



Sri Balaji

Action Medical Institute

Multi Speciality Hospital



Expertise, Empathy &
Empowerment

Excellence in

**Spine
Care**



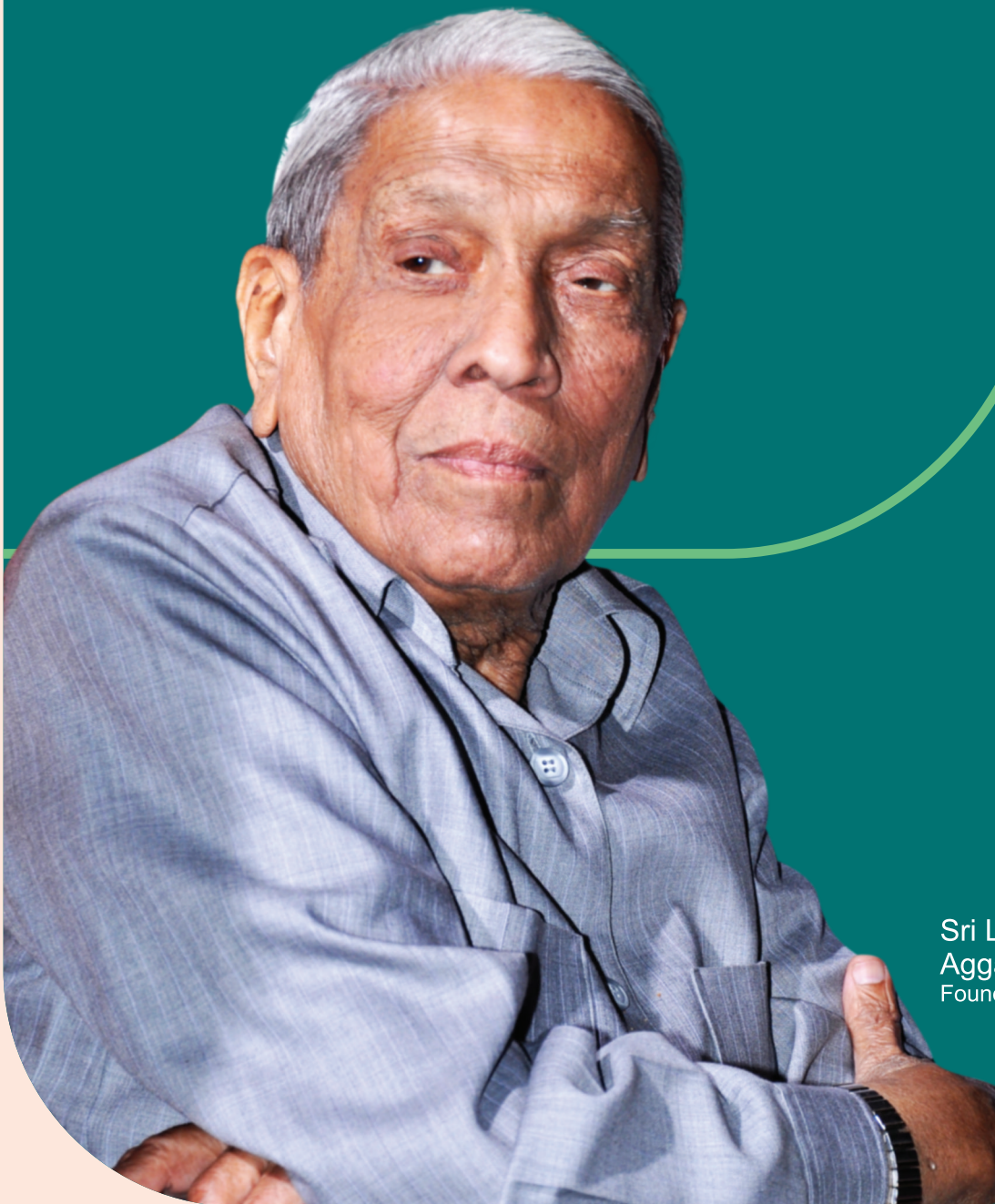
Healing with a
**Human
Touch**
Service with a Smile



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Hope Healing Happiness



Sri Lala Mange Ram
Aggarwal
Founder

Chairman's Message

Sri Balaji Action Medical Institute is the dream and vision of the great philanthropist Sri Lala Mange Ram Aggarwal. The logo of this institute symbolizes its philosophy. It consists of a hand embracing the flame of life, with a sphere in the background. The human hand represents the healing touch provided by our dedicated team of professionals, to brighten the lives of those who come to us. The flame denotes the core values of honesty and selfless service towards our patients. The sphere in the background reflects our commitment to maintaining international standards of excellence.

