



On **01<sup>st</sup> JULY 2024**, PSG Hospitals

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# Launched



## INDIA'S FIRST **RADIXACT TOMOTHERAPY**

system equipped with  
**AI Enhanced Synchrony,  
ClearRT and VOLO™ Ultra.**

## INAUGURAL POOJA OF INDIA'S FIRST RADIXACT TOMOTHERAPY

On 1st July 2024, PSG Hospitals proudly hosted the inaugural pooja of India's first Radixact Tomotherapy system equipped with AI Enhanced Synchrony, ClearRT and VOLO Ultra. This landmark event, held at the Lower Basement, C Block of the PSG Institute of Oncology, Coimbatore, marked a significant advancement in cancer treatment technology in India. The ceremony was attended by distinguished guests, medical professionals, and staff, all united in celebrating this monumental achievement.

### Event Highlights :

#### 1. Inaugural Ceremony :

- The event commenced with a traditional pooja, invoking blessings for the successful operation of the new Radixact Tomotherapy system.
- Esteemed dignitaries and senior doctors of PSG Hospitals participated in the ceremony, highlighting the importance of this technological advancement in oncology.

#### 2. Technology Demonstration :

- Following the pooja, a detailed demonstration of the Radixact Tomotherapy system was provided.
- Experts explained the advanced features of AI Enhanced Synchrony, ClearRT, and VOLO™ Ultra, showcasing the system's capabilities in delivering precise and efficient cancer treatment.

### Key Features of Radixact Tomotherapy :

#### AI Enhanced Synchrony :

- Real-time adaptation to changes in tumor size, shape, and position during treatment.
- Enhanced precision in radiation delivery, reducing side effects and improving patient outcomes.

#### ClearRT :

- High-resolution imaging for accurate tumor targeting and monitoring.
- Improved visualization of soft tissues, aiding in the treatment of complex cases.

#### VOLO™ Ultra :

- Faster treatment delivery, increasing efficiency without compromising accuracy.
- Optimized dosage distribution, maximizing therapeutic effects while minimizing exposure to healthy tissues.

### Benefits to Patients :

The integration of AI Enhanced Synchrony, ClearRT, and VOLO™ Ultra into the Radixact Tomotherapy system brings numerous benefits to patients:

- **Higher Precision :** Reduced radiation exposure to healthy tissues, leading to fewer side effects.
- **Enhanced Efficiency :** Shorter treatment times and improved patient comfort.



- **Improved Outcomes** : Higher accuracy in targeting tumors translates to better treatment outcomes and increased chances of recovery.

#### **Conclusion :**

The successful completion of the inaugural

pooja for India's first Radixact Tomotherapy system at PSG Hospitals marks a new era in cancer treatment. This state-of-the-art technology will significantly enhance the quality of care provided to cancer patients, reaffirming PSG Hospitals' commitment to pioneering advanced healthcare technologies.

## **SHAKTHI HALL** (Meditation Hall)

**Dr. M. SUBHASHINI**

*Naturopathy and Yoga Consultant*

**Shakthi Hall (Meditation Hall), C Block, Ground floor** - This place itself reflects an enchanting experience of silence from within.

Meditation can be a valuable tool for promoting mental health, emotional well-being and overall quality of life. It acts as a powerful antidote to everyday's stress and anxiety. By taking a few moments each day to focus on the

present moment, individuals can experience a sense of calmness and relaxation. And they could feel more balanced and connected. Regular practice of meditation can enhance the ability to focus on tasks and improve productivity at workplace.

Meditation can help individuals better respond to challenging situations with greater clarity and composure. By developing a greater awareness of their thoughts and feelings, individuals can choose how to respond to



difficult emotions in a healthy way.

Research has shown that meditation can have a positive impact on physical health as well. It has been linked to reduced blood pressure, improved immune function and decreased inflammation. By incorporating meditation into their daily routine, individuals can experience greater peace, clarity and resilience in the face of life's challenges.

## **MULTIPLE MYELOMA** - Bone Marrow Transplant



**Dr. LEO PRINCE MATHAN. S**

*Department of Clinical Hematology, PSG Hospitals*

Multiple Myeloma, a slow growing blood cancer, is one of a very common malignancy. A malignancy predominantly affects the middle aged to older age groups. Due to its slow course and vague symptoms, this disease is often recognized only at later stages, after the damage of "end organs" – kidneys or bones. Most often its either a physician/nephrologist or orthopedician who picks up the diagnosis.

