

# Smart Health

Bulletin

Introducing the Future of **Brain Care!**

## BrainsWay Deep TMS

The 1<sup>st</sup> & Only in the Region



### Approved in US by FDA for:

- ✓ Major Depressive Disorder
- ✓ Anxious Depression
- ✓ Obsessive-Compulsive Disorder
- ✓ Smoking Addiction

### Neurological Treatments like:

- ✓ Alzheimer's Disease
- ✓ Autism
- ✓ Chronic Pain
- ✓ Multiple Sclerosis
- ✓ Parkinson's Disease
- ✓ Post Stroke Rehabilitation

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### INSIDE STORY

MIGRAINE: NOT  
JUST A HEADACHE

SUCCESSFUL REMOVAL OF LARGE RENAL  
MASS EXTENDING TO HEART: OVERCOMING COMPLEX  
CHALLENGES AT METRO HOSPITAL, NOIDA

EMERGENCY RESUSCITATION & TRAUMA  
MANAGEMENT IN A CARDIAC ARREST PATIENT  
WITH SEVERE HEAD & SPINAL INJURIES

# MIGRAINE: NOT JUST A HEADACHE

Richa\* is a 42 year old suffering from headaches since she was 15. Initially they weren't as bad but for the past few years they had become more frequent. She gets throbbing headaches along with light and noise sensitivity and sometimes even has episodes of severe nausea and vomiting. Many a times she has to miss work or personal events because of the pain. She feels that the headaches have taken over her life.

Sounds familiar? What Richa has are headaches called Migraines, known to be one of the biggest causes of disability in the world affecting women four times more than men.

For years people suffer from migraines without seeking any medical help thinking its "just a headache" till it starts taking over their life – like in the case of Richa.

A migraine is a whole process that your brain undergoes leading to various symptoms one suffers from that usually happens in 4 stages.

**Stage 1: Prodrome:** In this stage, even before your headache starts, you might get a warning where you know that you are going to get headache. Common prodrome signs include irritability, fatigue and yawning. This can start an hour to even twelve hours before the attack begins.

**Stage 2: Aura:** People usually can see rainbow like colors or flashing lights or get a blind spot & the stage can last for upto an hour. Some people can also get numbness in their arms or even have trouble speaking. Only 30 percent of people usually get Aura and most migraineurs skip this stage.

**Stage 3: Headache:** This is when the painful stage starts and one starts feeling the headache. The headache can be one sided or on both sides of the head. It is a throbbing headache that may feel like someone is pounding your head. These headaches are associated with light sensitivity or noise sensitivity and many times both occur together. Many people get nausea and some even vomit at times. This stage can last anywhere from 4 hours to 72 hours.

**Stage 4: Postdrome:** Post headache stage which many describe as being hungover or lethargic even after the pain is gone and it can take upto 24 hours to feel normal. So if someone has a full blown attack, atleast a day to upto 4 days can be affected.

\*The patient name has been changed

Lifestyle changes help prevent migraines, but frequent episodes (2-3 times a week) need medical attention.  
**Consult a specialist.**

**SCAN TO KNOW MORE  
ABOUT MIGRAINE**



## COMMON TRIGGERS

- Stress
- Lack of sleep or irregular schedule of sleep
- Exposure to direct sun light
- Hormones – Migraines may occur around periods or during perimenopause.
- Hunger or missing meals
- Food – Triggers like blue cheese, MSG, chocolate, and wine which vary from person to person.

## Lifestyle modifications to prevent a migraine



### **Eat Balanced Meals**

Include fruits, vegetables, whole grains, lean protein, and healthy fats in your diet.



### **Prioritize Sleep**

Maintain a regular sleep schedule to improve relaxation, immunity, and mental health.



### **Exercise Regularly**

Incorporate aerobic, strength, and flexibility exercises to reduce migraine symptoms.



### **Maintain Good Posture**

Avoid hunching over screens to prevent muscle strain that can trigger headaches.



### **Manage Stress**

Practice deep breathing and meditation to lower stress levels.