State of the art infrastructural equipment and a highly specialized team of medical professionals make this medical mastery one of Delhi's best hospitals.

With the blessings of Sri Balaji, the deity of the family, the opening of this hospital has fulfilled a long cherished desire of Lala Mange Ram Aggarwal. This institute believes in maintaining a high standard of ethical practice along with professional competency. It also lays emphasis on training, education and research.



DR. H.S. CHHABRA
CHIEF OF SPINE SERVICES

We've Got
Your Back

Spine Service Director's Message



Dr. H.S. Chhabra

Spine is your lifeline. A healthy spine is the prerequisite of a healthy body. You may be aware that spinal ailments are the most common cause of disability globally, are the second most common ailment after common cold, are responsible for the highest number of man hours lost in the industry in the US and can have devastating consequences.

Recognising the importance of spine health, we have endeavoured to provide a comprehensive service to take care of not only any spinal ailments but also spinal health. We not only provide consultation through a team of doctors but also provide counselling for prevention and for reducing the chances of recurrence. All possible diagnostic evaluation procedures from simple tests like X-Rays to the most advanced like PET Scan are available under one roof. If any surgical procedure is required, the state-of-the-art equipment including O-Arm, Navigation, Spine Robot, multimodal neuromonitoring and cell saver are available in order to ensure safe spine surgery. Comprehensive rehabilitation is vital for ensuring good

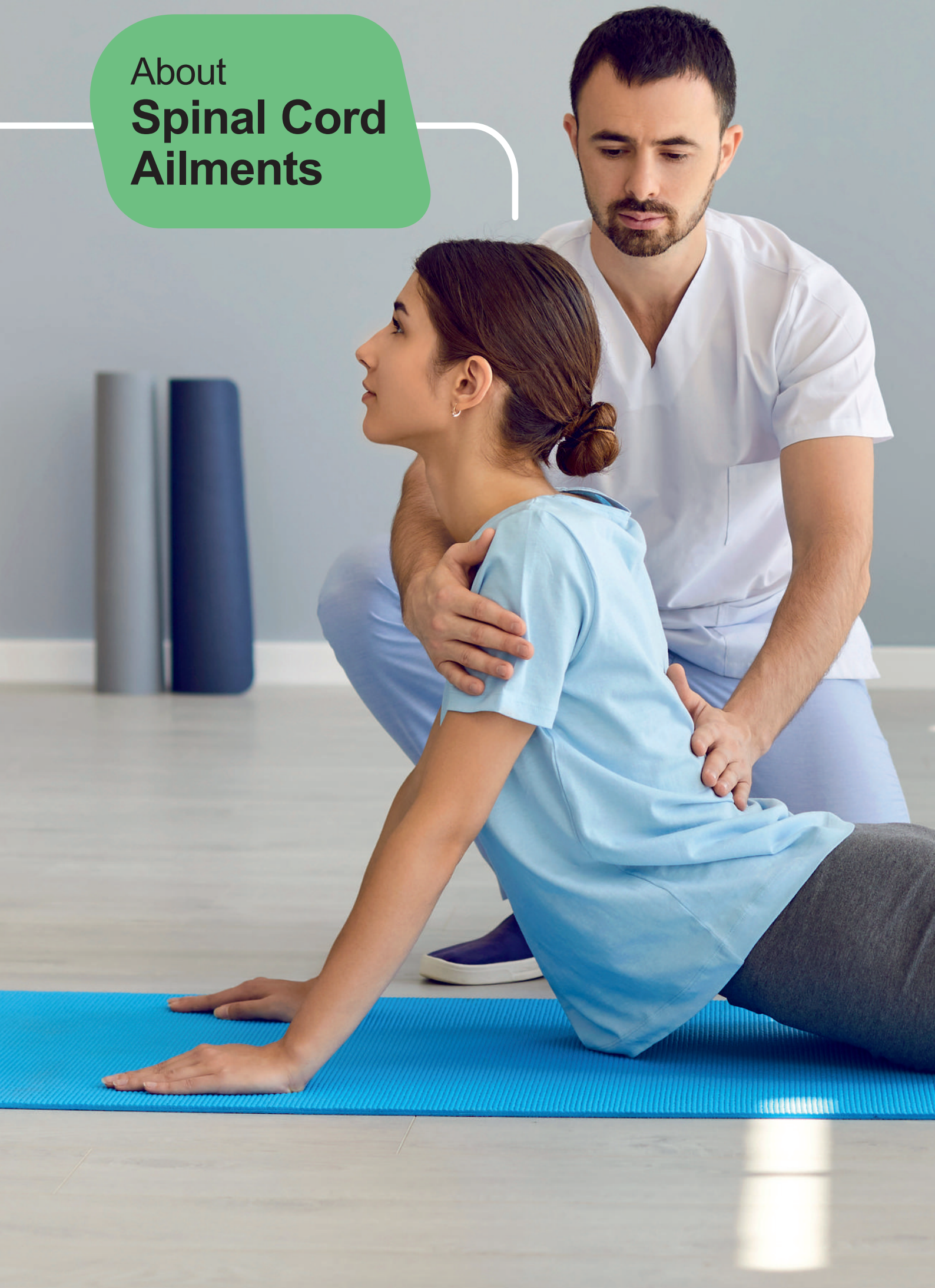
outcomes of any spinal ailment and we are proud to boast a rehabilitation department equipped with cutting edge technology.

