Sri Ramakrishna
Hospital (Multi-Speciality)

pulse

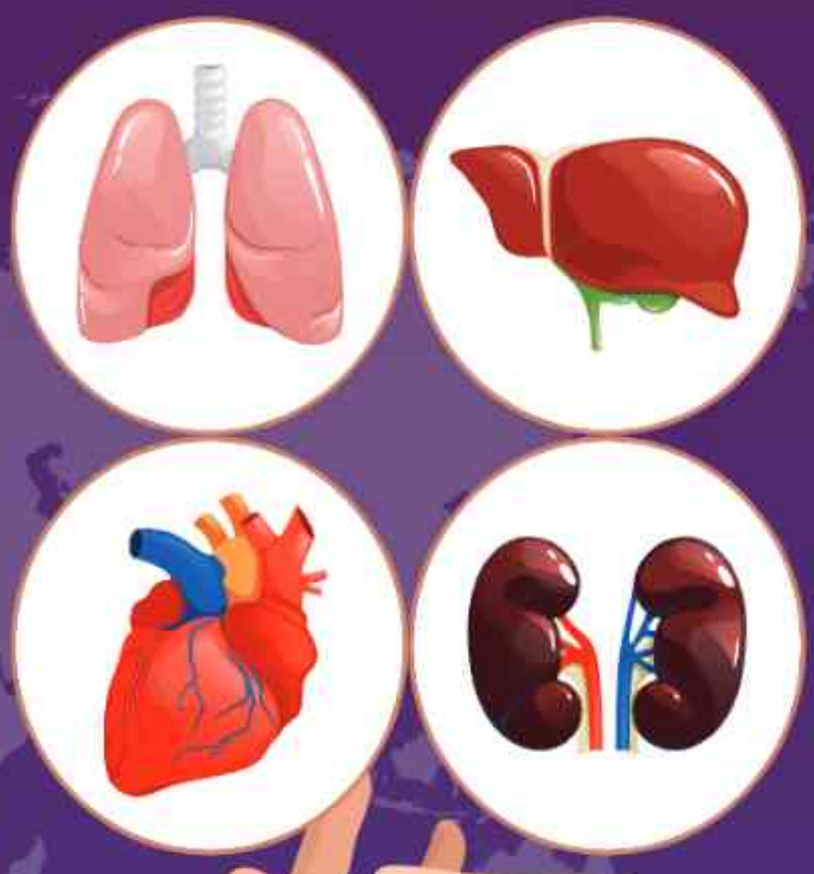
50 Years of Excellence

VOLUME 54 | ISSUE 1 | AUGUST 2025

WORLD ORGAN DONATION DAY

13th August, 2025

Let's share our life with others.



DONATE ORGAN SAVE LIVES

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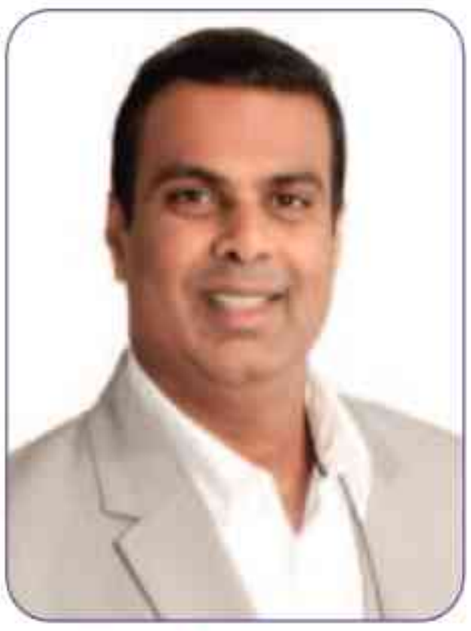

Shri.R.Sundar
Managing Trustee

As we step into the month of August, a time of national pride and reflection, we at Sri Ramakrishna Hospital are reminded of our continued responsibility to serve society with dedication and compassion. Just as our country's independence was built on sacrifice and service, so too is healthcare grounded in selfless care and commitment.

World Breastfeeding Week (August 1–7) reminds us of the importance of promoting breastfeeding as the first and most natural form of nutrition for infants. Our obstetrics and paediatrics teams continue to offer guidance and support to new mothers, ensuring both maternal and child health are prioritized. Equally important is **World Organ Donation Day (August 13)**—a day to honour the heroes who give life through donation and to encourage more people to register as organ donors.

Looking ahead, August will be a month of continued focus on our long-term vision.Our goal is to not only be a place of healing but also a pillar of health education and wellness within the community.

Dr.S.Rajagopal
Medical Director

As August begins, I want to highlight our ongoing commitment to clinical excellence and patient-centered care at our Hospital.Our medical team continues to push the boundaries of modern medicine, integrating the latest advancements and best practices into our treatment protocols.

This month, we mark **World Breastfeeding Week** and **World Organ Donation Day**, two occasions that highlight the importance of nurturing and giving. Breastfeeding plays a vital role in early childhood development and long-term health, while organ donation represents the highest form of altruism—offering a second chance at life. Through awareness drives and patient engagement, our hospital remains committed to these causes.

Your health and well-being are our top priority. We are committed to fostering an environment where you feel heard, understood, and confident in the care you receive.I extend my heartfelt appreciation to all our doctors, nurses, staff, and well-wishers for their relentless support in shaping a healthier tomorrow.

SWAP LIVER TRANSPLANT

India's First Inter-Hospital Swap Living Donor Liver Transplantation Successfully Performed by Sri Ramakrishna Hospital, Coimbatore and GEM Hospital, Coimbatore

Sri Ramakrishna Hospital, Coimbatore, has proudly achieved a national milestone by successfully performing India's first inter-hospital swap living donor liver transplantation on **3rd July 2025**. This groundbreaking procedure involved two recipients and two donors undergoing simultaneous surgeries - an intricate process requiring exceptional precision, planning, and clinical expertise. The swap transplant method offers renewed hope to patients with end-stage liver disease by enabling donor exchanges between unrelated families when direct donation is not feasible.

Spearheading this complex effort, **Sri Ramakrishna Hospital** showcased its leadership in advanced medical care, working in close coordination with **GEM Hospital**, Coimbatore.

