



Operation Straight Spine (OSS) Trust

Regd. No. : 0077/2020

ANNUAL ACTIVITY 2024



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<https://oss.org.in>



"Moments & Memories"
OSS Spinal surgical deformity workshop, 18-22nd Mar 24

PREFACE

In continuation of the activities related to Spine Deformity detection and correction, Operation Straight Spine Trust held its 17th annual surgical mission of spine deformity correction between 18th — 23rd Mar 2024. Successful surgeries require special equipment, spinal instrumentation and spinal cord monitoring along with sincere volunteers from USA, UK, Europe and India.

The social determinants of health include factors such as income, social support, early childhood development, education, employment, housing and gender. The quality of care provided, whether by surgical intervention or non-operative treatment, is closely intertwined with socio-economic status (SES). Charitable surgery in scoliosis has a huge impact on the SES of the families. The parents feel obligated to their children for correcting the disease. All parents from the lower SES have a keenness to treat their children and make them better.

Scoliosis or kyphosis in children in the rural or urban sector has large psychosocial impact on the children and parents. Scoliosis can affect a child's body image, have feelings of anxiety, fear, and withdrawal from society. The surgical correction of the deformity in these children has a high social impact on the child and their parents. Children have reduced worry

of falling behind in school and concerns of their body image. They are able to cope with their situation better and allay anxiety with reduced risk of withdrawal from the social surroundings. They are able to mix with other children and have reduced probability of depression. Someone termed Scoliosis as a "social curve"

Many of these children have gone on to do higher studies and doing jobs in the IT sector or teaching in schools after successful surgical treatment. Many girls who were treated with surgery under OSS program have got married and have borne children. Many are well settled with good jobs and most of them have felt more independent and mature. These are the long term positive effects of surgical treatment.

OSS mission imparts scientific education and training to the residents, nurses and OT technicians. International surgery missions expose residents to a high volume and variety of cases. There is huge influx of Spinal Fellows from around India to attend OSS workshop during this time of the year to learn the techniques of selection of patients and the techniques of surgery. Thus, OSS serves the surgical community to raise their standards of scoliosis and spine surgery and bring their experience to different regions of India.

18th -23rd Mar 2024

17th OSS Scoliosis Surgery workshop at JIMSH

Special guest

4th KOLKATA SPINE DEFORMITY CONFERENCE

OSS Chairman

on 23rd March 2024 (Saturday)

17th OSS 'OPERATION STRAIGHT SPINE' MISSION

SPINE DEFORMITY SURGICAL WORKSHOP

18th – 23rd March 2024

Chairman JIMSH

Vice Chairman JIMSH

Organized by :

OPERATION STRAIGHT SPINE TRUST
Hope Lives here

JIMSH HOSPITAL
Jagannath Gupta Institute of Medical Sciences & Hospital

International Faculty

Allied Healthcare Faculty (UK)

Venue : JIMSH
Budge Budge, Kolkata

Swami Satyeshananda
Asst. General Secretary
Ramakrishna Math & Ramakrishna Mission

Prof. (Dr) Ujjwal K Debnath
Organising secretary

Mr K K Gupta
Chairman

Dr Balram Gupta
Vice Chairman

Prof. (Dr) Alaaeldin Ahmad
Palestine/USA

Prof. (Dr) Massimo Balzano
Italy

Dr Girish Swamy
UK

Ms Charlotte El Labany

Mr Emmanuel Gavan

Mr Sergio Cecchetti

Scoliosis is a physical manifestation of various adaptations - physically, emotionally, mentally, and spiritually. While adapting to survive, we can easily lose connection to our own essence which could easily lead us to lose our 'centre'. Natural reaction and responses may force us to 'bend' ourselves a little bit; to literally twist ourselves... to survive.

The basic aim of the trust is to provide modernized treatment to the people in the rural area by establishing super specialty healthcare infrastructure to cater the healthcare needs of the common people at nominal cost, thus benefiting the society at a large. Under the mentorship of Dr. Debnath, OSS has been responsible for many charitable healthcare camps over the

last 17 years. Dr. Debnath has himself offered his expertise to treat (through complicated surgeries) patients with spinal deformities, mostly belonging to the rural areas, where accessibility to advanced healthcare facilities is not available easily. The international program i.e. Spinal deformity conference enabled JIMSH to create awareness in the rural community in and around Budge Budge and in the city of Kolkata. The whole program was novel for the hospital and medical college. There was a learning process for all who participated. The surgical workshop involved difficult spinal deformity patients who had travelled from around the state of West Bengal and nearby States.