It is peculiar in certain ways. It is slow but deadly. To date, it's incurable. Not only the bones also the immune system also becomes fragile in this disease. As the disease progresses it cripples a person with bone fractures, recurrent infections or renal failure. One of the malignancies, in which quality of life can be severely compromised. If not successfully treated, average survival of the affected individual is less than a year.

As the modern medicine evolves more and more proportion of patients with cancer are getting better, either in terms of cure,

prolonged survival or improved quality of life, but yet a battle against a cancer is not so easy. In this current era a person with good risk multiple myeloma can hope for survival beyond 10 years. But this can only be done with a multidisciplinary team.

We at PSG hospital, by the efforts of a coordinated work between multiple specialties, could give few extra years of disease-free life for a multiple myeloma patient.

In short, our patient was a 54-year-old gentleman with diabetes mellitus and urethral stricture. He presented with left shoulder pain to orthopedic OPD, his X-ray of the right shoulder showed punched out bone lytic lesions, hence he was referred to hematology-oncology unit for further evaluation. We did necessary blood, bone marrow and imaging studies to diagnose him with Lambda light chain myeloma, ISS stage III disease. His disease was controlled with chemotherapy. His comorbidities of pathological fracture, diabetes, urethral stricture, recent urinary tract infections were treated by orthopedic, endocrine, urology, & general medicine departments respectively.

Department of clinical pathology used apheresis technique to take out stem cells from patient. We the transplant team hemato-oncology, medical oncology and pediatric oncology used high dose chemotherapy to ablate the bone marrow. Later we gave the stem cells. After 12 days patient improved and discharged to home.

## **PSG HOME PSYCHOLOGICAL COUNSELLING SERVICES :**

*Enhancing Mental Wellness at Your Doorstep*



### **Overview :**

In today's fast-paced world, mental health issues like stress, anxiety, and depression have become increasingly common. Recognizing the importance of mental well-being, PSG Hospitals has introduced "PSG Home Psychological Counselling Services," aimed at providing comprehensive mental health support in the comfort of your home. This initiative ensures that individuals receive the necessary psychological assistance without the need to travel, thereby reducing barriers to accessing mental health care.

### **Service Offer :**

#### **1. Stress, Anxiety, and Depression Management :**

- **Stress Management :** Techniques and strategies to manage and reduce stress.
- **Anxiety Relief :** Counseling to help manage anxiety symptoms.
- **Depression Support :** Providing coping mechanisms and therapeutic interventions for those suffering from depression.

#### **2. Medical and Illness Counselling :**



- **Chronic Illness Support** : Psychological support for patients dealing with long-term illnesses.

- **Post-Surgery Counselling** : Helping patients cope with the emotional and psychological aftermath of surgeries and medical treatments.

### 3. Grief Counselling :

- **Loss and Bereavement Support** : Assisting individuals in coping with the loss of a loved one.
- **Emotional Healing** : Guiding patients through the stages of grief to achieve emotional stability.

### 4. Loneliness, Anger, and Emotional Instability :

- **Coping with Loneliness** : Strategies to overcome feelings of isolation.
- **Anger Management** : Techniques to control and manage anger effectively.
- **Emotional Stability** : Helping individuals achieve a balanced emotional state.

### 5. Behavioural Modifications :

- **Habit Change** : Assistance in modifying harmful behaviors and developing healthier habits.
- **Lifestyle Adjustments** : Support in making positive changes in daily routines and behaviors.

### 6. Cognitive Retraining :

- **Cognitive Behavioral Therapy (CBT)** : Techniques to change negative thought patterns.

- **Memory and Focus Enhancement** : Strategies to improve cognitive functions like memory and concentration.

### Why Choose PSG Home Psychological Counselling Services ?

- **Convenience** : Receive professional counseling at home without the need to travel.
- **Personalized Care** : Tailored sessions based on individual needs and conditions.
- **Qualified Professionals** : Access to experienced and licensed psychologists and counselors.
- **Comprehensive Support** : A wide range of services covering various aspects of mental health.
- **Confidentiality** : Ensuring privacy and confidentiality in all counseling sessions.

### Contact Information :

For more information or to schedule a home visit,

Please call : **9952558666**.