To commemorate and share this remarkable achievement, a press meet was held on **18th July 2025** in Chennai, graced by our **Managing Trustee Shri. R. Sundar, Dr. S. Alagappan Medical Superintendent**, and **Dr. Jayapal, Consultant Surgeon**, along with key representatives from **GEM Hospital**. The event highlighted the collaborative spirit, medical excellence, and patient-centered approach that made this milestone possible. By avoiding costly ABO-incompatible transplantation, the hospital reaffirmed its commitment to delivering cutting-edge yet affordable healthcare, setting a new benchmark in liver transplant procedures across the country.

This achievement stands as a testament to **Sri Ramakrishna Hospital's** vision of redefining tertiary healthcare through innovation, compassion, and collaboration. With its robust transplant program, expert clinical teams, and state-of-the-art infrastructure, the hospital continues to offer a lifeline to patients not just in Tamil Nadu, but across India - pushing the boundaries of what is possible in modern medicine.

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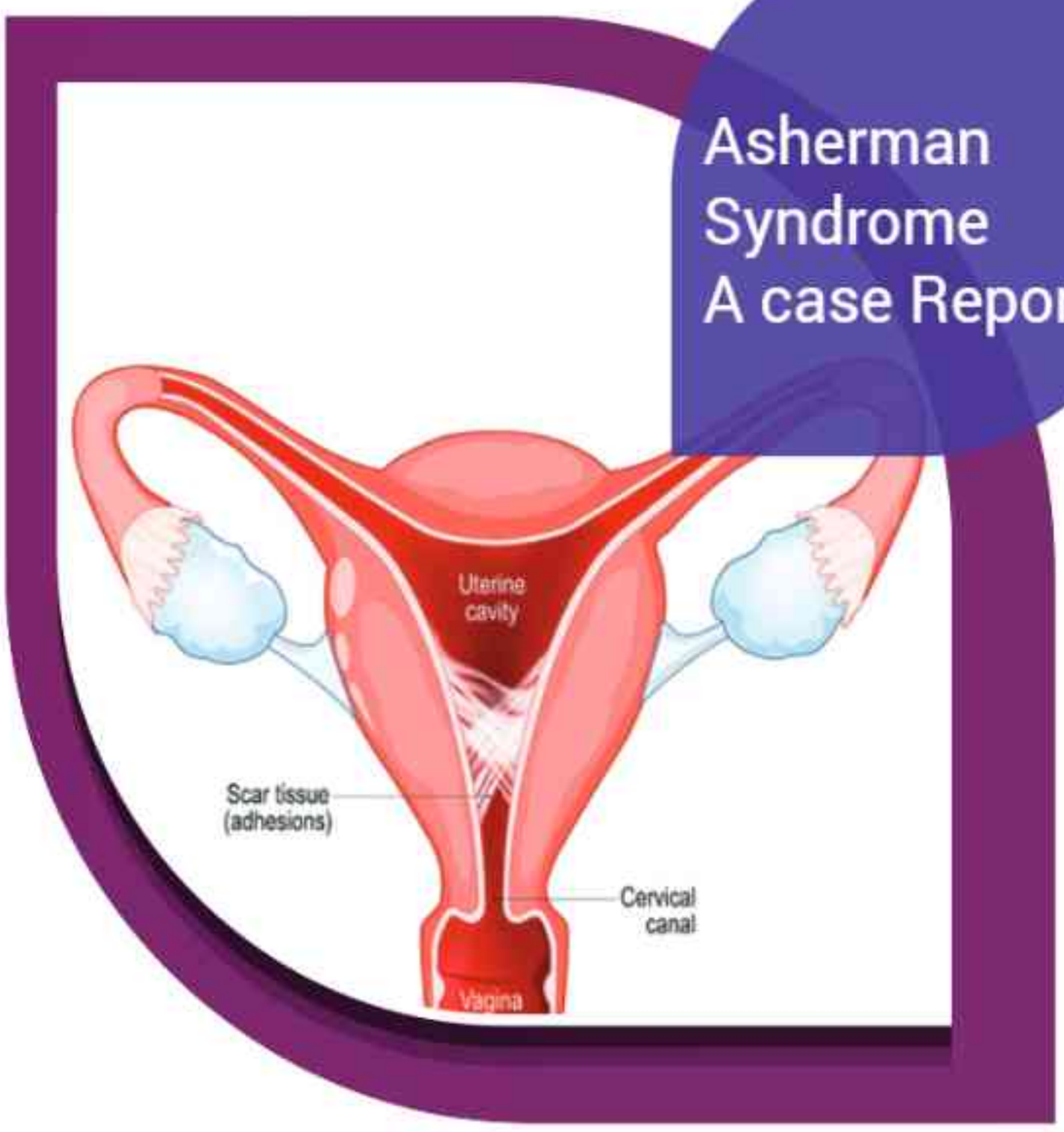
Asherman Syndrome A case Report



INTRODUCTION

Asherman Syndrome also known as intrauterine adhesions (IUAs) caused due to fibrosis of the endometrium and adherence of opposite walls caused by infection or trauma to endometrium. It is found in 8% of women having multiple implantation failures. Some studies have reported that two thirds of women with asherman are infertile. Causative factors are divided under two headings –Gravid and Non Gravid status.

Gravid condition-

Postabortion/postpartum curettage, endometritis, uterine artery embolization in postpartum haemorraghe, Miscarriage or Cesarean section.

Non-Gravid conditions

Infections mainly tuberculous endometritis, Myomectomy and Uterine artery embolization.

There is damage to innermost layer of endometrium leading to scarring,loss of endometrial function, implantation and menstruation.

Clinically they present with scanty periods progressively leading to amenorrhea. Infertility or recurrent pregnancy loss, dysmenorrhea or pelvic pain.

Treatment includes hysteroscopic resection of adhesions, cavity restoration and endometrial regeneration. We present one such case of asherman management.