OSS Beneficiaries Mar 2024

Name	Age & Sex	Date of Surgery	Dx	Side	Level of instrument
Suprova Jana	13/F	18/03/24	AIS	Right	T2-L2
Rubina Khatun	7/F	19/03/24	Cong	Right	T5-L1
Alamgir Khan	16/M	19/03/24	AIS	Left	T2 to L4
Samima Khatun Khan	15/F	20/03/24	Cong	Left	T11 to L5
Sk Javed Ali	16/M	20/03/24	AIS	Left	T3 to L3
Reshma Khatun	13/F	21/03/24	AIS	Right	T3 to L2
Trisha Den	14/F	22/03/24	EOS	Right	T3 to L2
Priyanka Adhikary	16/F	22/03/24	AIS	Right	T3 to L2



World Orthopaedic Concern (WOC) International

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To Whom It May Concern

World Orthopaedic Concern International would like to extend its congratulations to Prof (Dr) Ujjwal K Debnath, Consultant Orthopedic & Spine surgeon, for organizing the upcoming spinal deformity course at Jagannath Gupta Institute of Medical Sciences, Budge Budge, Kolkata 700137 starting 18th March 2024. Prof Debnath is the founder & chairman of the "Operation Straight Spine" (OSS) program– a global outreach project in spine surgery in a developing nation (India) since 2006. OSS has successfully completed its 17 years of annual charitable missions, providing surgical correction of spinal deformities to indigenous underprivileged children and young adults from remote areas of West Bengal and India.

Prof Debnath is a highly esteemed member of the Orthopedic Community, dedicating his time and efforts to serving relentlessly, thereby delivering compassionate, high-quality, and affordable musculoskeletal health care to the underprivileged. He is actively involved in teaching and training his residents, as well as Spine Fellows from around India. Prof Debnath has extended an invitation to members of WOC to participate in the annual Spine deformity mission, including Prof (Dr) Alaaeldin Ahmad, who has become an integral part of the program.

WOC fully endorses the upcoming course and has provided its logo to confirm the same.

Yours sincerely

President,
World Orthopaedic Concern International

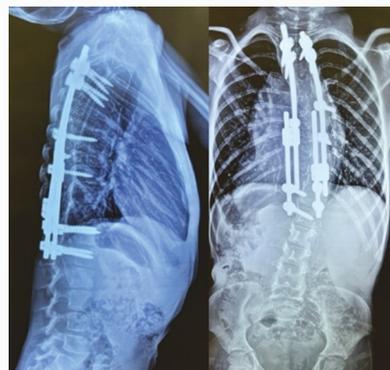
18th Mar 2024



The arrival of foreign faculty from Europe and UK. All went to the hospital and examined all the patients.

After going through all the patients in details, our first patient was 13/F who was scheduled for a posterior corrective fusion of scoliosis from T2 to L2. Following anaesthesia, Spinal cord monitoring was applied. After recording baseline graphs, we proceeded for the planned surgery. It all finished by 7PM

19th Mar 2024



Today we performed 2 surgeries in two OTs.

In the OT 1 a 7Y,F underwent Growing rod surgery (Active Apex correction) by Dr Alaeldin Ahmad and Dr Massimo Balsano. The levels of surgery T2 to L2.



In the OT 2, Prof (Dr) Ujjwal K Debnath & UK team (Dr Girish Swamy & team) performed posterior corrected fusion from T3 to L4 in a 16y Male with AIS.

20th Mar 2024



In the OT, a 15year old female with congenital scoliosis (L3/4 fused) with osteotomy at L3 and posterior Instrumented fusion.



In OT 2, a 16year old male underwent Posterior Instrumented correction and fusion from T10 to L4 with left sided AIS.

21st Mar 2024



In the OT 1 a 13Y,F underwent Growing rod surgery (Active Apex correction) by DrAlaaeldin Ahmad and Dr Massimo Balsano. The levels of surgery were from T2 to L3.

22nd Mar 2024



Nine (9) year old girl with Early Onset Scoliosis had underwent Apex Active correction (growth rods) for a right thoracolumbar in 2020. She underwent removal of implants and definitive fusion from T2 to L3. Surgery undertaken by Dr Girish Swamy and DrUjjwal K Debnath in OT 1.



