

**DR. SHIRISH YANDE**

M.S., F.R.C.S., Dip. Urology (London)

**URODYNAMICIST**



**CRYSTAL CENTRE FOR URINARY  
INCONTINENCE AND NEUROUROLOGY**

---

• Address •

Third Floor, Ratna Memorial Hospital, Senapati Bapat Road, Pune - 411053.

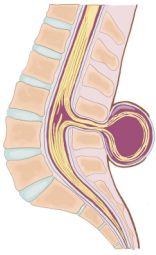
**Tel. :** 020-4109 7777 (Hunting Line) Ext. 768 / 4109 7768. **Mobile :** 77200 17848

**Email :** shirishyande1999@gmail.com / shirishdyande@gmail.com

**Social medial links :** X (Tweeter account) / Facebook

**Website:** <https://spineandchild.org> | **Helpdesk, WhatsApp advice number:** 77200 17848

# Spina Bifida – Meningomyelocele



## What is Meningomyelocele

The children who are born with neural Tube defects have an exceptionally high incidence in India, which is about 3.7 per 1000 live births (according to official sources.) This is partly due to deficiency of vitamins notably the folic acid in pregnant women

Besides, no access to early prenatal ultrasound examination and stringent laws about late termination of pregnancy may have difficulties in reducing this number. Considering that there are about 26 million babies born in India every year, the number of babies born with neural tube defects may be close

to a staggering 1 lakh per year.

Most of these children are born with a condition called **“Meningomyelocele”** where the contents of the spinal cord are ballooned out of the vertebral canal (See inset picture). Delicate elements of the neural tissue are either stretched or exposed to infection from the atmosphere. These children have a variable affection of the bladder and bowel function with or without paralysis and anaesthesia of the lower half of the body.

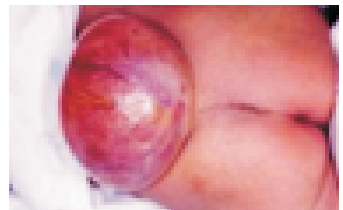
Affection of the bladder function is potentially disastrous, since it not only causes urinary leakage, but can also pose a threat to the function of the kidneys, which is a potentially fatal condition

The problems of concern in our society are many folds:

1. Most of these children are managed by primary care clinicians, who themselves are not fully aware of the potential dangers of this condition and certainly do not have the expertise to treat these conditions on time.
2. Majority of children are born to the population of lower socioeconomic strata where nutrition in the prenatal period is often compromised (e.g. Deficiency of Folic Acid during pregnancy is one of the commonest causes of this condition in the foetus)
3. By the time they reach the appropriate specialists, it is often so late that their kidney function is at least partly but irreversibly damaged.
4. Total optimisation of this condition demands dedicated personnel with appropriate training and expertise, which is seriously lacking even in specialty centres of our country.

## Symptoms of MMC in children

- Defect of spine formation.
- Visible bulge, dimple or tuft hair on the back.
- Deformation of the spine or limbs.
- Weakness in the limbs.
- Lack of control on bladder and bowels.
- A continuous leakage of urine or stools.
- Frequent urinary tract infections leading to high fever.
- Lack of sensations in the limbs leading to frequent injuries.
- Learning and speech difficulty.



**A Baby born with  
Meningomyelocele**

### Facts about Meningomyelocele (MMC) or Spina Bifida

- MMC is a serious congenital developmental defect of the spine that affects a large number of children.
- The ill effects of MMC continue from birth through the patient's life to seriously impact their health in several ways. As the child grows, the symptoms may change.
- MMC patients require regular monitoring, treatment and management of their symptoms for extended periods of time.
- This unrecognized health scourge affects around 4 children of every 1000 live births, which is a very large number of patients.
- With a massive population, India sees a significant number of children born with MMC.
- These children need specialist care to function independently and integrate with the society.
- Often the MMC patients come from an underprivileged background and the required treatment is beyond their reach.
- Due to a variety of socio-economic reasons, the ratio of MMC in India is several times higher than the global average.
- MMC is easily preventable with adequate nutrition during the gestation period, pre-natal scans, specialist monitoring and pregnancy management.
- Ultrasound scans early in pregnancy (16 weeks) can detect a spinal defect. However, medical termination of pregnancy is possible only in the early part of the gestation, due to India's medico-legal norms.
- Awareness for MMC is not common knowledge, even with healthcare professionals.
- Scanty information is available about MMC and its practical treatment in the public domain.



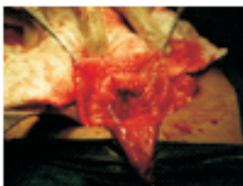
**X-ray Investigation of MMC Patient**

### About Spine and Child Centre (SCC)

- Despite the large number of MMC patients, India lacks dedicated medical facilities to deal with this disorder.
- The MMC patient requires care and counselling in a variety of medical disciplines. Typically, the patients lack adequate information, qualified guidance and means to the required treatment.
- SCC is an attempt by experienced and qualified team of doctors to integrate all the MMC treatment and management skills with facilities under one roof.



**Ultrasound investigation of MMC Patient**



**Surgical Treatment & Abnormal Bladders**

In summary this condition poses a large burden on the society and is further worsened by lack of awareness and understanding. The community at large remains ignorant of the gravity of the problem as well as the promptness needed to treat this condition.

This results in a huge social burden on the community and poses challenges in the form of urinary, faecal, sexual and psychological rehabilitation of this group of children.

This is only possible if they are referred to the tertiary care centre as soon as neurosurgical treatment is over; i.e. within three months of their birth.

Finally, it is the multidisciplinary commitment where all subspecialties must understand their roles as well as mutual responsibility in order to give these unfortunate children a decent quality of life, which is immensely feasible.

In summary, neural tube defects and in particular, Meningomyelocele adds a very heavy burden on the family (and in turn on the society) in terms of short and long term management in India.

### Spine and Child Centre

Spine and Child Centre [SCC] is a specialized medical facility for treatment and management of Meningomyelocele (MMC) or Spina Bifida in infants, children and young adults.

Located at Pune in Maharashtra, SCC uniquely offers all the expertise and equipment needed to mitigate the effects of MMC, under one roof and one management.

### Introduction to the team Leadership

SCC is led by **Dr. Shirish Yande**, who is one of the leading Urologists from Pune, India. With over 40 years of intensive practice in India and abroad, he has handled thousands of cases covering a wide area of expertise. He is the Chief Urologist at Ruby Hall Clinic and the Director at Institute of Urodynamics in Ratna Hospital, both in Pune.

### Why is a Urologist heading the treatment of MMC?

During his long career Dr. Shirish Yande regularly sees patients with urological issues resulting from MMC. The patients visit Dr. Yande after having met other medical professionals who are not able to solve the myriad visible and invisible problems caused by MMC.

As an experienced and well-connected surgeon, Dr. Yande is aware about the lack of specialized care for MMC patients. His expertise in Functional Urology would be invaluable to treat the less obvious connection between MMC, urinary tract and the kidneys. He aims to help the MMC patients, especially from the underprivileged section of the society who have no access to the specialized treatment.

### Location Map

**CRYSTAL CENTRE FOR URINARY  
INCONTINENCE AND NEUROUROLOGY**

