



Activities Report of Operation Straight Spine (OSS)

This Activities Report includes a description and pictures of the surgeries performed on patients with spinal deformities

Prelude to OSS20

The last workshop of Operation Straight Spine (OSS) i.e. 12th workshop on spinal deformities was held in Feb 2017, when Dr Jeff McConnell with his team from USA and Dr Neena Seth's team from London, UK had visited. Due to the logistic issues the team didn't converge in 2018 or 2019. I had been thinking of organising the program once again from middle of 2019. The final decision to host the program was developed after few meetings with Prof (Dr) Ananda K Pal (Head of the Dept of Orthopaedics, IPGMER & SSKM Hospital) and few other Orthopaedic Surgeons.

The preparations for the Operation Straight Spine project began in Dec 2019, when Dr Ananda K Pal confirmed his interest regarding a spinal surgery academic program along with workshop that may help the Post Graduate Trainees. I suggested that we can do the Surgical workshop preceded by a one day conference on Spinal deformity workshop. With this thought we both met Dr Debasish Bhattacharyya, Director of Medical Education in West Bengal Health Directorate. After meeting us he gave a verbal permission to do the workshop for 1 week (from 29th Feb - 6th Mar 2020) as mission project at IPGMER & SSKM hospital under the aegis of OSS.

In Jan 2020 during the 2days Post Graduate Instructional course; I had discussion with Dr D K Taneja, President, World Orthopaedic Concern, for the endorsement of our work of Operation Straight Spine which has been actively doing the surgical workshops since 2006. He suggested inviting Dr Alaaeldin Ahmad, MD (Secretary General, WOC) from Palestine, who is an active member of Scoliosis Research Society (SRS), USA. I wrote to Dr Alaaeldin Ahmad and he immediately agreed on joining us for the live surgical workshop. I also invited Dr Harwant Singh (Spine Surgeon) from Malaysia who immediately agreed to join us for the conference on 29th Feb 2020. I also invited my friend Dr Francesco Cacciola, Neurosurgeon from Siena, Italy who has been with us before on three occasions. I invited Prof (Dr) Shah Alam, Spine Surgeon from Dhaka, Bangladesh who agreed to join us for the week.

I continued with my preparation by designing a flyer inviting Surgeons and speakers from India and abroad. I invited our team of anaesthesia (Dr Neena Seth & Dr Meera Alexander) who travel from London every year for the mission. I had discussions with Dr Jeffrey R McConnell, MD from Allentown, USA (Co-founder of OSS) who was keen to join us but due to certain essential engagements he pulled out of the OSS20. I had sent the invitation flyer to many surgeons in India and neighboring countries, USA and Europe. I invited the Dr Dheera Ananthkrishnan, from Atlanta, USA, the current chairman of SRS - GOP (Global Outreach Program) to join us. She showed a lot of interest.

The local team of organisers included Dr Manimoy Bandyopadhyay (Director, IPGMER), Dr Anand Kishore Pal (HOD, Orthopaedics), Dr Alokshobhon Datta (Prof Orthopaedics), and three Post Graduate Trainees (Dr Sanjoy Mondal, Dr Diptendu Ghosh and Dr Sanjoy Mahato). Dr Siddharth Gupta (Registrar) was involved actively in admitting the patients. Many surgeons were actively participating in the preparation were Dr Debabrata Kumar (Orthopaedic Surgeon, AMRI hospital), Dr Prashant Baid (Spine Surgeon, Apollo hospital), Dr Utpal Banerjee (Spine Surgeon, NRS MC), Dr Sanjay Keshkar (Orthopaedic Surgeon, ESI hospital), Dr Shakti Das (Director, NILD) and Dr Chinmay Nath (Narayana Hospital).

A week before the event, my world of preparation had suffered a sudden setback due the ongoing COVID-19 (Corona virus) scare. The team from UK and Italy cancelled their plans for travel. Therefore, I requested Dr H S Chhabra, President of ASSI (Association of Spine Surgeons of India) and Dr B Garg, (Consultant Spine Surgeon at AIIMS) at New Delhi to arrange for Anaesthetists who can be supportive of the live scoliosis surgery workshop. In this short period of time the anaesthesia team from New Delhi agreed to come and help us for the surgeries. Dr Souvik Maitra from AIIMS could get one day leave and come for the live surgery on 29th Feb 2020. The team of three members from Indian Spinal Injuries Centre, New Delhi (Dr H K Mahajan, Dr Lokesh and Dr Abhisek Misra) and Dr Rahul Anand (AIIMS, New Delhi) had confirmed their active participation for the rest of the week. The formalities of travels were completed just before advent of the event.