In OT 2, a right sided Thoracolumbar curve with Cobb 60° had posterior instrumented fusion from T3 to L3 was our last case for the workshop.



Dr Debnath with all patients and residents

Prior activities related to Awareness Campaign by OSS

On the occasion of 17th Spine Deformity Conference to be held from 18th to 23rd March, 2024 in collaboration with JIMS, Budge Budge certain plans have been chalked out by Operation Straight Spine (OSS) Trust for February and March, 2024.



Operation Straight Spine Trust

ACTIVITY REPORT

OF
OPERATION STRAIGHT SPINE (OSS) TRUST

MARCH, 2024

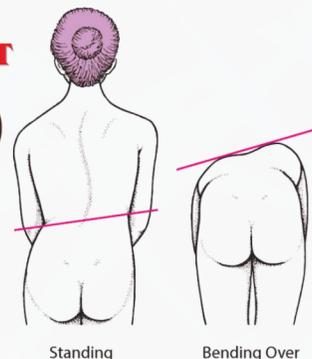
Sit N Draw Competitions

IN AID OF CHILDREN WITH SPINAL DEFORMITY

SPONSORED BY : OSS TRUST

CHAIRMAN : PROF. (DR.) UJJWAL K DEBNATH
PRESIDENT : MS PIYALI ROY BURMAN

www.oss.org.in



16th Mar 2024

FU clinic



GALLERY



GALLERY



23rd Mar 2024

Symposium on Spinal Deformity







বাংলায় শিরদাঁড়ার সমস্যায় ভোগা শিশুদের চিকিৎসার জন্য পাশে দাঁড়াতে এগিয়ে এলেন ইউরোপ তথা বিশ্বের প্রথম সারির অর্থোপেডিক সার্জেনরা

বিশাল এই কর্মকাণ্ডের পিছনে মূল উদ্যোক্তা কলকাতার বিশিষ্ট অর্থোপেডিক সার্জন ডাক্তার উজ্জ্বল কুমার দেবনাথ জানান, স্ক্লেগোটা বিষয়টা শুরু হয় ২০০২ সাল নাগাদ আমি যখন ইংল্যান্ডে কর্মরত ছিলাম সেই সময়। মার্কিন যুক্তরাষ্ট্র থেকে এ ডাক্তার ম্যাকনেল নামে একজন অর্থোপেডিক সার্জেন এসেছিলেন লন্ডনে। তার সঙ্গে ধীরে ধীরে বন্ধুত্ব গভীর হওয়ার পরে আমি জানাই যে কলকাতা তথা বাংলার বিভিন্ন প্রান্তে স্ক্লেগিওসিস আক্রান্তদের চিকিৎসার খুব একটা সুব্যবস্থা নেই। আমার যে এই ধরনের অসুস্থ ব্যক্তিদের পাশে দাঁড়ানোর ইচ্ছে রয়েছে সেই বিষয়টা তাকে জানাই। কারণ এই বিশাল কর্মকাণ্ড করার জন্য অনেক লোক সঙ্গে প্রয়োজন। প্রয়োজন উন্নত চিকিৎসা পরিকাঠামো এবং অনেক অর্থের যোগান। তবে তিনিও বলেন চলুন একসঙ্গে আমরা স্কেজোসেবী সংস্থা তৈরি করে এই রোগে আক্রান্তদের চিকিৎসা করি। এরপরে ২০০৬ সালে আমরা দুজনেই কলকাতায় এসে একটা ফিজিওলজি স্টাডি করি। এরপর থেকে আমরা প্রত্যেক বছর কলকাতায় এসে