It is the brain behind the machines which ensures an optimal outcome and the multidisciplinary team has extensive exposure and vast experience. More importantly, they work like a well-oiled cohesive team.

Spinal ailments often require inputs from other specialities, and being part of a multi speciality healthcare facility is a significant advantage for the Spine Service.

Hence, you can count on us. We can rightfully boast “We have your Back”.

About
**Spinal Cord
Ailments**



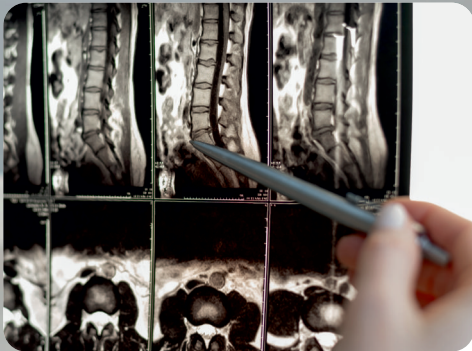
As per WHO, Spinal ailments are the most common cause of disability worldwide. It not only can have devastating physical consequences, it has very significant socio-economic consequences as well. For example, back pain is responsible for the highest number of man hours lost in the industry in the US. Thus spinal ailments contribute very significantly to the global burden of disease.

The most common manifestation of spinal ailment is back pain and neck pain. However, spinal ailments can also result in pain travelling down the leg or the arm, weakness in the limbs and