CASE HISTORY

Mrs and Mr X married for 6 yrs with primary infertility was referred with dense intrauterine adhesions for further management. Over past 4 years patient had been having regular menstrual cycles with scanty flow, bleeding for a day or less. The couple had been investigated elsewhere in 2018 for infertility. Diagnostic laparoscopy showed uterus normal size, flimsy adhesions in peripheral area with bilateral tubo-ovarian mass. Hysteroscopy revealed- Uterine cavity small, thick adhesions which were excised, ostia identified with difficulty and no normal endometrium.

TB PCR was negative but ATT was given in 2018 in view of tubo-ovarian mass and intrauterine adhesions. patient did nor pursue any treatment until 2023 when second look hysteroscopy was performed in view of her very scanty to no periods hysteroscopy done.Findings revealed -Uterine cavity small and constricted, thick adhesions present. with these finding patient was was referred to SRH for further treatment.

The couple underwent a complete infertility workup at SRH. Patient was diagnosed to have PCO Husband-Semen analysis showed Oligozoospermia.Sonohysterogram showed midcavity echogenic foci suggestive of intrauterine adhesions..Couple were counseled to have relook hysteroscopy and ICSI ET.As it was her third hysteroscopy we planned for adhesiolysis and endometrial rejuvenation therapy with PRP . Inj Granulocyte colony factor was given for two days followed by preparation of Homologous Platelet rich plasma comprising of stem cells and growth factor.

Hysteroscopy showed thick adhesions from internal os till fundus and laterally. All adhesions lysed cavity reconstructed PRP injected subendometrially. Inflated catheter was placed in cavity same removed after two weeks. For endometrial regeneration high dose of estrogen was given for three weeks followed by progesterone. Patient had normal menstrual flow.

As action of PRP lasts for 6 months patient was given HRT in the month of September and planned IVF stimulation with antagonist protocol in the month of October. oocyte retrieval - 26 oocytes ,of which 20 were Metaphase 2 , 14 embryos obtained. All frozen, planned for ET next cycle

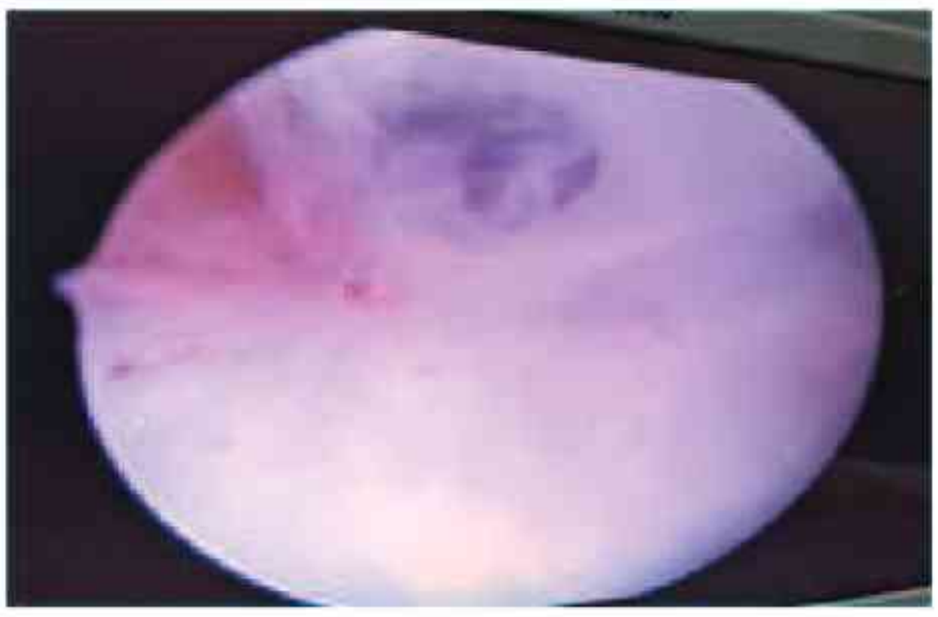
ET transfer- was performed on 21/10/2024 Two gradeAA Blastocysts were transferred.

Pregnancy journey

Beta-HCG positive on 2/11/25 Patient was admitted at 8 weeks with threatened miscarriage, treated conservatively At 18wks, short Cervix identified 2.4cm underwent cervical encerclage.

At 29th week patient had multiple episodes of bleeding steroids coverage given Patient underwent elective LSCS at 30+5 wks on 6/5/25 at 09:08 am in view of APH, delivered preterm male baby weighing 1.335kgs with Apgar 8/10, 9/10. Post op was uneventful.After 7 weeks of stay in NICU baby went home and is doing well.