Nine (9) patients with different types of scoliosis were admitted one week prior to the surgical workshop in IPGMER. One patient cancelled when parents were not able to cope with the surgery for their child.

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Scoliosis Research Society, USA

World Orthopaedic Concern (International)

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Institute of Post Graduate Medical Education & Research, Kolkata

West Bengal Orthopaedic Association, Kolkata

National Institute of Locomotor Disability, Bon Hooghly

SPONSORED by

Operation Straight Spine, Kolkata

Team Members for OSS 2020

KOLKATA, INDIA: Dr Ujjwal K Debnath, Consultant Orthopaedic Spine Surgeon
Prof (Dr) Ananda K Pal (Head of the Dept, Orthopaedics)
Prof(Dr) Alok Sobhon Datta,
Dr Prashant Baid, Consultant Spine Surgeon
Dr Debabrata Kumar, Consultant Orthopaedic Surgeon
Dr Siddharth Gupta, Regsitrar
Dr Sahir Mondal, PG Trainee
Dr Diptendu Ghosh, PG Trainee
Dr Sanjay Mahato, PG Trainee
Dr Rohit Karmakar, PG Trainee

PALESTINE: Dr Alaaeldin A I Ahmad - Paediatric Spinal Orthopaedic Surgeon (WOC, Gen Secy)

MALAYSIA: Dr Harwant Singh, Consultant Spine Surgeon

BANGLADESH: Prof (Dr) Shah Alam, Consultant Orthopaedic Spine Surgeon

VISITING SPINAL FELLOWS: Dr Jaydeep Ghosh (Guwhati)

Dr Shrijith MB (AIIMS, New Delhi)

Dr Anand Kumar (Puduchhery, TN)

Dr Someshwar (Bangalore, KN)

Dr Tarun Chabra (Hissar, Haryana)

NEW DELHI, INDIA: (Indian Spinal Injuries Centre)

Dr H K Mahajan, Consultant Anaesthesiologist

Dr Lokesh, Consultant Anaesthsologist

Dr Abhisek Misra, ICU Specialist

(All India Institute of Medical Sciences)

Dr Souvik Maitra, Cosnultant Anaesthesiologist

Dr Rahul Anand, Consultant Anaesthesiologist

KOLKATA, INDIA: (IPGMER & SSKM Hospital)

Prof (Dr) Sankari Santra, Head of Dept, Anaesthesiology

Dr Jayanta Chakraborty, Consultant Anaesthesiology

Sponsors:

We would like to acknowledge our sponsors who generously supported for a successful Operation Straight Spine 2020.

Thank You!

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Sanofi, India
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28th Feb 2020

Dr D K Taneja (from Indore) our chief Guest and inaugural speaker arrived in the late afternoon. The surgical faculty of Dr Alaaeldin Ahmad, Dr Shah Alam, Dr Harwant Singh arrived at the accommodation - Tollygunge club. All the PGs helped in receiving them from airport.

The speakers whom I invited locally were ready to come and join us for an academic update on scoliosis & kyphosis management on 29th Feb 2020.

29th Feb 2020

In the morning, I personally went to Tollygunge club to welcome the faculty and escorted them to the venue (IPGMER & SSKM hospital). Amidst all the registration and coffee, I had met many doctors and



delegates who had come to join us for the meeting. We had registration of 6 Spinal Fellows from around the country. They were Dr Shrijith MB (AIIMS, New Delhi), Dr Tarun Chabra (Hissar, Haryana), Dr Anand Kumar (Puduchery, TN), Dr Someshwar (Bangalore), Dr Jaydeep Ghosh (Guwahati, Assam) and Dr Siddhartha Gupta (IPGIMER, Kolkata).

The conference began with an introductory note by Dr Ananda K Pal. This was followed by series of interesting talks from Dr K K Mukhopadhyay (*AIS classification*), Dr Chinmoy Nath (*Imaging in Scoliosis*) and Dr Shakti Das (*Casting in EOS*). Dr Souvik Maitra gave a talk on "*Preventing anaesthesia complications during and after scoliosis surgery*". Manish Pandey gave a short talk on "*Spinal Cord Monitoring*"

Dr Alaaeldin Ahmad was introduced by Dr Debnath and he gave an overview of APC technique which he has introduced and spoke on '*How I treat EOS children*'. Dr Prashant Baid followed with a script on '*Magnetic growing rods*'.