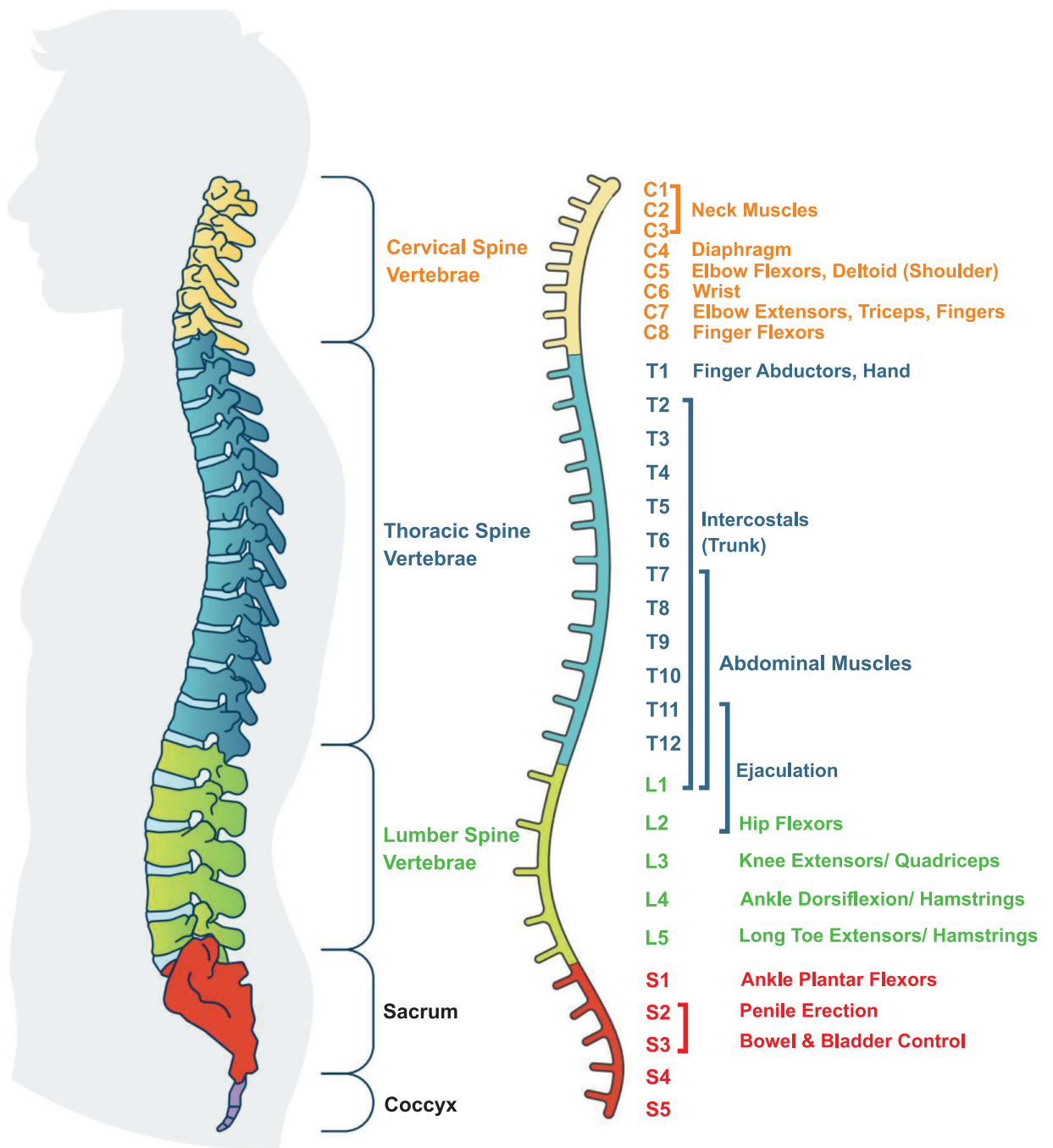
involvement of bowel and bladder control.

A Spinal Cord injury occurs when there is damage or pressure on the spinal cord. An injury that occurs in the neck can result in weakness in the arms, legs and torso, whereas an injury that occurs below the neck can result in weakness of lower limbs and torso.

A spinal cord injury can be either complete (complete loss of all sensation and movement) or incomplete (some sensation or movement remains). Some persons get confined to a wheelchair after the spinal cord injury whereas some retain the ability to walk.



Know Your Spine



Spinal cord injury can be traumatic or non traumatic.

Traumatic spinal cord injuries could be due to:



Road traffic accidents



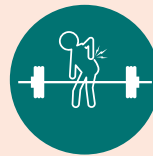
Fall from height



Fall of load from height



Violence



Sports injuries

Non traumatic spinal cord injuries could be due to:



Infections like tubercular (Pott's spine) or pyogenic



Degenerative like cervical myelopathy, lumbar canal stenosis, prolapsed intervertebral disc



Tumor



Congenital anomalies



Deformities

Spinal ailments have a bimodal presentation especially for spine trauma. Though it is most often seen in young individuals between 25 to 34 years of age, it is also seen in the elderly age group where falls, infections and tumors are more common.

Classification of **Spinal Cord Ailments**



Spinal cord ailments can be classified based on the function (how much sensation and movement is affected) or on where the damage occurs.

The spine, backbone or vertebral column forms a protective passageway for the spinal cord which is a continuation of the brain. These 2 together form the central nervous system. There are 33 vertebrae, 7 in the neck or cervical region, 12 in the upper back or thoracic region, 5 in the lower back or lumbar region and the 5 in the

sacral as well as coccygeal region are fused together.

Each vertebra has a solid portion in the front called the body. Behind it is a ring shaped structure which encloses the spinal canal. In front between 2 bodies there is the intervertebral disc which works like a shock absorber. Behind each vertebra forms a couple of joints with the upper vertebra and a couple with the lower vertebra. At the level of each vertebra 1 spinal nerve exits the spinal cord and supplies a respective portion of the body.