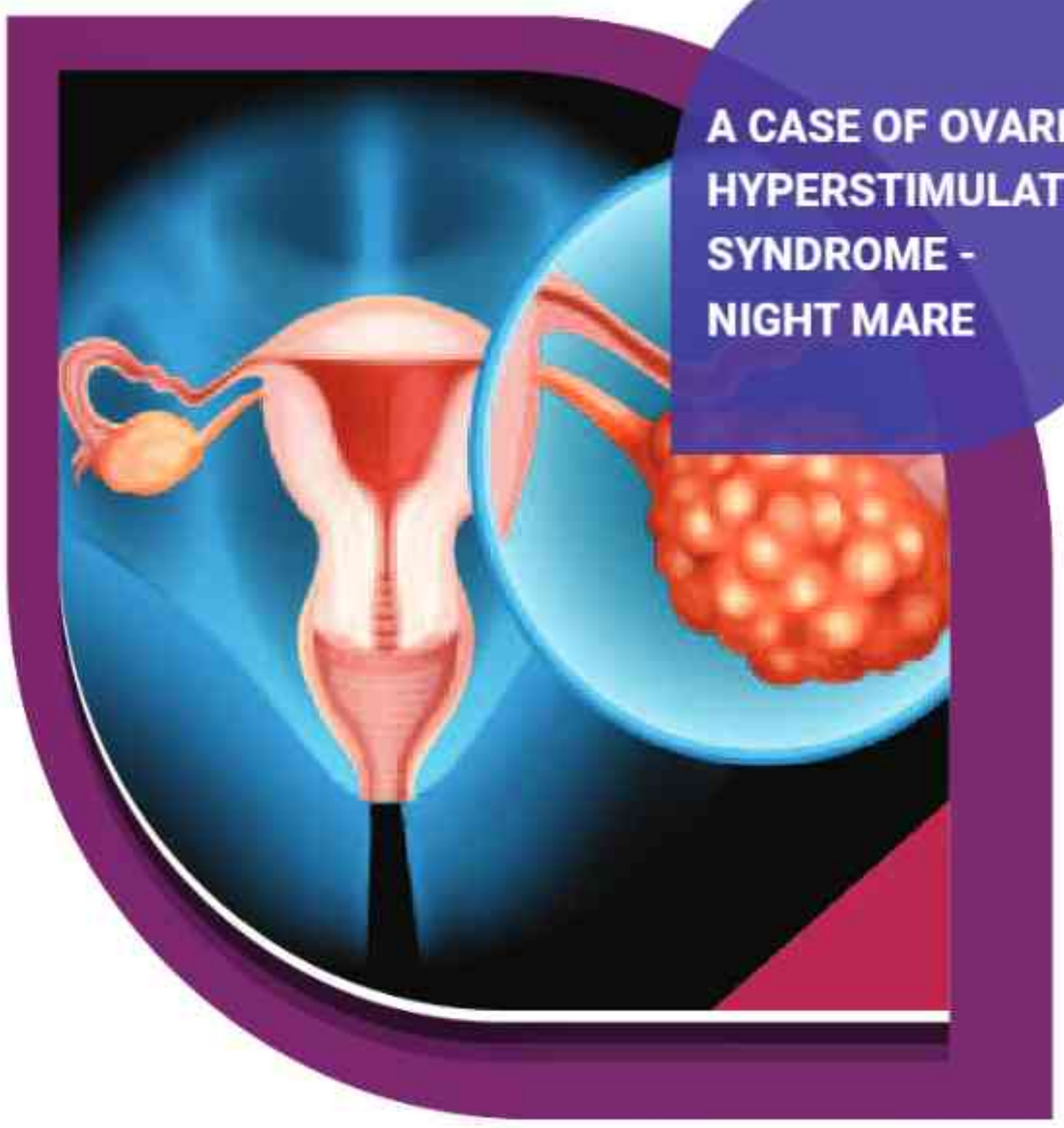
Dense adhesions from internal os till fundus with scattered adhesions



Adhesiolysis with scissors

Both ostia visible

Dr. M. S. LAKSHMI
ART Consultant
MBBS, DNB (OG)



A CASE OF OVARIAN HYPERSTIMULATING SYNDROME - NIGHT MARE

Assisted Reproductive Technology Procedure itself is a state of hyperstimulating the ovaries to get more number of oocytes to create, Grade I Blastocyst for Embryo Transfer to get clinical pregnancy and live birth baby. But it is a controlled ovarian hyperstimulation.

OHSS is a medical condition which is a exaggerated response of all systems to excess estrogen. It is of iatrogenic complication of IVF treatment but to recognize and treat it in the right way will prevent from serious complication. The syndrome is characterized by cystic enlargement of the ovaries and a fluid shift from the intravascular to the third space due to increased capillary permeability and ovarian neoangiogenesis. Main reasons being the vasoactive substances such as interleukins, tumor necrosis factor (TNF)-a, endothelin-1 and VEGF secreted by the ovaries have been implicated in increasing vascular permeability.

Mrs. Amirthasri 30years old female w/o Mr. Sekar Balaji married since 4years and came to consulation for primary infertility.

She was diagnosed as obese pco with BMI of 30 and inview of multiple failed IUI was suggested ICSI - ET. She had ovarian stimulation with long protocol with gonadotropins (FSH and LH) for 10 days and had recombinant HCG for trigger and had oocyte retrieval procedure on 21/03/2025. Retrived 20 oocytes and ICSI procedure performed. in view of high estradiol levels on the day of oocytes retrival has more than 8000pg was admitted for further management because ANITIC-IPATED PROBLEM FOR THE NEXT 7DAYS, which is more important due to the half life of HCG which is for 7 days.

As expected, patient developed ascites, pleural effusion, deranged electrolytes and complete renal shutdown with 5ml output every hour. Multi displinary approach was taken and paracentesis was done twice, approximately 900ml, 350ml fluid was taken, pleural tapping was done once, 900ml fluid tapped, intravascular volume was managed judiciously with osmotic agents, IV fluids, monitoring of urine output and electrolytes patient was treated with cabgolin, on the day of recovery of renal function, liver enzymes, SGOT, SGPT were elevated more than 300 IU and it was treated with ursodeoxycholic acid and glutathione. Usually once the half life of HCG has crossed symptoms improves and recovered completely hence the patient was discharged.