Our services are available from

**09:00 am to 05:00 pm.**



**SANJEEVANI**  
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அனுப்பும் வசதி

Contact : **82203 33747**

## **DEPARTMENT OF BARIATRIC & METABOLIC SURGERY, PSG HOSPITALS** **- SUPER SPECIALITY CONDUCTED BARIATRIC TRAINING WORKSHOP - 2024**

Department of Bariatric & Metabolic Surgery, PSG Hospitals - Super Speciality, Coimbatore has conducted 4th Bariatric and Metabolic Surgery Workshop at PSG Hospitals from 18th to 24th July - 2024. This programme focused on various bariatric surgeries and role of multidisciplinary team on effective management. The beneficiaries of this workshop were Doctors, Surgeons, Anaesthetists, OT Staff Nurses, Dietitians, Nutritionists, Interns and students from various prestigious institutions across South India.

Bariatric Surgery can be life changing for those who want to lose weight. This surgery can produce sustainable weight loss in obese people who have not achieved long term success with other weight loss attempts. There are different Bariatric Surgeries available that includes Sleeve Gastrectomy, Mini Gastric Bypass Surgery and Roux-en-Y Gastric Bypass. This workshop benefitted those who wanted to excel in the field of Bariatric Surgery.

On 19th July, Live hands on workshop was conducted for surgeons at Animal Lab, PSGIMSR and Hospitals where Surgeons performed Sleeve Gastrectomy, Mini Gastric Bypass Surgery and Roux-en-Y Gastric Bypass and on 20th July, Live observership training programme on above mentioned Bariatric Surgeries at Operation Theatre, A Block under the guidance of course faculties were **Dr. Ramen Goel, Dr. Balashanmugam T S, Dr. Saravana Kumar S, Dr. Balamurugan S, Dr. Balu K and Dr. Karthigeyan.**

Bariatric Anaesthetist Workshop was conducted for Anaesthetists in which they observed Difficult Intubation, Insertion of Bougie, Fluid Management and Pain Management by course mentor **Dr. MS. Prasanth Kumar** and faculty **Dr. R. Arun Kumar.** Hands on Operation Theatre Staff Nurse Training workshop was conducted for Staff Nurses employed in authorized Hospitals by course mentor **Dr. Anuratha M.D** and faculties.

From 18th to 24th July - 2024, Medical Nutrition Therapy in Bariatric Surgery was organized by **Mrs. V. Kavitha**, for Nutritionists, Dietitians and Students. The course faculties were. **Dr. Richa Jaiswal**, Dietitian, AIIMS, Delhi, **Ms. Parimala Devi**, Founder, Parims Nutrition, Coimbatore, **Dr. Madhu Goel**, Bariatric Physician, Centre for Metabolic Surgery, Mumbai and Doctors from various departments of PSG Hospitals.

Around 100 participants including Doctors, Surgeons, Anesthetists, OT staff nurses, Dietitians, Nutritionists, Interns and students from various prestigious institutions participated and gained practical knowledge in this workshop.





## **MAKE LUPUS VISIBLE** - *Raising awareness for SLE*



Systemic Lupus Erythematosus (SLE) or Lupus is a chronic autoimmune disease that can practically affect any organ of the body. It is extremely rare occurring in 0.1 to 0.01% of the population. It commonly affects young females in the age group 10-40. Outcomes of the disease depend on the early diagnosis, appropriate treatment based on severity and prompt identification of complications like infections.

### **How can we identify lupus early?**

This is dependent on identifying symptoms of lupus. The common symptoms that should alert a physician about lupus are

- Skin rash- particularly those in sun-exposed areas- particularly that which worsens in sunlight
- Joint pains with or without swelling
- Repeated oral ulcers
- Increase hair fall with generalised thinning

or patches of balding

- Frothy urine or reduced urine output
- Unexplained fall in haemoglobin (which may present with or without breathing difficulty) or platelet (which may present with or without bleeding manifestations)
- Unexplained fever

### **Rarely the disease can present with**

- Unexplained breathing difficulty or chest pain
- Fits or altered sensorium or weakness of limbs
- Unexplained abdominal pain,

If a patient in the vulnerable age group has more than one of these symptoms, they likely have Lupus.

### **What should be done next if you suspect Lupus?**

The next step is doing appropriate investigations. Certain general investigations should be done in all patients which include

- Complete blood count
- Creatinine and electrolytes
- Liver function tests
- HIV, HBsAg, Anti-HCV
- Chest X-ray
- ESR or CRP

- Urine Complete examination
- Complement levels (C3, C4)

Specific to lupus, the screening test is Anti-nuclear antibody (ANA) by Immunofluorescence. In patients in whom proteinuria is detected, protein-creatinine ratio in a spot urine sample or estimation of protein and creatinine in a 24-hour urine sample should be done. This helps in early identification of kidney involvement in lupus. This is particularly important because early treatment improves long-term outcomes. Once kidney involvement is suspected, patients should be referred for kidney biopsy to decide further treatment.

