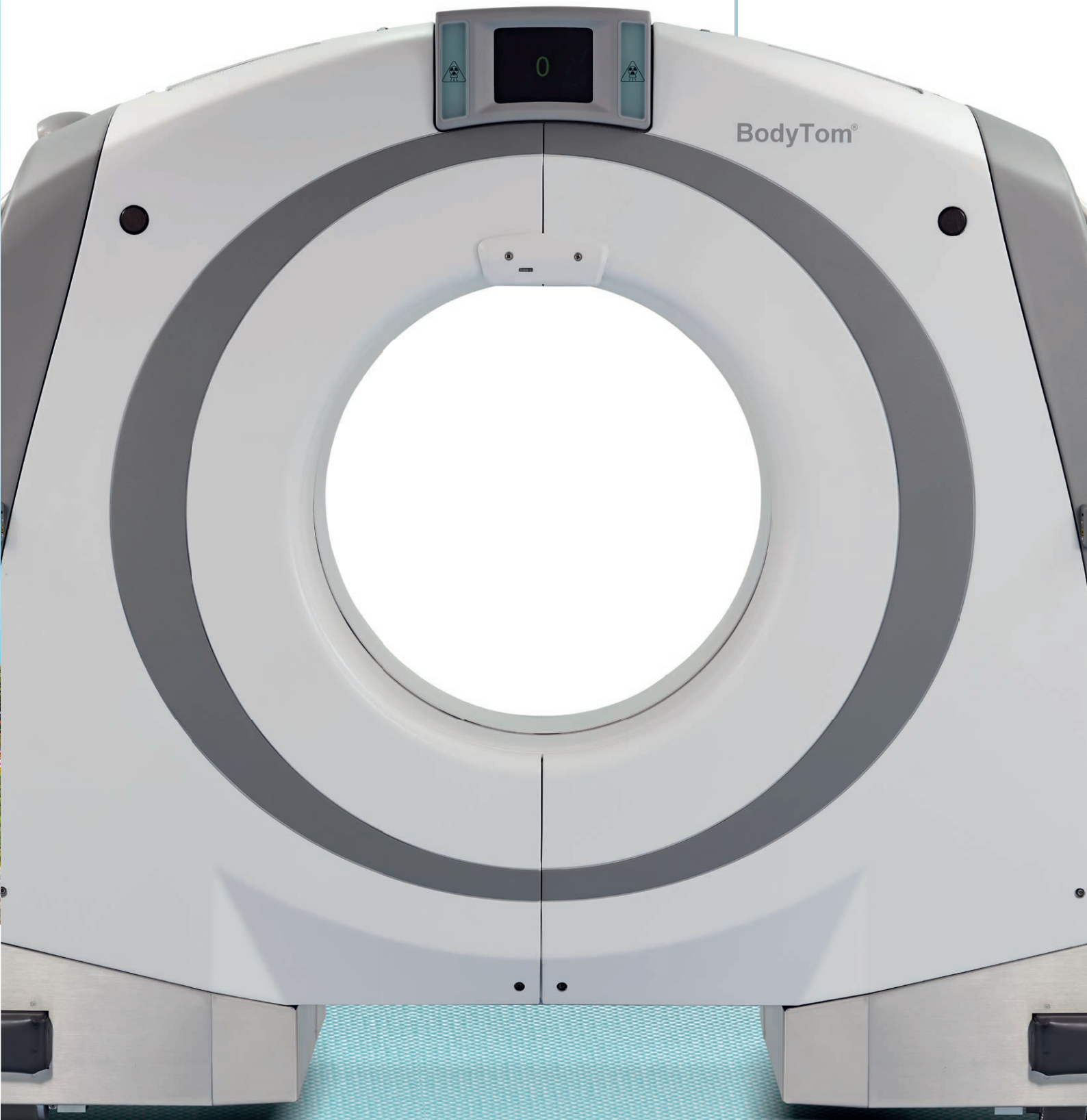


Reinventing imaging Revolutionising surgery

Launching MIOT's full-body mobile 32-slice CT scan



1st Time in Tamil Nadu

MIOT'S BODYTOM MOBILE CT SCAN

A Real Time Intra-Operative Full Body Mobile CT



The New Era of CT Imaging in Tamil Nadu



Modern-day surgery is greatly aided by artificial intelligence and navigation. Yet, these technologies do not assure accuracy because they are not based on real-time imaging. They are based on imaging done a day or even a week before the surgery.

They cannot provide real-time guidance in accurately placing artificial implants, especially when there are live problems in the patient's body. They also don't lend clarity on whether the surgeon is following the correct course, while avoiding damage to structures critical to the body. This is a compromise on safety and precision.

The only way to ensure the highest accuracy and the best possible outcomes is live intraoperative CT imaging. MIOT brings you this breakthrough possibility!

We have always been a pioneer in adopting cutting-edge health care technologies in India. We now proudly introduce MIOT's full-body mobile CT scan, for the first time in Tamil Nadu. It is transforming surgery! At every step of the way during a surgery, the CT scan generates real-time intraoperative images. It guides the surgeon in operating with the highest accuracy and ensuring total repair of the diseased tissue, with zero-compromise care.