Dr Harwant Singh spoke on '*Congenital Scoliosis and management*'. Dr Taneja gave a plenary lecture on '*Operation Straight Spine*' and gave his ideas on developing this program further and take this to different parts of India. Dr Debabrata Kumar spoke on the OSS- past, present & Future and short video was shown where Dr Jeffrey McConnell narrated the history of OSS.

The conference & workshop was inaugurated by Dr Manimoy Bandyopadhyay, Dr A K Pal, Dr D K Taneja, Dr KK Mukherjee and Dr Gautam Bhattacharyya. This was followed by rest of the speakers giving their talks. The team from NILD (National Institute of Locomotor Disease) Dr P K Lenka delivered a talk on '*Spinal Bracing in AIS*' and Parvin Kumar presented his talk on '*Post op rehab for scoliosis patients*'.

Prof (Dr) Shah Alam, from Dhaka presented '*Long term results after AIS surgery*'. This was followed by a talk on '*Management of Lenke 5 curves in AIS*' by Prof Gautam Bhattacharyya. Dr Abhisek Roy presented his talk on '*Cost analysis in AIS Surgeries*' which was followed by a talk by Dr Anindya Basu on '*Post tuberculous Kyphosis correction*'. Dr Sanjay Keshkar delivered his talk on '*High Grade Spondylolisthesis*'.

The participants became familiar with the anatomical and biomechanical particularity, classification, natural history, conservative, and surgical options for the treatment of these challenging pathologies (spinal deformity). The content of each talks were of high standard although basic knowledge was imparted to the delegates.

Conference photos



Registration desk



Dr A K Pal, Dr D Ghosh
Dr S Ghosh, Dr S Gupta



Inauguration of Conference
with Dr M Bandopadhyaya



Dr A K Pal Dr D K Taneja



Dr Alaaeldin Ahmad
(WOC, Gen Secy)



Dr H Singh
(Malaysia)



Dr P Baid



Dr Debnath introducing
Dr Taneja (WOC, President)



Dr D Kumar



Director, IPGMER



With Faculty



Dr S Keshkar



Delegates in hall A



Dr A K Pal & Dr C Nath



Dr S Moitra



M Pandey



Felicitating Dr Ahmad



Attentive Delegates



Live Surgery progress



Dignitaries on stage



Dr G B'arya



Dr K M'jee



Dr Taneja cracking a joke



Indian Faculty



Dr Singh with Dr Pal



Dr D Ghosh



Dr S P Das



Dr P K Lenka



Dr S Gupta



Dr A S Datta & Dr Shah Alam



Dr A S Datta



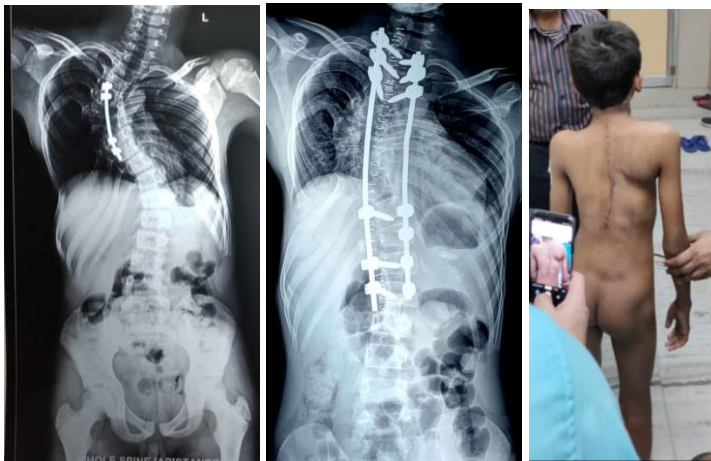
Dr Sahir Mondal

Live Surgery Workshop

I had to leave the conference venue for the Operating Rooms at Woodburn Theatres, where the patient Ankit Rajak 11y/male, had been anaesthetized by Dr Souvik Maitra and IPGMER team. Neural monitoring leads were applied. Once everything was ready, we started the surgery at 1:30PM. The boy has had previous surgery under our care in 2010 for congenital hemivertebrae at D6. The previous rod and hooks were removed. A pedicle screws construct from T1 to L2 (bilateral) was done. Used (Globus 4.5mm set) 6 screws proximally and 6 screws distally.

Dr Alaaeldin, Dr Harwant Singh and Dr Prashant Baid continued with the surgery. I returned back to the Conference venue at the closing stage for a presentation on '*Neuromuscular Scoliosis*' followed by a Press conference. The Live surgery was in progress on the large screens and questions were answered by Dr Alaaeldin from OR as directed by the delegates from audience.