Thus the involvement of the spinal cord due to any cause can partially or completely, temporarily or permanently affect these functions.

Cervical – Cervical SCI usually causes loss of function in the chest, arms and legs. Cervical injuries can also affect breathing and bowel and bladder control.

Thoracic – Thoracic SCI usually affects the chest and the legs. Injuries to the upper thoracic area can also affect breathing. Thoracic injuries can also affect bowel and bladder control.

Lumbar – Lumbar SCI usually affects the hips and legs. Lumbar

injuries can also affect bowel and bladder control.

Sacral – Sacral SCIs also usually affect the hips and legs. Injuries to the upper sacral area can affect bowel and bladder control.

The higher the damage occurs in the spinal cord, the more of the body is affected. When the spinal cord is damaged, messages cannot “jump over” the damaged area. This means that messages sent from the brain cannot make it to the body parts below the damaged area, and vice versa. Thus, the body’s functions at and below the level of ailment are affected.

The spinal cord thus mediates these functions:



Movement



Sensation



Some autonomic functions like blood pressure & temperature control



Bowel bladder control



Ability to breathe





**Why
Choose
Us**

**Impeccable Clinical Treatment,
Tailored Therapy &
Comprehensive Care.
EXPERIENCE UNPARALLELED
HOLISTIC RECOVERY**

At our center, we take a holistic approach to spine care, addressing underlying causes and symptoms. We focus on pain management, mobility improvement, and ailment prevention. Our advanced imaging services ensure accurate diagnosis.

At our institute, our experts skillfully tackle a myriad of ailments, including but not limited to:

Lumbar Decompression

Surgery to relieve lower back nerve pressure, easing pain and improving mobility.

Anterior Cervical Decompression & Fusion (ACDF)

Neck surgery for disc issues, stabilizing spine and reducing pain.

Posterior Cervical Decompression & Fusion (PCDF)

Neck surgery for stenosis or disc problems, stabilizing spine and relieving pain.

Minimally Invasive Spine Surgery (MISS)

Small-incision surgery for spinal issues, reducing pain and recovery time.

Robotic Spine Surgery

Precision-enhanced surgery using robots, improving outcomes and minimizing risks.

Common Spinal Cord Ailments





Mechanical Back Pain

Often resolves with rest, physical therapy, and pain management.

Prolapsed Intervertebral Disc

May require rest, physical therapy, medications, or in severe cases, surgery.

Lumbar Canal Stenosis

Spinal canal narrowing in the lower back causing leg pain, treated with medicines, therapy, or surgery.

Degenerative Cervical Myelopathy (DCM)

Neck spinal cord compression from aging, treated with surgery or physio.

Spinal Cord Injury

Damage causing paralysis, treated with rehab and medical care.

TB Spine

Tuberculosis affecting spine, treated with prolonged medicines and sometimes surgery.

Pyogenic Spondylodiscitis

Bacterial infection causing back pain, treated with antibiotics and surgery if needed.

Your Care Team



Dr. H.S. Chhabra
Spine Service Director



Dr. Anuj Mundra
Associate Consultant



Dr. Sachin Sharma
Associate Consultant



Dr. Vishal Singh
Associate Consultant



Our team is dedicated to providing expert care for patients with a spinal ailment. We consider our mission to be accomplished when those with spinal cord injuries are able to achieve a quality of life with increased personal independence, productive functioning and a maximum state of health. As a patient, you will be evaluated by each member of our care team. This team will help develop and coordinate your treatment plan.



Dr. H.S. Chhabra

Assess, Discuss, Treat – Your Journey to Wellness Starts Here

Dr. H.S. Chhabra, Chief of Spine & Rehabilitation Centre, stands as one of India's foremost surgeons, acclaimed for his extensive expertise and notable achievements. He has over 32 years of experience.



He has earned over 25 prestigious awards for his pioneering research and remarkable contributions to the field. Specializing in spine surgery, his areas of expertise encompass:

- Robotic, Computer Navigated, and O-arm Assisted Spine Surgery with Neuromonitoring
- Minimally Invasive Spine (MIS) Surgeries, including Microscopic and Endoscopic approaches
- Motion-Preserving Spine Surgeries

A trailblazer in comprehensive patient rehabilitation, Dr. Chhabra continues to lead the way in advancing spine care and improving patient outcomes.