## KNOW THE AUTHOR



### **Dr. Sonia Lal Gupta**

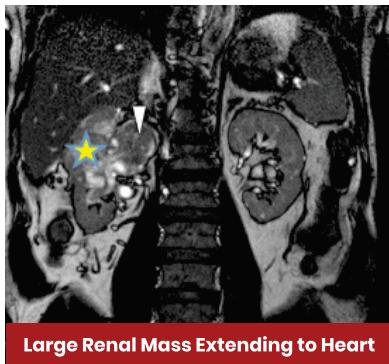
MD, MBA, FACP  
Senior – Neurologist  
(Stroke & Headache Specialist)  
Director – Metro Group of Hospitals

Dr Sonia Lal Gupta is a US-trained, highly qualified, Board Certified Neurologist specialized in Headache Medicine and Vascular Neurology. She is also a Visiting Professor at New York Medical College, USA. She is board certified by 4 American Boards including Neurology, Vascular Neurology, Neurosonology and Headache Medicine which is a rare thing to achieve. After finishing her training and gaining working experience in US, she joined Metro Group of Hospitals as Director & Senior Neurologist. She was awarded the "Neurologist of the Year" at the India Health and Wellness Summit by the Union Health Minister in December 2014. She also received the Times Healthcare's "Young Achiever's Award" in 2017.

**FOR THE FURTHER DETAILS, CONTACT : 99978 99820**

# SUCCESSFUL REMOVAL OF LARGE RENAL MASS EXTENDING TO HEART: OVERCOMING COMPLEX CHALLENGES AT METRO HOSPITAL, NOIDA

In a remarkable medical achievement, a patient presented with a large right renal mass that had extended to the inferior vena cava, reaching up to the right atrium of the heart. Complicating matters further, there was thrombosis in the external iliac vein, inferior vena cava, opposite renal vein, and liver veins. The surgical team at Metro Hospital faced a daunting challenge due to the risk of significant bleeding and associated complications.



Large Renal Mass Extending to Heart

A meticulous plan was devised, and the patient underwent a crucial procedure called **Right Renal Artery Angioembolization**, skillfully performed by **Dr. Sameer Gupta, Interventional Cardiologist & Endovascular Specialist**. This procedure effectively blocked the blood supply to the right kidney and the tumor.

The following day, a major surgery took place, led by senior urologist **Dr. Ashutosh Singh, Senior Urologist and his team**. The operation involved the removal of the right renal cancer, along with the right kidney, tumor, and the portion extending into the inferior vena cava and heart. To ensure the patient's safety, the surgery was performed under **cardio-pulmonary bypass**.

The complex surgery was a resounding success, thanks to the expertise and coordination of the surgical and critical care team. Post-operatively, the patient received dedicated care in the ICU, overseen by **Dr. Kapil Singh, Head Critical Care and his team**, along with Dr. Ashutosh Singh.



**Dr. Sameer Gupta**

Senior Interventional Cardiologist  
Vascular Intervention Specialist  
Group Head – Cardiac Cath Lab  
Director – Metro Group of Hospitals



**Dr. Ashutosh Singh**

Sr. Consultant – Urology  
Metro Hospital, Noida



**Dr. Kapil Singh**

Director & HOD, Anesthesia & Critical Care  
Metro Hospital, Noida

## How to Improve the Health of Your Kidneys?

### Keep Fit and Active

Staying fit lowers blood pressure and reduces the risk of kidney disease.



### Control Your Blood Sugar

Early detection helps prevent diabetes-related kidney damage.



### Monitor Your Blood Pressure

High blood pressure is one of the most common causes of kidney disease.



**Chronic kidney disease affects 1 in 10 people worldwide, but simple steps can help lower your risk.**

### Eat Healthy Diet:

This helps prevent diabetes, heart disease, and kidney-related conditions.



### Fluid Intake:

Drink 1.5 to 2 liters of water per day to lower the risk of kidney disease.



**Quit Smoke:** Smoking reduces blood flow to the kidneys, impairing their function.



# WELCOME BOARD



## Dr. Nikky Yadav

Consultant – Obstetrics & Gynaecology  
Advanced Gynaec Laparoscopic Surgeon  
MBBS, MS – (Obstetrics & Gynecology)  
Metro Multi Super Speciality Hospital, Noida

### Experience of over 10+ years

Dr. Nikky Yadav is an experienced Obstetrician and Gynecologist specializing in high-risk obstetrics and advanced gynecological laparoscopic surgeries. With over 10 years of expertise, she is dedicated to providing comprehensive and compassionate care to women, focusing on improving reproductive health and managing complex gynecological conditions.