I returned back to the OR following the conclusion of conference. I entered the OR and final correction of the spinal curve was going on. A correction of the shoulder imbalance was achieved. He had 500ml blood loss. He was extubated and sent to ICU facility. He had a good post-operative recovery in the ICU.



Ankit – (before and after surgery)

After completion of the surgery, we had a meeting in the Surgeon's room. We called parents of Supriya Bharati, 15year old girl with a severe spinal deformity at the thoracolumbar junction with a dystrophic curve and wedge vertebrae at D11/12 with acute kyphotic angulation (about 140°) due to Neurofibromatosis. We counseled the family and the child regarding the dangers of surgery i.e. esp. paralysis which may disable her future life. With all the knowledge about her and the possible outcomes, the parents wished to proceed with surgery signing high risk consent.



Supriya with Surgeons



Dr S Satra, Dr S Moitra & Dr J Chakraborty

In the evening, we all had a dinner at Hotel Hindusthan International.



Dr Harwant Singh, Dr D Kumar and Divyanshi Debnath

1st Mar 2020

Our Anaesthesiologists team of four (4) for the week arrived from New Delhi, around afternoon at Tollygunge club. Once they had their lunch, we went to IPGMER & SSKM hospital for reviewing our patients who required surgery. After the Pre-anaesthetic checkup, I had to organize sterilization of the implants from various implant companies who were scheduled for the next day. With lot of efforts, I had organized for two simultaneous Operating Rooms to be engaged with two cases. Two live TV monitors with microphones from two Operating Rooms were arranged in the surgeon's room for Fellows and Residents to interact with the operating team.

2nd Mar 2020

Case 1

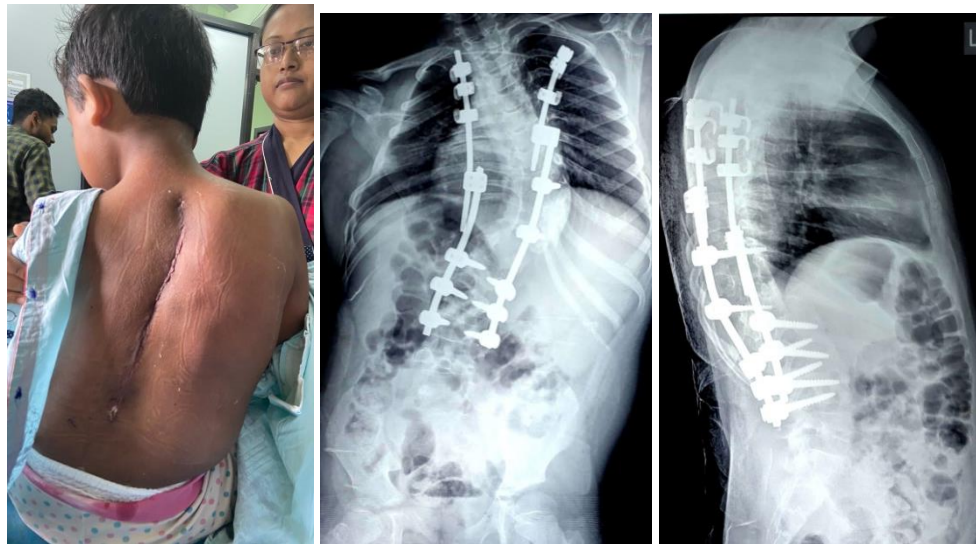
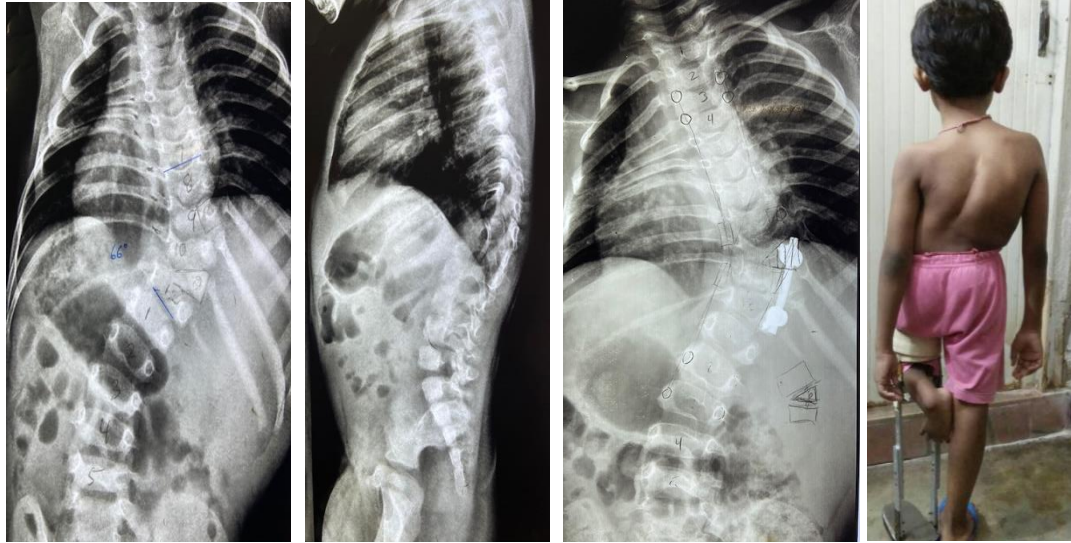
I escorted the team from Tollygunge club to IPGMER (Woodburn OT) at around 9AM. Dr Mahajan with his team arranged for the 1st Case (Ritam Mitra, 10year old boy) to be anaesthetized in the OR 1. Once he was anaesthetized, it was noted that the Orthopaedic Resident couldn't pass the urinary catheter through the distal hypospadias in the patient. A referral was made to the Urology team. The Urology resident did try to catheterize and failed. Subsequently, a call for the Consultant Urologist was made who after few trial catheterizations decided to do suprapubic catheterization. A great deal of time lapsed with the patient under anaesthesia.