Conservative Approach to Spinal Care

A Pathway to Healing Without Surgery

Many spinal conditions can be effectively managed without resorting to surgery. Our conservative approach focuses on relieving pain, promoting healing, and restoring function through a combination of non-invasive techniques and therapies.

Key Components of Our Conservative Approach:

Physical Therapy: Exercises and manual therapy techniques to improve strength, flexibility, range of motion, and posture.

Occupational Therapy: Strategies and adaptations to help you perform daily activities with less pain and improved function.

Medication Management: Medications to reduce pain, inflammation, and muscle spasms.

Fomentation: Warm compresses or heating pads to soothe muscles, improve blood flow, and reduce stiffness.

Injections: Targeted injections of corticosteroids or other medications to reduce inflammation and pain in specific areas.

Gel Application: Topical gels or creams containing pain relievers or anti-inflammatory agents to provide localized relief.

Bracing or Orthotics: Supportive devices to stabilize the spine, improve posture, and reduce pain.



Surgical Procedures

Procedures play a vital role in minimizing the impact of spinal cord injuries and maximizing the chances of recovery and quality of life for affected individuals.

Pedicle Screw Fixation: Our specialists use pedicle screw fixation for spinal stability in fractures, degenerative conditions, & deformities. Combining expertise and innovation, we offer advanced care for your spine health and well-being.

Discectomy: Discectomy removes herniated or affected disc material, relieving pain and nerve pressure. Our expert team offers advanced care for your spine health, ensuring the best outcomes and enhanced quality of life.

Deformity Correction Surgery: Our surgical team specializes in correcting deformities like scoliosis, kyphosis, and other spinal issues, restoring proper spinal alignment.

Lumbar Decompression: Lumbar decompression surgeries alleviate pressure on the spinal cord or nerves in the lower back, addressing conditions such as spinal stenosis and herniated discs.

Robotic Spine Surgery: Our department utilizes state-of-the-art robotic spine surgery, ensuring precise control and superior outcomes in spinal procedures. O-Arm assisted spine surgery provides real-time 3D imaging, enhancing precision, minimizing invasiveness, and improving outcomes for patients.

Indications for Spine Surgery

- Pain that is resistant to all forms of non-surgical treatment
- Progressive numbness or weakness radiating into your arms or legs
- Herniated or ruptured discs
- Loss of bowel or bladder control
- Narrowing of the spinal canal that compresses the nerves and/or spinal cord
- Spinal infection, fracture, or tumors in the spine

Neuromonitoring and Navigation in Spine Surgery

Neuromonitoring in spine surgery ensures real-time tracking of spinal cord and neural function to prevent injury. It involves techniques like somatosensory and motor evoked potentials and electromyography to assess the integrity of the spinal cord and nerves. By detecting changes in neural signals, surgeons can adjust their approach to safeguard critical structures. This proactive monitoring enhances surgical safety and outcomes.

Navigation in spine surgery uses advanced imaging and computer systems to guide precise placement of implants and instrumentation. By integrating real-time 3D imaging with surgical tools, it improves accuracy and reduces the risk of complications. This technology enhances the surgeon's ability to visualize anatomical structures, leading to more effective and safer procedures. Overall, it contributes to better placement of implants and fewer postoperative issues.

Computer Navigated Robot & O-arm for Spine Surgery



Rehabilitation Services

Access Leading
Recovery Programs
for Enhanced
Quality of Life





What is Rehabilitation?

Rehabilitation is the comprehensive process of helping a person regain abilities they have lost due to illness, injury, or other causes. This can include physical abilities, mental abilities, or both. The goal of rehabilitation is to help one achieve the highest level of function and independence possible, improve quality of life and enable a person to do the things they love!

Why Choose Our Spine & Rehabilitation Centre?

At the Spine & Rehabilitation Centre, we are more than just healthcare providers – we're partners in your journey to recovery and wellness. Here's why you should choose us:

Evidence Based Practice: Our team of highly skilled and experienced rehabilitation professionals use the latest evidence-based protocols and techniques to deliver the highest standard of care.

Compassionate Support: We understand that the road to recovery can be challenging. That's why we provide unwavering support and guidance at every step of the way.