## Dr. Jyotsna Singh

Consultant – Obstetrics & Gynaecology  
MBBS, M.S. (Obstetrics and Gynecology)  
Metro Multi Super Speciality Hospital, Noida

### Experience of over 10+ years

Dr. Jyotsna Singh, is a highly skilled Obstetrician and Gynecologist with over 10 years of experience. She specializes in high-risk pregnancies, infertility management, minimal access surgery, and aesthetic gynecology, making significant contributions to women's health through her clinical expertise and patient care.



## Dr. Akshay Chugh

Consultant – Internal Medicine  
MBBS, MD (Medicine)  
Metro Multi Super Speciality Hospital, Noida

### Experience of over 6+ years

Dr. Akshay Chugh is a skilled and dedicated Consultant in Internal Medicine with over 6 years of experience in diagnosing and managing a wide range of medical conditions. Dr. Chugh has a strong academic background and extensive clinical experience. His expertise spans chronic diseases, metabolic disorders, infectious diseases, and critical care. In addition to his clinical practice, Dr. Chugh has made valuable contributions to medical research through multiple publications in respected journals.

# ACTIVITIES

## Bringing Women's Health to the Community on International Women's Day



## 10 Tips to **AGE HEALTHY**



**Exercise Regularly**



**Give up Smoking**



**Take Proper Sleep**



**Live Stress free**



**Keep Positive attitude**



**Maintain a Health Diet**



**Opt For Regular Health Checkup**



**Limit Alcohol**



**Socialize with others**



**Avoid Extreme Sun**



# Introducing Advanced Deep TMS Technology



Metro Hospital, Noida is excited to announce the introduction of Deep Transcranial Magnetic Stimulation (Deep TMS) technology, a revolutionary neurostimulation treatment now available for the first time in Western Uttar Pradesh. This advanced technology offers new hope for patients dealing with various mental health and neurological conditions.

## What is Deep TMS?

Deep TMS is a non-invasive treatment that utilizes a specially designed magnetic coil to stimulate neural networks in targeted areas of the brain. Unlike traditional methods, this technology can reach deeper brain structures, enhancing treatment effectiveness while ensuring patient comfort and mobility.

## Conditions Treated by Deep TMS

This FDA-approved treatment is highly effective for:

- Major Depressive Disorder
- Anxious Depression
- Obsessive-Compulsive Disorder (OCD)
- Smoking Addiction



**Additionally, Deep TMS is being used to treat other mental health conditions such as:**

- Bipolar Disorder
- Post-Traumatic Stress Disorder (PTSD)
- Schizophrenia

**It also shows promising results in neurological conditions, including:**

- Alzheimer's Disease
- Autism
- Chronic Pain
- Multiple Sclerosis
- Parkinson's Disease
- Post-Stroke Rehabilitation

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## How Does Deep TMS Work?

Deep TMS utilizes a cushioned, cooled helmet that features BrainsWay's patented H-Coil technology. This helmet sends magnetic pulses to specific areas of the brain, stimulating neural activity

without causing discomfort. Unlike traditional treatments, Deep TMS does not require sedation or surgery, making it a safer option for many patients.

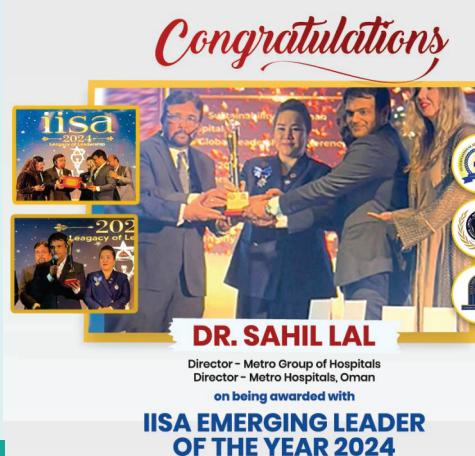
## Key Advantages of Deep TMS

1. Non-invasive and Painless: The procedure does not require anesthesia or surgery.
2. Deeper and Broader Brain Stimulation: It effectively targets essential brain regions for improved outcomes.
3. Safe and Proven: Deep TMS is FDA-approved and backed by extensive clinical research demonstrating its effectiveness.
4. No Need for Complex Navigation: The treatment is precise and does not require additional neuronavigation tools.