Ritam was 2.5 years old when he was 1st seen by me in 2012 with multiple congenital anomalies. He had Multiple Hemi Vertebrae with a progressive scoliosis and respiratory difficulties with a congenital left leg anomaly (Left Tibial Hemimelia with hypoplastic Knee). He also had hypospadias and an inguinal hernia. X-ray showed T10 and T9 hemivertebra with 60 degrees of curvature of left side. He had undergone T10 Hemivertebrectomy with left sided posterior instrumented fusion. Post operatively he ran a rough course and was on ventilator for 3days. Gradually he recovered over the next few days. In 2014, he was again seen for progressive spinal deformity with the existing T9 Hemivertebrae. He underwent T9 Hemivertebrectomy with posterior fusion with multiple pedicle screws. I had been following him for the last few years. Now the boy was 11years and his scoliosis was progressive with curvature of 80°.

A long discussion was held between us and was decided to follow the APC technique of Dr Alaaeldin for growth modulation since the child was still growing.

I had to rush to the OR 1 since the child was positioned on table. I left Dr Alaaeldin to be assisted by Prof (Dr) Shah Alam and Spinal Fellows. We exposed the spine & confirmed the location of the vertebrae with a C-arm. The previous screws and rods were removed. The fusion mass was solid at the T9-T12 region. The caudal pedicle screw fixation was performed at L2,L3 & L4. In the meantime Dr Alaaeldin joined me after completion of the case in OR 2. He used 3 hooks on the either side of upper 3 ribs (Rib 2, 3 & 4). The apical screws on the convex side were applied at T9 and T12. The two proximal rods and to caudal rods were connected with two dominos. We used implants hooks & locking screws (6), 4.5 mm rods (2), Parallel Connector Clamp 4.5 (2) & 5.5 poly axial screws (7) & 4.5 polyaxial screw (1) with locking caps. We achieved significant correction on table.

Once visualized with the C-arm, we closed the spinal wound following thorough irrigation and sprinkling Vancomycin powder.



Ritam – 3rd surgery

Case 2

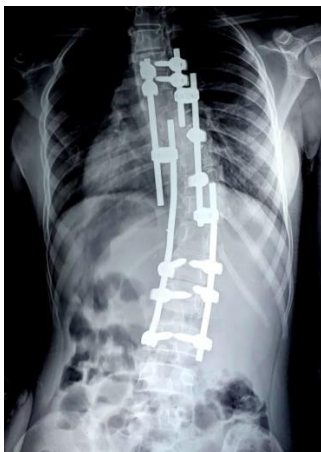
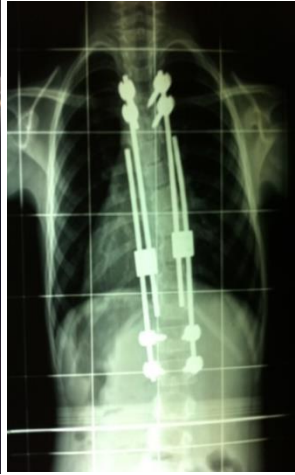
During this time of waiting, the 2nd case (Tithi Pan, 13 year old female) was anaesthetized in the OR 2. Tithi has been under OSS care since she was 5years old with an early onset long thoracic curve. She had undergone four (4) previous surgeries from 2012 onwards. She currently has a growth rod in situ with anchors at T4 and T5 proximally and L1 & L2 distally. X-rays were suggestive of progressive curve decompensating at L2/L3 vertebral disc. The lack of surgeries for the growth modulation through Dominoes had not been performed for last 3years and hence she developed a crankshaft phenomenon.