Personalized Approach: We believe in treating the individual, not just the condition. We develop customized treatment plans tailored to your unique needs, goals, and preferences.

Flexible Appointments: We'll work with your schedule to ensure you get the care you need, when you need it.

State-of-the-Art Facilities: Our modern facilities are equipped with the latest technology and amenities to ensure you receive the highest quality care in a comfortable and welcoming environment.

Hydrotherapy



Exoskeleton

Together with our clients, we embark on a path toward restored mobility, enhanced function, and a better quality of life.

Specialized Physiotherapy & Occupational Therapy Services



Psychological Counseling



Comprehensive Spinal Cord Injury Rehabilitation



Neuro-Rehabilitation



Pain Management & Corrective Exercises



Vocational Rehabilitation



Posture Correction



Assistive Technology



Ergonomics & Back Care

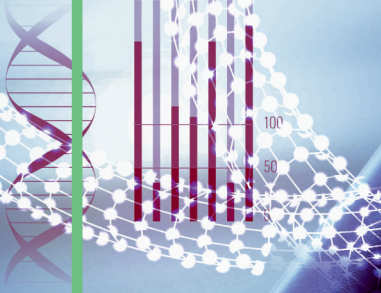
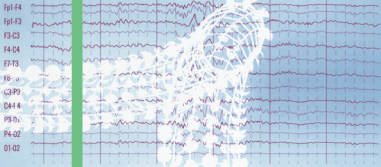


Sports Injuries Rehabilitation



Fall Prevention





**Education
Research,
Scientific &
Advocacy
Activities**

Empowering minds, Shaping the future through knowledge and discovery

The department mandate is to give equal emphasis on Education and Research as for Service Delivery. All members in the clinical team are involved in the Education and Research activities. An operational plan and a calendar for such activities are prepared at the beginning of the year after deliberations amongst all team members.

Amongst the significant educational and scientific activities undertaken by the department is the organisation of International Spine and Spinal Injury conference (ISSICON). The department had the privilege to host this conference in 2024. The department also organised DSSCON 2024 - the annual conference of Spine Society Delhi Chapter.

Live demonstration of surgery at MISSABCON (Minimally Invasive Spine Surgeons Association of Bharat) Bangalore and DSSCON 2024 were other significant educational activities in the last calendar year.

Association of Spine Surgeons of India's fellowship in Spine Surgery and a fellowship in Robotic Spine Surgery are the other important educational activities of the department.

There is special emphasis on Research activities coordinated by a Research and Academics Manager. The department has been involved in pioneering research in the field of spinal ailments amongst which the most significant have been cervical and thoracolumbar Epidural Stimulation, transcutaneous spinal cord

neuromodulation, cognitive decline in spinal cord injuries and impact of orthosis on functional independence and mental health of persons with spinal cord injury. The department has also been involved in prestigious international projects like Indo-Swiss project on "Prediction Of Individualised Spinal Cord Injury Recovery Profiles", AO Spine Foundation's international projects like Traumatic Incomplete Tetraplegia Without Instability and Stoke Mandeville Spinal Research's sponsored project on Comparison Of Outcomes Of Single And Reuse Catheters For Intermittent Catheterisation In Spinal Cord Injury. The department has also contributed to important international surveys and databases like International Spinal Cord Injury Community Survey and international database project.

Dr Chhabra, the Head of the Department, has been involved in 24 international & 21 national research projects as Principal Investigator / Co-Principal Investigator. He has 3 patents granted / in process under his name. He has 179 peer reviewed Journal publications and 27 Chapters in Textbooks. He is the Editor-in-Chief of ISCOS textbook on "Comprehensive Management of Spinal Cord Injuries", elearnSCI.org - an ISCoS online learning web resource and Journal of Clinical Orthopaedics and Trauma. Dr Chhabra has conducted 35 international and national conferences and has been guest faculty in more than 200 international and national conferences.

Advocacy

Recognising the importance of advocacy in the field of spinal ailments, recognised as the most common cause of disability globally, the department endeavours to retain an equal focus on advocacy activities.

These initiatives focus on creating awareness not only amongst the

community but also amongst all stakeholders including the policy makers, the healthcare providers, the

professionals and the media. The team takes the opportunity of special days like the Spinal Cord Injury Day and the Injury Prevention Week and



SCI DAY

special events like the Spine20 held on the sidelines of G20, to give a thrust to the advocacy activities.