MIOT's mobile CT scan makes surgery faster, more accurate and 8 times safer. This helps us deliver the finest international standards in surgical care.

Dr. Prithvi Mohandas,
Managing Director,
MIOT International.

A HOSPITAL OF MANY FIRSTS

- ▶ India's first TrueBeam STx radiotherapy machine.
- ▶ India's first Biplane CathLab with single-platform Cone Beam CT, 3D Echo and software intelligence.
- ▶ South India's first GE IQ PET/CT scan.

Imaging Innovation for Faster, Safer, Accurate Surgery

- The operating room becomes an advanced imaging suite.
- Allows full-body imaging.
- Makes surgery safer.
- Greater precision in performing surgery.
- Better patient outcomes.
- Reduces the need for repeat surgeries.
- Three times lesser radiation with no compromise on the image quality.



Operating Room Meets Advanced Imaging Suite

- MIOT's mobile CT scan enables evaluative imaging to be done right in the operating room instead of an external suite. This helps save precious time.

Full-body Imaging

- The CT scan allows the surgeon to perform head-to-toe imaging, which prevents repetitive shifting of the patient.

Surgery is Now Safer

- Better visualisation of body structures enables precise navigation and prevents any damage to healthy tissue. This ensures safer surgery.

Unmatched Surgical Precision

- The CT scan's 32-slice imaging improves navigation and implant placement accuracy during surgery. The surgeon can perform it with absolute precision.

Better Patient Outcomes

- Higher accuracy translates into greater chances of success, improved outcomes and a shorter hospital stay.

Reduced Need for Repeat Surgeries

- Since the surgical evaluation is completed on the operating table, it lowers the risk of complications and the necessity for repeat surgeries.

Lower Radiation Exposure

- MIOT's mobile CT scan emits a three-fold lesser radiation than conventional CT scans, but there's zero compromise on image quality. It also necessitates fewer scans. This makes it safer for both patients and doctors.

Imaging Innovation for Faster, Safer, Accurate Surgery





Better Surgical Outcomes Through Unmatched Precision

Neurosurgery

Brain surgeries are the most intricate procedures performed in medicine. The structures of the nervous system are so sensitive that any submillimetre deviation can create the risk of permanent nerve damage. Conventionally, these surgeries are performed after interpreting CT or MRI scans of the patient, but even a scan done right before surgery can cause misinterpretation during the procedure. This may result in errors or complications. Also, the outcome of conventional neurosurgery can only be assessed through post-operative CT imaging.

MIOT's mobile CT scan eliminates all these risks by enabling real-time imaging right on the operating table. The surgeon can view high-resolution images of nerves, blood vessels and brain tissue at different stages of the surgery. He can evaluate the progress, identify potential for errors and modify the procedure if necessary. It helps in making near-zero error decisions at the operating table. Furthermore, it ensures correct placement of implants, avoidance of critical organs and total repair of damaged tissue. Accurately performed nerve surgery would result in complete recovery of the brain and spinal cord.





Applications of MIOT's Mobile CT Scan in Neuro procedures

- Implantation of brain biopsy needles, deep brain stimulation electrodes and spinal screws.
- Minimally invasive keyhole surgery with precise navigation.
- A real-time angiogram during surgery for a stroke, aneurysm or arteriovenous malformation.
- Tumour resection
- Neurovascular surgery
- Functional and stereotactic neurosurgery
- Paediatric neurosurgery
- Post-surgical scanning in the operating room.

Spine Surgery

The spine is one of the strongest, yet most sensitive parts of the body. Spine surgery comes with its own challenges. It may be needed for different conditions, like sciatic pain, disc prolapse or spinal deformities. Surgery may be performed for spinal stabilisation, involving the insertion of screws and implants. Conventionally, this is done through a technique called freehand spine surgery, guided by x-rays. Even though this is performed by expert surgeons with the highest possible precision and safety, there is still room for error.

When the patient is on the operating table, there may be anatomical changes at a submillimetre level. They can result in inaccuracies that create the risk of nerve damage, spinal cord damage or paralysis. This can be negated by real-time 3D imaging through MIOT's mobile CT scan. The CT scan has the capability to capture the entire spine in a single pass. It produces high-quality 3D images of both bone and soft tissue. This enables placement of implants and screws with utmost accuracy. When the surgeon needs to remove tissue or bone, he can be sure of not touching anything critical to the natural body function. There are near-zero errors, resulting in excellent surgical outcomes and the lowest risk of complications.





Applications of MIOT's Mobile CT Scan in Spine procedures

- Surgery for neuromuscular scoliosis
- Cervical, thoracic and lumbar fusions
- Laminoplasty
- Laminectomy
- Vertebroplasty
- Kyphoplasty
- Paediatric spine surgery

The Future of Imaging

MIOT creates never-before possibilities in healthcare through the new full-body mobile CT scan. Beyond ensuring the highest precision, lesser post-operative complications and better outcomes, the CT scan hardly releases any radiation. This makes it completely safe even for paediatric surgery. MIOT's revolutionary new mobile CT scan redefines surgery and restores hope in countless lives.



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