Dr Alaaeldin and I discussed regarding the preoperative planning with the Fellows and Residents. This was a good session of flurry of questions. Dr Alaa discussed preoperatively regarding the growth potential of the girl since she was at Risser 2 stage. We decided to do Growth rods again but use technique of APC (Active Apex Correction with guided growth technique). This technique has been illustrated by Dr Alaaeldin in many of his cases and has been published in Global Spine J (23 Jun 2019, p1-5) & Spine Surg Relat Res. 2019 Aug 16; 4(1):31-36. 1`

In this modified technique, the most wedged vertebra was selected followed by insertion of pedicle screws in the convex side of the vertebrae above and below the wedged one. Instead of apical fusion, apex compression was applied at the wedged vertebra. This in addition to allowing a foundation for fixation at the apex traditionally sought for controlling the curve, also seeks to dynamically modify the peak of the curve. The procedure was more economical (putting 2 screws instead of 6 at the apex of the curve) for underprivileged patients globally.

Dr Alaaeldin and I scrubbed for the 2nd case since she was already positioned. We removed the previous rods & screws. The most distal screw head was locked on left side and it was very difficult to remove the rod from the screw. We had to use an in situ rod cutter to cut the rod and remove the screw. Proximal pedicle screw fixation at T4 & T5 followed by the pedicle fixation at apex T10 on the convex side was performed. A pedicle screw at T8 followed by distal pedicle fixation bilaterally at L1, L2 and L3 was done. The dominos (parallel rod connectors) were used on both sides for the sliding of two rods. We used implants from 5.5 screws with locking caps (12) + Rods 5.5 (2) & 5.5 to 4.5 Parallel Connector clamps (3).

The wound was closed after confirmation on C-arm radiographs.