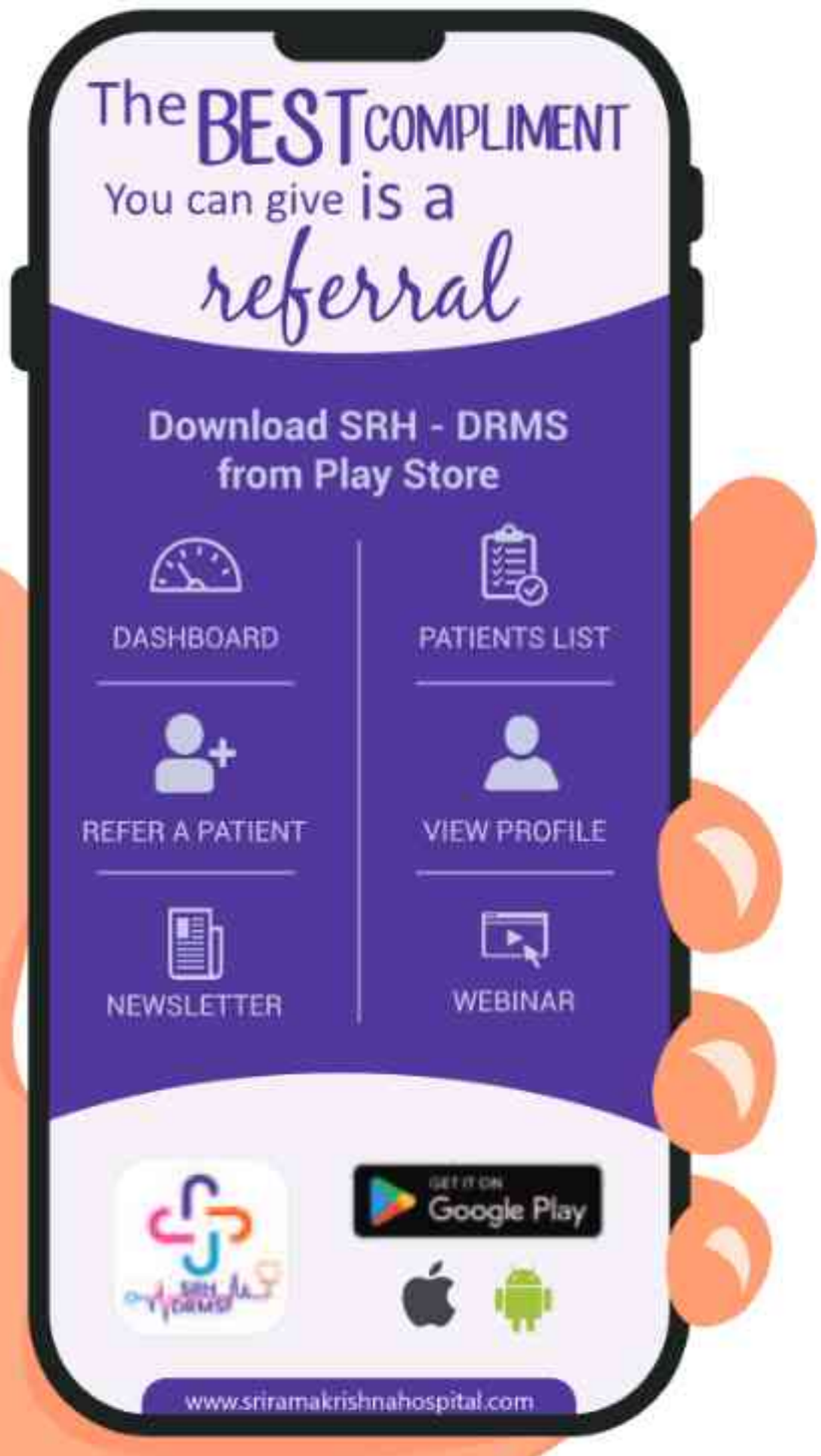
Severe OHSS is a dreadful complication and we run a OHSS free clinic, but one case will be met in fertility practice which will be a night mare having high index of suspicion and involving a team can save the patient or it will leadto mortality.

Dr. SUGANYA VENKATESH
Obstetrician & Gynaecologist, Fertility Consultant
MBBS, DNB (OG), DRM(Germany)

Dear Sir/ Madam,

Warm Greetings from Sri Ramakrishna Hospital, Coimbatore.

Thankyouforyoureternalsupporttosri Ramakrishna Hospital. It is our privilege and honour to connect with you, and great pleasure to bring to your kind notice that, We have developed a new mobile app named Dolphin Referral Management System(SRH-DRMS) which helps to track and service our referral patients electronically between you, patients and Sri Ramakrishna hospital.



The mobile app helps to Go Green and to avoid errors as well. Our marketing field force and the respective video product manual are designed, which helps you to enroll smoothly and patient referrals.

Requestyoutodownloadthemobileapp SRH-DRMS from the following links

Google Play Store Link for Android:
https://play.google.com/store/apps/details?id=com.drms.prod&pcampaignid=web_share

App Store Link for iOS:
https://apps.apple.com/in/app/srh- drms/id6466620577

We assure you the best of our services. In case of any queries, please feel free to contact me.

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REDUCING SUGAR INTAKE IN CHILDREN - THE NEED OF THE HOUR !

Reducing the amount of sugar a child consumes, is essential for their overall health & well being. Excessive sugar intake can lead to numerous health problems, including obesity, type 2 Diabetes and an increased risk of heart disease in later life.

Case history:

In 2017, a 7 year old female child presented with black discoloration of the neck since last 1 year. On examination, the child was obese (weight: 42 kg Height: 125 cm BMI=26.8). She had extensive acanthosis nigricans involving the neck, axilla and groins.(fig .1.) There was a strong history of excess junk food consumption including juices and packaged foods. Her investigations were suggestive of prediabetes and insulin resistance(Fasting Blood Glucose: 112 mg/dL, 2 hrs PP Blood Glucose : 184 mg/dl, Fasting insulin: 35.4 IU/L, HOMA IR: 9.7). Parents were cautioned about the risk of diabetes mellitus in the child and advised life style changes (reducing junk foods and increasing physical activity) and need for medications if the need arises.

They were lost to follow up for 8 years. Now, the child who is 15 years old, presented with Type 2 diabetes mellitus diagnosed 1 year back. She is currently on insulin and oral medications with poor diabetes control. Her last HbA1c is 9.8%. She continues to crave for and consumes junk food everyday inspite of repeated counseling.

This case highlights the consequences of unhealthy food choices and childhood obesity on the future generation.

Why should we reduce sugar intake in children?

Hidden sugar is the sugar hidden in the packaged and processed foods; in fruit juices and so called “healthy” snacks. This sugar is unknowingly consumed in large amounts and forms the major chunk of the daily calorie intake. Sugar consumption stimulates release of dopamine and activates the reward center of the brain; thereby increasing craving for and increasing the consumption of these foods. However, sugar is only empty calories, it has no nutritious value. The excess sugar is converted to triglycerides,it increases the visceral fat, disrupts the gut microbiome and results in a state of chronic inflammation which disrupts the metabolism of the body. It is the underlying cause for obesity and metabolic syndrome.

What are sugars?

Sugars are of 2 types:

A. **Natural sugars:** Sugars present naturally in whole grains, fruits, vegetables and dairy products. They are not accounted for in the calculation of total daily sugar intake.

B. **Added sugars/ free sugars:** Sugars which are added to the food during preparation or packaging/processing. It also includes natural sugars from honey, fruit extracts and syrups.