The department hosted Spine20 2023, the annual event of Spine20, a global advocacy initiative involving 41 distinguished professional spine societies from across the globe. The Delphi based expert recommendations were forwarded to the Ministry of Health and Shri Amitabh Kant, G20 2023 Sherpa for consideration for implementation.



SPINE20

Injury Prevention Week





Staying
Healthy

After a
**Spinal Cord
Ailment**



Regular Exercise: Tailor an exercise routine to your abilities, whether it's running, swimming, or wheelchair-based upper body exercises. Find what works and challenge yourself safely to build muscle and burn calories.



Mindful Diet: Ensure your body receives essential vitamins and nutrients by consuming a variety of healthy foods. Be mindful of calorie intake, especially if mobility is limited, but don't hesitate to enjoy occasional treats to maintain mental well-being.



Mental Engagement: Exercise your mind to support mental health, as a spinal cord ailment can impact the psyche. Stimulate your brain with challenging activities and seek support from specialists or healthcare providers if feelings of anxiety, depression, or stress arise.



Regular Checkups: Schedule regular checkups to monitor overall health and address any emerging issues promptly. Stay up-to-date with vaccinations, as preventing illnesses like the flu is crucial, particularly for individuals with spinal cord injuries.



Proper Posture: Maintain proper posture to reduce strain on your spine, preventing further injury or damage. This will enable your spine to heal in a neutral position, reducing the risk of complications or long-term damage. It also helps alleviate back pain & discomfort, promoting a faster and more comfortable recovery.



**Caregiver
Tips**

How Can I Help My Loved One?



Your first experience as a caregiver for Spinal Cord Ailment usually comes during rehabilitation. Although the rehab team takes the lead at this point in your loved one's recovery, there are also some things you can do to help while your loved one is in rehab.

- Visit and talk to your loved one often. Find out what they can do independently and what they need help with. Avoid doing things for your loved one that they can do without your help. This will give them a sense of control and accomplishment.
- Help your loved one learn and practice new skills.
- Find meaningful activities you can do together. Bring in their favorite music, pictures or pastimes.
- Ask your loved one if they are ready to meet visitors. Keep visits brief because rehab is physically and mentally challenging and rest is a key component to recovery.
- Observe and learn how to care for your loved one with their new SCI. The rehab staff will demonstrate care skills for you and provide educational materials. The more you know, the more comfortable you will be when it is time to bring your loved one home.
- **ASK QUESTIONS!** The rehab staff is here to teach you everything there is to know about a Spinal Cord Ailment

Patient Success Stories

Hear it from the
Patients





I was suffering from Cervical pain. No doctor in Patna was able to cure my problem. In Sri Balaji Action Medical Institute, Dr Chhabra operated on me. Today, I am mobile, am able to speak properly and my pain has reduced a lot. I was very happy with the hospital's cleanliness, the attitude of the doctors and staff, as well as the food. The nurses treat patients like family. I am very grateful that I can now return home.

Ramji Singh – Patna, Bihar



My father slipped in the bathroom. As a result of this accident, he found it difficult to breathe and speak. I brought him to Sri Balaji Action Medical Institute where Dr Chhabra performed surgery. My father is now able to walk. Dr Chhabra has given us hope that my father will return to a normal independent life, for which I am very thankful to him.

Rishav Pathak (son of Braj Bhushan Pathak) – Patna, Bihar



I am 62 years old and am under the care of Dr Chhabra. People had instilled a fear of spine surgery in me. The spine surgeon did the surgery with so much care, that only two days after my spine surgery, I am pain free and my medications are down to one-fourth. Friends, if you have a spine problem, don't think twice. Come to Sri Ballaji Action Medical Institute and meet Dr Chhabra. Don't suffer!

Kiran Bata – Delhi




I had a big spine problem. I was not able to walk & even do basic everyday tasks. After doing the necessary tests at Sri Balaji Action Medical Institute Dr Chhabra performed surgery on my spine. After the surgery, with 24 hours I was able to walk and the following day I was put into therapy. The doctor was highly motivating and I am now able to walk normally. I would advice anybody with a spine problem to see Dr Chhabra. I will stay indebted to him forever!


Neelam - Delhi



Sri Balaji
Action Medical Institute
Multi Speciality Hospital

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 **011-42-888-777**
Ambulance

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