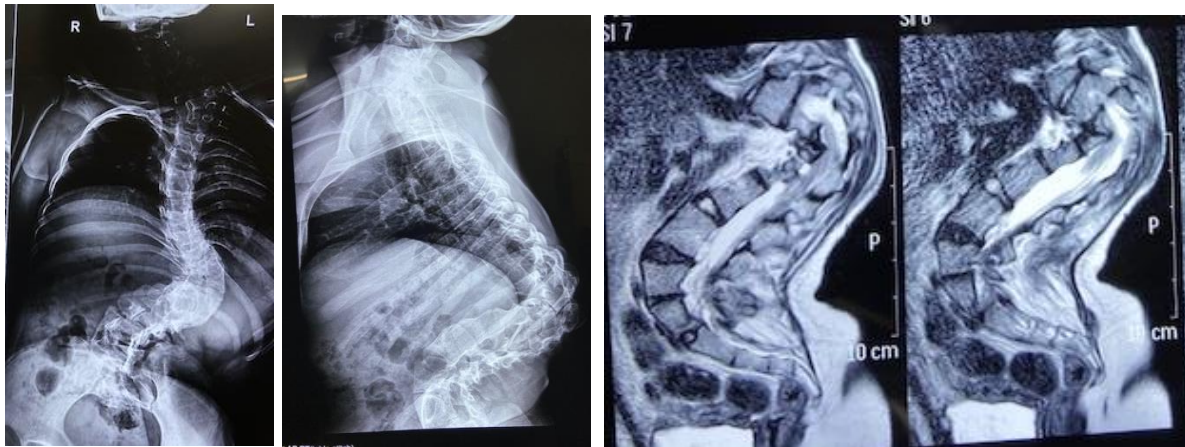


Tithi – After 8 years of growing rod treatment

3rd Mar2020

Case 3

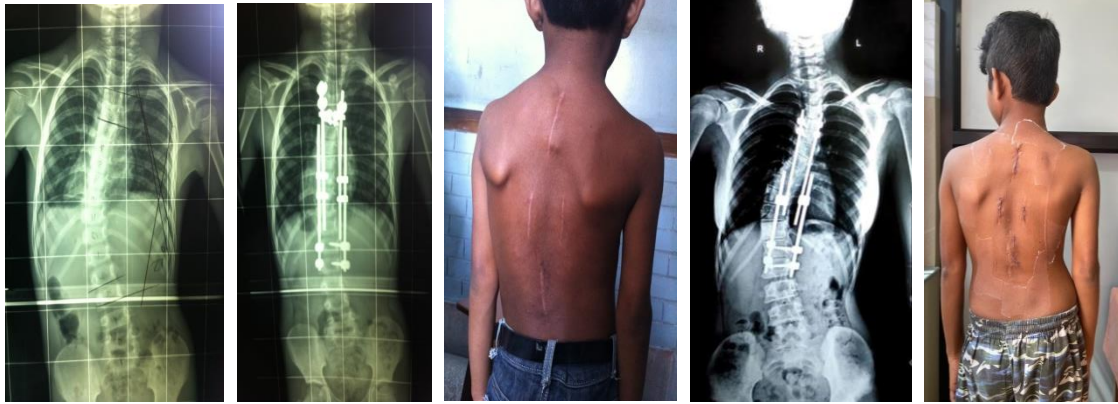
Supriya was certainly one of our most challenging cases we had dealt under OSS since 2006, due to the magnitude of her spinal deformity and the gross abnormality of her spinal cord with the wedge vertebrae. With lot of speculation we proceeded with her anaesthesia and positioned her on the table with neural monitoring leads. A baseline spinal cord monitoring was normal. We started the surgery by exposing the spine on both sides of the deformity. We did instrument at L3 & L4 bilaterally under image guidance. On the left side I did the T9 and T10 pedicle instrumentation. But when doing the instrumentation on the right side at T11, we lost the Spinal cord monitoring response. We waited for half hour and decided to remove the screws. Once we removed the screws, we did wait for another hour. We closed the spinal wound hoping some return of function. She had return of perianal response on both sides. We rushed her to the MRI scanner for a review. At night, MRI scan report didn't suggest any Spinal cord injury. Therefore, we hoped and prayed for her return of function in her lower limbs.



Case 4

Dipankar, 13year old has been treated under OSS for the last 7years for Early Onset Scoliosis. In 2013, he first had Growing Rods T4-L2. He had growth rod manipulation in 2014 and a year later he had change of the growth rods since the dominos were stuck and were not sliding. He had T4, T5 proximal screws and a L1, L2 caudal screws. He had another correction in 2016. But subsequently he was left alone. Currently he had well corrected spinal deformity. It was decided to remove the metalwork and observe him grow for the next few years.

While we were busy in OR 1, the Spinal Fellows (Dr Shrijith, Dr Chabra and Dr Gupta) performed the surgery in OR 2, i.e. removal of implants from Dipankar. He had an uneventful recovery.



Dipankar – after 8years of growing rod treatment

4th Mar 2020

A 14year old boy of Armenian origin from Kharagpur with mental retardation (CP/Syndromic) with facial dysmorphic features was admitted. He had epilepsy and had been managed at home with care by the family. The last episode of epileptic fits was couple of years earlier. He was a walker but was fidgety and didn't allow us to do Echocardiogram or Lung Function test. He had a progressive right sided thoracolumbar curvature of 80° with left sided shoulder lower than right. He was scheduled for surgery today but incidentally he had two episodes of epileptic fits on the previous night. Therefore, our anaesthetist felt it wouldn't be wise to undertake the surgery. We discussed with the family who were also quite worried and decided not to proceed with surgery. Therefore, he was discharged home.



Andre (Syndromic Scoliosis) with Dr Alaaeldin & Dr Harwant Singh

We continued with the other two patients that were prepared for surgery today.

Case 5

Trisha, 9year old girl with Early Onset Scoliosis (Lenke 1A) had a right sided thoracic curvature (45°) from T4 to T12. It was decided to do growth rods application on her. She had been anaesthetized in OR 1 followed by positioning and Neural monitoring lead application. She underwent the APC technique of Dr

Alaaeldin with proximal rib hooks (5) and caudal pedicle screw insertion (6). Dr Alaaeldin and I had been able to complete the surgery.

Once the construct was made, I rushed to the OR 2 to start the surgery.



Trisha – (Before & after surgery)

Case 6

Rubina, 16year old girl with Lenke 5C AIS and a right sided thoracolumbar curvature (85°) from T6 to L3. Surgery consisted of a posterior approach with curve correction and instrumented spinal fusion from T3 to L3. She had 90% correction of her spinal deformity on table. We used implants 5.5 mm screws & caps (7) , 6.5mm screws & locking caps (6) , 5.5mm Rod (2) & 5.5 mm screws & caps (4). Our Anesthesia team had supported us through the surgery all throughout.