WHO recommends a reduced intake of free sugars throughout the life course.In both adults and children, WHO recommends reducing the intake of free sugars to less than 10% of total energy intake.WHO suggests a further reduction of the intake of free sugars to below 5% of total energy intake where ever feasible. Accordingly, the daily consumption of free sugar should be as follows:

A. 4-6 years old: 19 grams (5 teaspoons)
B. 7-10 years old: 24 grams (6 teaspoons)
C. 11 years and beyond: 30 grams (7 teaspoons)

How to identify sugars in the foods?

Reading food labels helps to make crucial decisions regarding consumption of free sugars. Foods that contain **>10 gm sugar/ 100 gm** is considered to have a high sugar content and should be avoided. Foods that contain **<5 gm sugar/ 100 gm** is low in sugars and is preferable. It is important to choose foods that are;

- Higher in %Daily Value for Dietary Fiber, Vitamin D, Calcium, Iron and Potassium
- Lower in %Daily Value for Saturated Fat, Sodium and Added Sugars

Pre-packed food products also have a list of ingredients on the packaging. The ingredients are listed in order of weight, so the main ingredients in the packaged food always come first – if sugar is listed as one of the first three ingredients, that product is likely to be high in sugar.

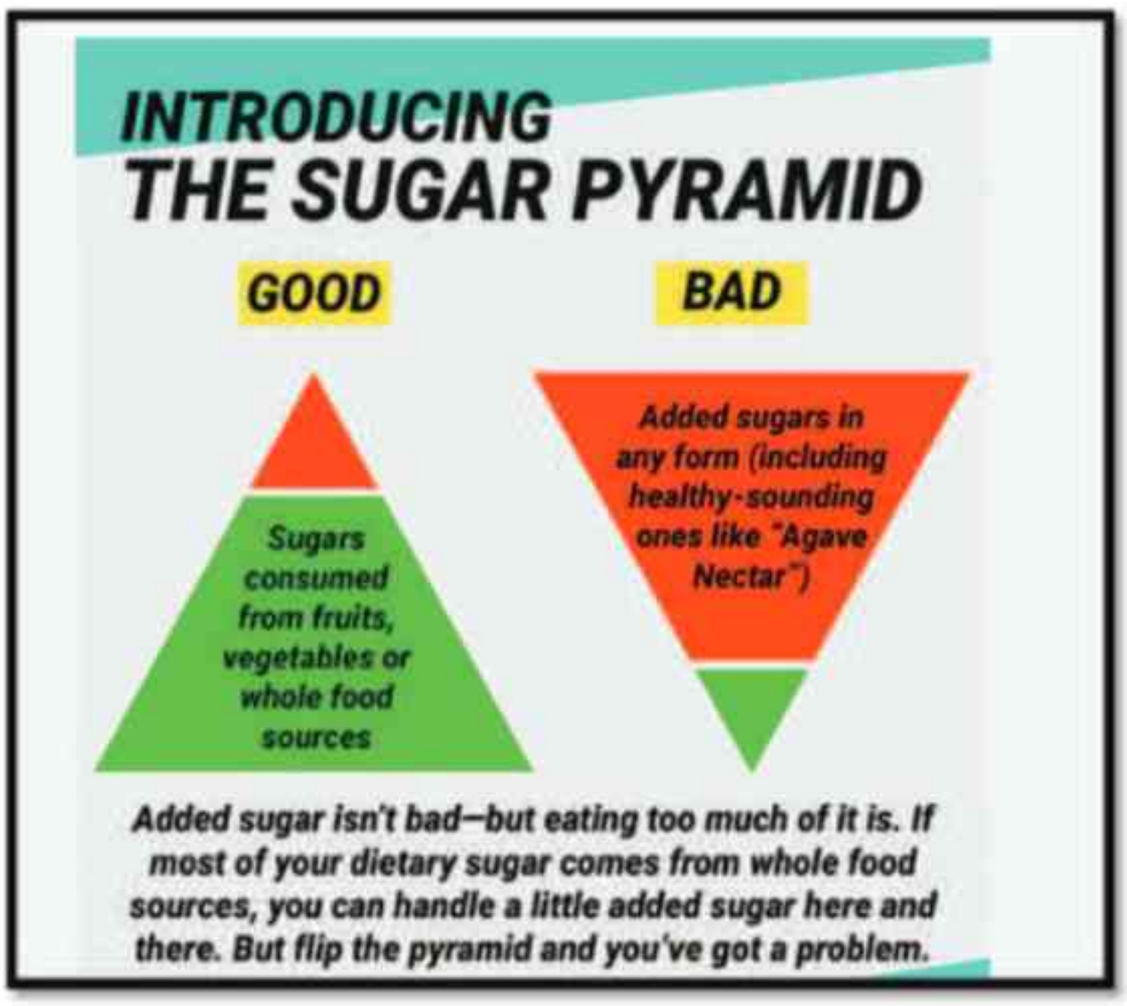


Figure 2

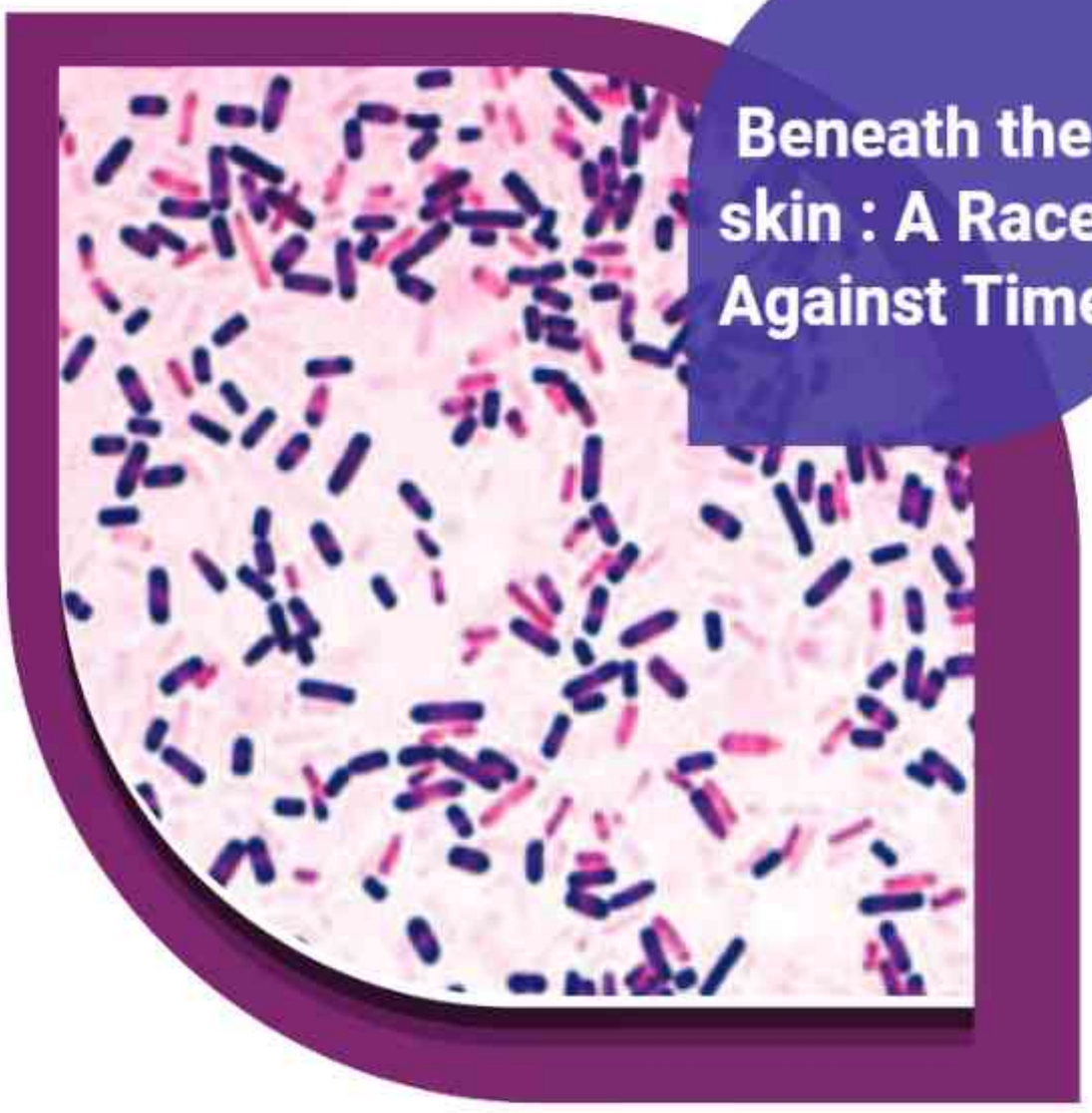
How to reduce sugar in the diet?

1. Following the sugar pyramid. (fig.2.)
2. Try to make sure meals contain items from the four main food groups: starchy foods, vegetables and fruits, protein foods and dairy and alternatives
3. Parents should act as a role model and follow healthy eating habits.
4. Water is the best drink that can be offered to a child.
5. Fresh fruit is a healthy, nutritious dessert option. In case of desserts such as brownies, cakes, and ice cream, sharing helps cut down on the amount of sugar children have.