Apart from the above, certain investigations might help in improving the confidence of our diagnosis and prognosticating patients better.

- ANA profile
- Anti-dsDNA by ELISA
- Antiphospholipid antibody profile
- Direct Coombs test (particularly in those with haemolytic anemia)

Once lupus is identified or suspected, the patient must be referred to a rheumatologist or a specialist well-versed in the management of lupus. Treatment of Lupus depends the severity and importance of organ involved.

### What are the pregnancy considerations for Lupus patients?

1. Female patients with lupus are at increased

risk of adverse pregnancy outcomes. Before planning pregnancy, all patients should be screened for anti-phospholipid and anti-Ro antibodies.

2. Patients should plan their pregnancy only after they have achieved low disease activity or remission.
3. Drug reconciliation should be done and only drugs which are compatible with pregnancy should be continued.

### What are important non-pharmacologic advice that should be given to patients of lupus?

#### 1. Physical exercise :

- 150 (to 300) minutes of moderate physical activity a week- brisk walking, gardening, swimming, Yoga.
- 75 (to 150) minutes of vigorous physical activity a week- running, swimming laps, dancing, heavy yard work

#### 2. Photoprotection :

- Avoid direct sunlight exposure. Use hats, umbrellas, full sleeves, sunglasses.
- Broad-spectrum sunscreen (that blocks UV-A and UV-B sunlight)- this should be reapplied every 2 hours of being outside.

#### 3. Diet :

- Low salt diet, with <2 g daily- this is particularly important in patients with kidney disease.
- The diet should be rich in fruits and veggies, whole grains in place of refined grains, peas, beans and nuts.

- Oils rich in unsaturated fatty acids like sunflower oil or olive oil should be preferred over others.
- Following this diet has an overall anti-inflammatory effect and should be combined with regular exercise and medications.

### What are some of the unique problems that Indian Lupus patients face?

Since lupus is a very rare disease, patients face a lot of challenges in the diagnosis and management of lupus.

#### Challenges in Diagnosis :

- Limited access to rheumatologists.
- No allied healthcare workers dedicated to rheumatology.
- Rural-urban divide in access to rheumatology services.
- Financial costs of investigations
- Delay in diagnosis of organ-threatening complications like nephritis

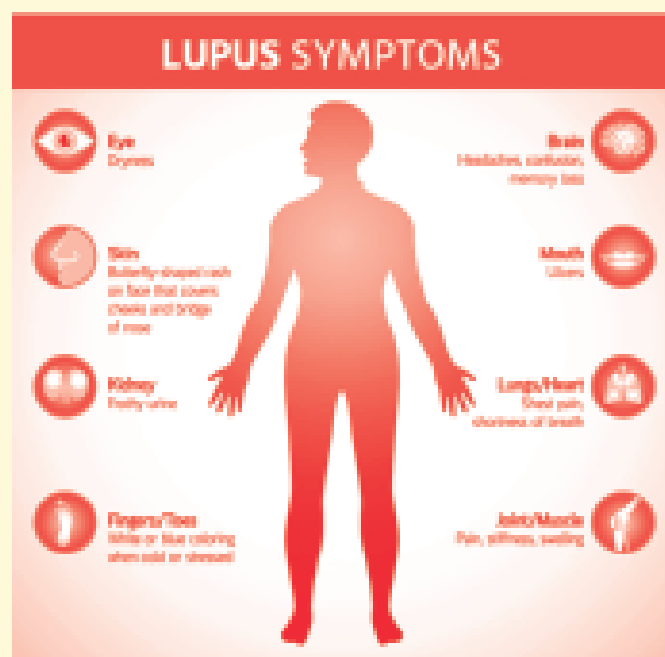
#### Challenges in Management :

- Lack of access to drugs
- Complications of therapy
- Misconceptions about disease and drugs and poor compliance to therapy
- Infections
- Dependence on family support and lack of financial freedom

- Fatigue and poor quality of life



All these factors contribute to the complexity of the management of lupus and these factors should not be missed while managing lupus. Let us all resolve to help identify lupus early and manage it better, to improve the quality of life of our patients.





**2024 DOCTOR'S DAY CELEBRATION**

