with this, there was induration of skin around lower eyelids with inability to pinch the skin at the site. On asking the patient to extend the neck, a tight band was visible over the platysma muscle. There was presence of a single, healed ulcer on the dorsal aspect of left index finger along with digital pitted scarring over tips of fingers. The baseline investigations revealed moderate anemia (Hb 8.2 g/dl). Serum ANA was positive (1:320 titre) and ANA to ENA reflex was carried out, which revealed positive anti- Scl 70 antibody. The patient was started on systemic steroids, immunomodulators and peripheral vasodilators along with local management of the ulcer, after which the complaint of recurrent digital ulceration and bluish discoloration of fingers subsided drastically.

#### Q1 - What is Scleroderma?

- Scleroderma is a chronic autoimmune disease which leads to fibrosis in the skin and multiple organ systems including lungs and heart. It is characterized by loss of cutaneous elasticity and accompanying tightness due to thickening and hardening of skin.

#### Q2 - What are the variants of the disease?

- There are two common clinical variants of the disease, viz. limited cutaneous type (lSSc) and diffuse cutaneous type (dSSc). The sclerosis in lSSc type is confined to face, hands and forearms till elbow joints in the upper limbs and feet and legs till knee joints in the lower limbs. It is associated with late onset pulmonary artery hypertension. dSSc, on the other hand, involves sclerosis of the skin beyond these regions, and is found to have early cardiac, pulmonary, gastrointestinal and renal complications.

#### Q3 - What is the etiology of Scleroderma?

- The disease occurs as a result of complex interactions between genetic susceptibility, environmental factors and epigenetic modifications. It is known to have association with hypothyroidism (4%), rheumatoid arthritis (1.5%), hyperthyroidism (1.3%) and systemic lupus erythematosus (0.4%). Major histocompatibility antigen class II (MHC-II), viruses such as cytomegalovirus and non-infectious agents such as occupational silica exposure, bleomycin and carbidoopa have been found to have association with the disease.

#### Q4 - What are the investigations to be carried out in a suspected case of Scleroderma?

- Routine investigations including hemogram and fasting thyroid profile are done to look for anemia of chronic disease and find the association with thyroid abnormalities, if any.
- Serum ANA is positive in majority of the cases. ANA to ENA reflex demonstrates positive anti- centromere antibodies in limited cutaneous scleroderma, and positive anti-Scl 70 antibodies in diffuse cutaneous scleroderma.
- Skin biopsy is required for histopathological confirmation of the disease.
- Barium swallow, chest X ray, pulmonary function tests, HRCT chest, ECG, echocardiography, electromyography (EMG) and creatine phosphokinase (CPK) levels are advised to look for systemic complications.

#### Q5 - What are the treatment options?

- The treatment depends on the clinical type of Scleroderma and the stage of the disease. Levels are advised to look for systemic complications.
- Steroids are useful in early, edematous phase of the disease.
- While immunosuppressants are more useful in the initial stages of the disease, antifibrotic therapies are more useful in the later fibrotic stage.
- Peripheral vasodilators are usually needed throughout the course of the disease.
- Methotrexate is the first line treatment in diffuse progressive skin disease without substantial interstitial lung disease (ILD).
- In case of presence of ILD, Mycophenolate mofetil or rituximab are preferred.
- Second-line treatment options include UVA-1 phototherapy, IVIg or rituximab. Cyclophosphamide and cyclosporine are the alternatives.
- Fibrosis, when occurs, is managed with d-Penicillamine and xantinal nicotinate.
- Calcium channels blockers and prostacycline analogues are useful in managing vascular complications such as digital ulcers and pulmonary artery hypertension.

### Food for thought

"Let the Passion drive  
your Profession "