6. Practice food swapping options- eg: soda replaced by water or buttermilk, fruit juice or candies replaced by fresh fruits.

Conclusions:

- **BE SUGAR SMART!** We should be mindful of the amount of added sugar in the diets of children.
- **START YOUNG!** Eating well is important in the early years, as it helps children to establish healthy eating behaviors which they carry forward into adulthood. Children's nutritional needs are great and good/bad habits form early.
- **SAY NO TO SUGAR!** Eating too much sugar on a daily basis, over a period of time is harmful for the body.

Dr. V. SHOBI ANANDI
Consultant Pediatrician and Pediatric Endocrinologist
MD, DNB, Fellowship in Paediatric Endocrinology



Beneath the skin : A Race Against Time

Air tracks into the spinal canal upto cervical spine

Extensive soft tissue emphysema in left retro peritoneal compartment & left thigh

Chief Complaints:

A 10 years old girl presented with 1-day history of left lower limb pain , swelling and difficulty in walking. Onset of hemorrhagic blisters over left thigh and groin 2 hours before admission. Absent pulse was noted in nearby hospital and referred here for further management.

Complete occlusion distal to origin of left external iliac artery.

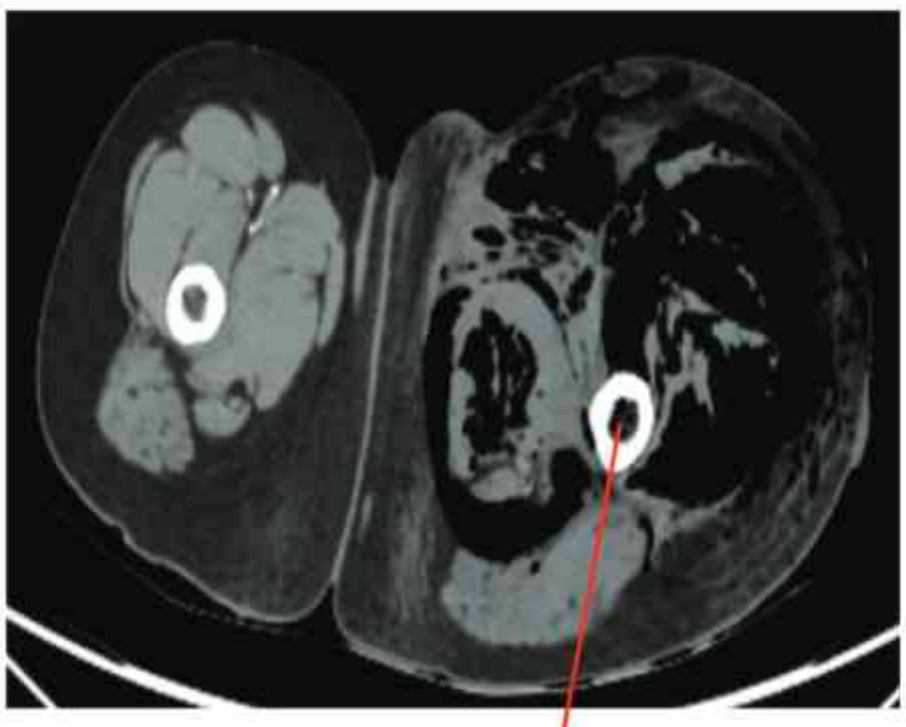
Past History: child was given inj. Paracetamol intramuscularly in anterolateral aspect of left thigh for fever 2 days back

Examination at admission:

Child was alert, oriented,

HR- 140/min, RR-30/', BP- 96/50mmhg

Left lower limb pulses not felt. Right sided pulses were normal in volume. Bluish discoloration of skin noted from below umbilicus on the left side upto entire left lower limb. Crepitus felt in the discolored area, predominatinely in left thigh and over left abdomen.