Dr Alaaeldin (Palestine) and Dr Shah Alam (Dhaka) had to leave today evening for their respective cities. While I was operating on the 2nd case, after assisting they left by 5PM for the airport. I had to leave the OR and bid them adieu for a safe flight home. No thanks were enough for them since they came and helped in the OSS20 in this time of COVID-19 outbreak with all positive views for OSS20.

I returned back to the OR 2. I demonstrated the Fellows how to bend the rods and connect to the pedicle screws loosely. The correction rod on the concave side was then rotated 90° to restore the sagittal profile in the corrected position. Straightening of the contoured rod occurs during the process. Two rods were finally fixed and the final adjustment was made via a portable X-ray with additional in situ bending and compression and distraction. As the rod is just supportive at the convex side in the thoracic and the concave side in the lumbar, the rod is bent conforming to the shape of the corrected curve and placed in situ without forceful manipulation.

The wound was closed and she was extubated to return back to the ICU for 24hours.



Rubina – (before & after surgery)

5th Mar 2020

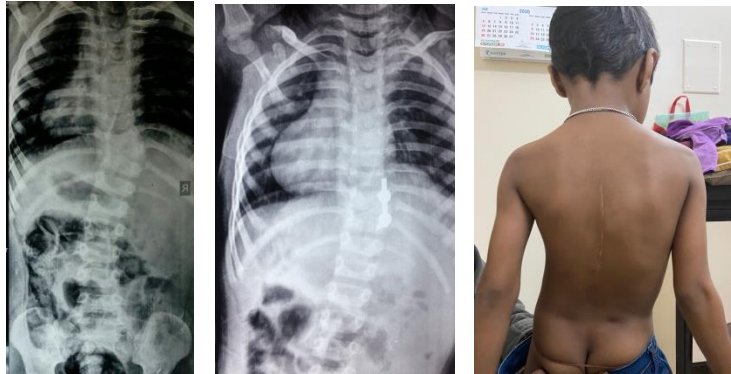
Sandip, a 18year old boy with Lenke 1C and a right sided thoracolumbar curvature (80°) from T3 to T12. Surgery consisted of a posterior approach and curve correction with instrumented spinal fusion from T3 to L2. We used two different pedicle screw system from two companies **Jayon (India)** 6.5 screws with locking caps (8) and **Bonetech (India)** 6.5mm screws with locking caps (1), 5.5mm screws with locking caps (7), 4.5mm screws with locking caps (1), 5.5 Rods (3). He underwent the single rod rotation technique on the concave side of the curve to correct the deformity. Once corrected, the convex side rod was fixed followed by irrigation, bone grafting, vancomycin powder application and insertion of drain. The wound was sutured, patient extubated and returned to the ICU for the next 24hours.



Sandip - (before and after surgery)

FU patient from 2017

Arannya Adhakary, four and half year (4.5) old boy came with his parents from a far off village for annual follow-up. This young baby had a congenital scoliosis associated with a T11 hemivertebra. He underwent surgery when he was 18months old in OSS2017. He had removal of the T11 hemivertebra, correction of the local kyphosis and scoliosis, and limited fusion from T10 to T12 with instrumentation using the Protex-C 3.5mm rod and screw system. He is currently walking well with fairly straight back. The parents are quite pleased.



Arannya – (before & 3years after surgery)

6th Mar 2020

We took ward rounds this morning and did dressings for everyone. Supriya was in HDU where she was recovering from the surgery. She has return of sensation to touch and pain in both her lower limbs. The anaesthesia team had seen all our post-operative patients and they were quite pleased with the outcome. The visiting spinal fellows had taken turns to continue the ward rounds for the day. We had one 3year old patient for surgery today for excision of T11 Hemivertebrae. But the child had mild upper respiratory tract infection and therefore we had to cancel the surgery.



(3yr child with HemiV)



Aajkaal



Sei Samay



Prabhat Khabar



Sanmarg



Salam Duniya

7th Mar 2020

I had bid addiue to all my team members who had joined us for this mission work. I had subsequently made my own rounds in the wards in the following week. All patients were discharged. A follow-up was arranged in the subsequent weeks.

Photos during the week



Team led by Dr Debnath



Spinal Fellows operating



Dr Alaeldin with Dr Shijith



with Dipankar



Discussion in Surgeons room



Live Telecast in OT



Dr Debnath & Dr Baid



Spinal Fellows with Dr Debnath



Dr Jaydeep Ghosh (Fellow)



IONM



Surgical Team



Dr Debnath looking at X-rays



Dr Shah Alam & Dr Ghosh



Anaesthesia Team & Fellows



Dr Alaeldin & Tithi



Whole team on last day



Post-operative pics with patients