নভেম্বর থেকে মার্চের মধ্যে ১০১২ জনের একটা টিম এই ধরনের অপারেশন করতাম। লন্ডন থেকে আমি আমার টিম নিয়ে আসতাম আর উনি মার্কিন যুক্তরাষ্ট্র থেকে ওনার টিম নিয়ে আসতেন। গত কয়েক বছর ধরে জগন্নাথ গুপ্তা ইনস্টিটিউট অফ মেডিক্যাল সায়েন্স এসে দুটি করে অপারেশন থিয়েটার আমরা পাচ্ছি এই ধরনের অপারেশন করার জন্য। এখনকার কর্তৃপক্ষ আমাদের যেভাবে আন্তরিক সমর্থন দেন তার ফলে আমরা প্রত্যেক বছর অন্তত ৭-৮ জন বাচ্চার অপারেশন করতে পারি বিনামূল্যে। স্ক্লেগ বজ্র বজ্রের জগন্নাথ গুপ্তা ইনস্টিটিউট অফ মেডিক্যাল সায়েন্সেস অডিটোরিয়ামে আজ উপস্থিত ছিলেন বেলুন বেলুন রামকৃষ্ণ মঠ ও মিশনের অ্যাসিস্ট্যান্ট জেনারেল সেক্রেটারি স্বামী সত্যোশ্বনাথ মহারাজ। যিনি স্বামী বিবেকানন্দর এবং রামকৃষ্ণ পরমহংসদেবের অনুপ্রেরণায় গৈরিক বস্তু পরিধান করলেও আদতে একজন গবেষক এবং চিকিৎসক হিসেবে নিজেই প্রমাণ করেছেন। তিনি আধুনিক লাইফ স্টাইলে স্ট্রেস



ম্যানেজমেন্ট বা মানসিক উদ্বেগ কাটানোর জন্য স্পিরিচুয়াল সায়েন্স অর্থাৎ আধ্যাত্মিকতার যে বিশাল ভূমিকা রয়েছে তা অত্যন্ত মনোপ্রাণী ভাবে তুলে ধরেন দেশ-বিদেশের স্নানমধনা চিকিৎসক এবং ডাক্তারির পড়ুয়াদের সামনে। ইংল্যান্ডে কর্মরত আন্তর্জাতিক খ্যাতিসম্পন্ন আরেক অর্থোপেডিক সার্জন ডাক্তার গিরিশ স্বামী বলেন, স্ক্লেগোডে আমি যে সংস্থার সঙ্গে যুক্ত রয়েছি, ডাক্তার উজ্জ্বল দেবনাথ আগে ইংল্যান্ডের সেখানেই কর্মরত ছিলেন। তার মুখে জানতে পারি বাংলায় তথা ভারতের বিভিন্ন জায়গায় কিভাবে স্ক্লেগিওসিস রোগে আক্রান্ত হয়ে

চিকিৎসার অভাবে অসংখ্য সমস্যার সম্মুখীন হচ্ছেন বহু দুঃস্থ মানুষ। এটা এমন একটা অসুখ যেখানে শিরদাঁড়া বেঁকে যায়। সুস্থ ভাবে চলাফেরা তো দূরের কথা সামাজিকভাবে ও নানা অসুবিধের সম্মুখীন হতে হয় ভুক্তভোগীকে। কলকাতার ক্ষেত্রে একটা হাসপাতালে এই ধরনের অপারেশনের খরচ প্রায় ৮ থেকে ১০ লক্ষ টাকা পর্যন্ত পড়ে যায়। আর ভারতের অন্যান্য জায়গায় বা কলকাতার কর্পোরেট হাসপাতাল ওলিতে সম্পূর্ণ পরিকাঠামোসহ এই ধরনের অপারেশনের খরচ ১৫ থেকে ২০ লক্ষ টাকা পর্যন্ত বেগে যেতে

পারে। কিন্তু বিপুল এই চিকিৎসা খরচ বহন করা সকলের পক্ষে সম্ভব হয় না। তাই এই ধরনের রোগীদের পাশে দাঁড়াতে ডাক্তার উজ্জ্বল কান্তি দেবনাথ যে উদ্যোগ নিয়েছেন এবং অপারেশন সেন্টার স্পাইন ট্রাস্ট তৈরি করেছেন তার সঙ্গে যুক্ত হতে পেরে আমি অত্যন্ত আনন্দ পাই আজকের এই সেমিনারে শুধু ইতালি থেকে ছুটে এসেছিলেন অধ্যাপক ডাক্তার মেশিমো বালসানো। তিনি বলেন পৃথিবীর অধিকাংশ দেশে চিকিৎসা পরিষেবার খরচ এতখানি বেড়ে গিয়েছে যে বেশ কিছু অসুস্থের চিকিৎসা করা এখন অত্যন্ত কষ্টসাধ্য ব্যাপার হয়ে গিয়েছে। তবে ভারতের মতো সংখ্যা বেড়ে চলেছে সেই বিষয়টি আমি প্রথম জানতে পারি আমার বিশিষ্ট বন্ধু ডাক্তার উজ্জ্বল কান্তি দেবনাথ এর কাছ থেকে। এছাড়াও এদিনের এই কর্মসূচিতে তাৎপর্যপূর্ণ বক্তব্য রাখেন জগন্নাথ গুপ্তা ইনস্টিটিউট অফ মেডিকেল সাইন্স এর প্রিন্সিপাল ডাক্তার শান্তনু কুমার ত্রিপাঠি। ডক্টর দেবনাথী অট্টাচার্য, ইংল্যান্ড থেকে আসা ডাক্তার লাবনী।