## A New Hope for Patients

Metro Hospital, Noida is dedicated to delivering world-class medical care with the introduction of Deep TMS. This innovative, non-invasive treatment offers patients suffering from depression, anxiety, addiction, and various neurological disorders an opportunity to significantly enhance their quality of life.

## AWARDS & ACCOLADES



**METRO HEART INSTITUTE, NOIDA**  
has been honored with



# Emergency Resuscitation & Trauma Management in A Cardiac Arrest Patient With Severe Head & Spinal Injuries



A 38-year-old male was brought to the Emergency Department following a road traffic accident. He arrived in a state of cardiac arrest that had lasted approximately 15–20 minutes. We immediately initiated simultaneous Advanced Cardiac Life Support (ACLS) and Advanced Trauma Life Support (ATLS) protocols.

Return of spontaneous circulation (ROSC) was achieved within 10 minutes through high-quality CPR.

Airway management was done with full C-spine precautions, considering a possible cervical spine injury. Intubation was difficult due to the suspected spinal involvement, but we ensured airway stabilization and successfully secured an endotracheal tube (ETT) during ongoing CPR, allowing uninterrupted resuscitation efforts.

Once a pulse was restored, we began post-ROSC care, which included an ECG, mental status evaluation, continuous oxygen saturation monitoring, and a chest X-ray. Inotropic support was initiated. I opted for phenylephrine as a push-dose vasopressor due to its benefits in trauma: it is a pure alpha-adrenergic agent, safe in patients with tachycardia, has a short half-life, and effectively supports blood pressure without increasing heart rate.

Warm intravenous fluids and tranexamic acid were administered early to manage blood loss and prevent coagulopathy.

Hypothermia was avoided throughout the process. Raised

intracranial pressure (ICP) was suspected and managed using 3% hypertonic saline, avoiding mannitol due to the risk of worsening hypotension. IV levetiracetam was given for seizure prophylaxis.

Following initial stabilization, a whole-body CT scan was performed. The scan revealed craniovertebral junction (CVJ) separation and diffuse axonal injury (DAI) – both severe, unstable injuries with a very poor prognosis.

Despite the gravity of the findings, our primary goal was to stabilize and save the patient during the most critical period.

He was later transferred to the ICU under the care of a neurosurgery team for further management.



## Dr. Ramit Singh Sambyal

Lead Consultant  
Head of Department in Emergency  
Metro Hospital & Heart Institute, Noida

## Introducing AI-powered Imaging Technology to Enhance Advanced Cardiac Care.

**Metro Hospital and Heart Institute, Noida**, has taken a major step in cardiac care with the introduction of the OPTIS™ Next Imaging System, integrated with Ultreon™ 2.0 software. This advanced technology integrates Artificial Intelligence (AI) with Optical Coherence Tomography (OCT) to enhance the accuracy of diagnosing and treating coronary artery disease (CAD).

Compared to traditional angiography, which has limitations in detecting fine details of the arteries, this advanced imaging system offers high-resolution, real-time 3D visuals of the coronary arteries. The AI-powered software accurately identifies different types of plaque, aids in precise stent

placement, and ensures thorough evaluation after procedures, thereby reducing the risk of restenosis. Consequently, this technology results in safer outcomes, procedures, faster recovery times, and improved patient outcomes.

The OPTIS™ Next Imaging System is particularly beneficial for complex cases, such as multi-vessel disease and heavily calcified arteries.

It provides cardiologists with exceptional insights for personalized treatment planning. Its integration at Metro Hospital highlights our commitment to delivering world-class cardiac care, allowing patients to access the latest medical advancements.





**Pain Relief Redefined:  
Your Journey to Comfort Starts Here!**

# METRO NEURO PAIN CLINIC

at Metro Hospital, Noida

 Every Thursday | 10 am to 2 PM

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CONSULT US CERTIFIED HEADACHE SPECIALIST AT



## Metro HeadACHE Clinic

Why Metro Headache Clinic?



Specialised &  
certified team  
of experts



Personalised  
Solutions



Customized physio  
& rehabilitation  
program

**EVERY WEDNESDAY | 12.00 PM - 4.00 PM**

For appointment  88267 88455

# Metro Hospitals & Heart Institute

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