Intramedullary gas in left femur suggesting osteonecrosis

Clinical Course & Interventions:

Diagnosed with rapidly progressing soft tissue infection with compartment syndrome; underwent **thigh and leg fasciotomy** and Attempted **left leg thrombectomy** was unsuccessful in retrieving thrombus.

Developed **septic shock** post-procedure; admitted to PICU. Empiric **broad-spectrum antibiotics** initiated (meropenem, clindamycin, vancomycin); later escalated to **teicoplanin** and **metronidazole**. Received **IVIG** for suspected **toxic shock syndrome**. Managed with **fluid resuscitation, colloids,** and **stress dose steroids**. Tetanus vaccine was administered. **Gram stain** of the wound showed **Clostridium species**.

Required **mechanical ventilation** and **maximal inotropic support** (noradrenaline, vasopressin, adrenaline, milrinone). Her all other functions were normal. We weaned off the ionotropes by 24hrs.

Progression

Despite aggressive care, **progressive ischemia** and **neurological deficits** in the limb developed.

The child was advised **hindquarter amputation** as a life-saving measure to halt the rapid spread of clostridial myonecrosis. However, the parents expressed significant concern regarding the **long-term complications** and **impact on quality of life** following such a radical procedure. Due to their reluctance to proceed with amputation, the opportunity for timely surgical intervention was missed. Tragically, in the effort to preserve the limb, the child's **life could not be saved**.

Background about Gas gangrene:

- **Clostridial Myonecrosis:** Rapidly progressing and often fatal muscle infection, typically post-trauma.
- **Historical Context:** Incidence: WWI – 6% in open fractures, WWII – reduced to 0.07% due to advance ments in care.
- **Causative Agent:** Caused by Clostridium perfrin gens, anaerobic, gram-positive, spore-forming bacte ria. Other species of clostridium can also cause.
- Clostridium perfringens is derived from latin word for "burst through"

Epidemiology: Annual incidence: 1,000–3,000 in the U.S.; 0.4 per 100,000 globally.

Pathophysiology

- **Traumatic Gas Gangrene:** Accounts for 80% of cases; direct bacterial inoculation post-trauma.
- **Spontaneous Variant:** Occurs hematogenously; linked to GI malignancies or mucosal compromise.

Gas Gangrene vs. Necrotizing Fasciitis: GG affects deep muscle and vasculature; NF targets subcutaneous tissue.

Survival Time: Traumatic GG – 15 hrs avg.; non-traumatic – 8 hrs avg.; emphasizes urgency

Evaluation of Gas Gangrene

- **Medical History:**
  - Recent trauma, surgeries, or invasive procedures
  - Assess for immunocompromised status or chronic infections
- **Clinical Presentation & Examination:**
  - Localized pain, swelling, erythema, blistering
  - **Palpable crepitus,** skin discoloration, foul odor
  - Systemic signs: fever, tachycardia, hypotension indicating **sepsis**
- **Imaging Modalities:**
  - **X-ray, Ultrasoun d, CT:** Identify gas in soft tissues and tissue destruction
  - **MRI:** Gold standard for:
    - Delineating soft tissue and muscle involvement
    - Detecting edema, necrosis, and intramuscular gas
    - Differentiating from other deep soft tissue infections
    - Guiding targeted biopsy
- **Laboratory & Microbiologic Workup:**
  - **CBC,** lactate, inflammatory markers, CPK
  - **Blood/tissue cultures** for organism identification (Anaerobic bottles)
  - **Surgical exploration** for definitive diagnosis and debridement planning
- **Management**
  - Aggressive Surgical debridement of devitalized tissue
  - Antibiotic therapy with Piperacillin – tazobactum / Carbapenam
  - Adjunctive measures
    - Hyperbaric oxygen - controversial
    - Anti toxin – not available

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IDPCCM (Pediatric Critical Care)

Dr. B. INDHIRADEVI
Consultant Paediatric
Intensive care (PICU)
MBBS, MD (Pediatrics),
IDPCCM (PICU)

BLOSSOM INAUGURATION - 2025

Sri Ramakrishna Hospital and Rotary Coimbatore Meridian launch 'Project Blossom' to support Bone Sarcoma patients

Project Blossom: A New Hope for Bone Sarcoma Patients

Sri Ramakrishna Hospital, in collaboration with the Rotary Club of Coimbatore Meridian, proudly launched Project Blossom—a transformative initiative dedicated to supporting bone sarcoma patients. The project, in partnership with Attitude Charitable Trust and Cordon Bleu Properties, aims to provide advanced, life-changing treatment for young patients, especially from economically challenged backgrounds. The launch event was held on July 24, 2025, at the hospital, in the presence of dignitaries including Mr. R. Sundar, Managing Trustee of SNR Sons Charitable Trust, and Dr. P. Guhan, Director of SRIOR.

Dr. Guhan shared that bone sarcoma, particularly osteosarcoma, most commonly affects adolescents and young adults. In the past, amputation was the primary option for survival, often leaving a lasting impact on the patient's life. However, with advancements in medical science, Limb Salvage Surgery followed by an endoprosthesis implant has now become a viable and hopeful alternative. SRIOR was a pioneer in Western Tamil Nadu, successfully performing this intricate surgery as early as 2008.

Under Project Blossom, the hospital and its partners have already supported five successful surgeries even before the official launch. The initiative not only funds the surgical procedures but also covers medication and post-operative care, ensuring a holistic recovery for each patient. With this compassionate step forward, Sri Ramakrishna Hospital continues its unwavering commitment to making quality cancer care accessible, reaffirming the belief that every child and young adult deserves a chance to blossom into a healthy future.