13th May 2024

Community Awareness Program at Maheshtala



ACADEMIC ACTIVITIES in 2024

1. Educating Residents
2. Writing papers from the OSS database
3. Training surgical techniques for Fellows
4. Training ODAs and Nurses

Educating Residents



Collaborations

HARVARD GLOBAL ORTHOPAEDIC COLLABORATIVE



**HARVARD GLOBAL
ORTHOPAEDICS COLLABORATIVE**
HARVARD COMBINED ORTHOPAEDIC RESIDENCY PROGRAM



Operation Straight Spine Trust

1. Dr. Kiran J. Agarwal-Harding on behalf of the Harvard Global Orthopaedics Collaborative and the Global Orthopaedics Initiative, Department of Orthopaedics, Beth Israel Deaconess Medical Center, Boston, MA, United States ("HGOC team"); and
2. Prof (Dr) Ujjwal K Debnath on behalf of Operation Straight Spine Trust, with headquarters at 30 Ballygunge Place, Kolkata, India ("OSS team");

Prof (Dr) Ujjwal K Debnath, Dr. Kiran J. Agarwal-Harding, Kelsey Brown, Alaleldin Ahamd, Girish Swamy, Massimo Balsano, Manon Pigeolet, Hao-Hua Wu, Pittman J. **Surgical Management of Adolescent Idiopathic Scoliosis through Medical Missions in India: An Operation Straight Spine Overview (for Global Spine J)**

Prof (Dr) Ujjwal K Debnath, Dr. Kiran J. Agarwal-Harding. **Economic Benefits of Scoliosis Surgery in low-income and middle-income groups in rural and semi-urban India in short-term surgical missions**

Papers in Collaboration with Dr Alaaeldin Ahmad

Dr Ujjwal K Debnath, Dr Alaaeldin Ahmad, Dr S Chakraborty. **Active Apex correction by Mini open approach in Early Onset Scoliosis (EOS) children in rural India**

Dr Ujjwal K Debnath, Dr Shweta Bhyri, Dr Biplab Majhi, Dr Alaaeldin Ahmad, Dr S Chakraborty. **Vitamin D deficiency and surgical outcome in adolescent idiopathic scoliosis in low socioeconomic status in rural India.**

Dr Ujjwal K Debnath. **How I do my Ponte Osteotomies in Adolescent Idiopathic Scoliosis.** (Video presented at SSWB meeting 2023)

Dr A Pandey, Dr Ujjwal K Debnath. **Posterior selective fusion with Pedicle instrumentation in Thoracic AIS.**

Dr N Mukherjee , Dr Ujjwal K Debnath. **Single stage posterior hemi vertebrae resection with instrumented correction of congenital scoliosis in children.**

Dr S Sen, Dr Ujjwal K Debnath. **Scoliosis as a social curse - patients, families and social stigma.**

Debnath UK, Chakraborty S, Prasad R. **Corrective osteotomy & fusion in an adolescent male with painful Type V Coccyx deformity- a case report** (Accepted by Indian Spine J)



Training Fellows, Residents & Nurses



OSS follow up clinics are held for post op patients at 3,6 and 12months at JIMSH and OSS clinic under supervision of Prof(Dr) Ujjwal K Debnath

Follow-up OSS Clinic (Sep/Oct 24)



7th Sept 2024



Awarded by 'Journalist Union of India' for "Health Awareness & social development" for making a profound impact on lives of many by his relentless contribution to betterment of society.

Papers under review

Debnath U K et al. Clinical and economic benefits of short-term surgical mission surgeries in Spinal deformity surgery esp. Adolescent Idiopathic Scoliosis under Operation Straight Spine program in India

Untreated severe scoliosis of 70° or more is associated with increased mortality as compared with the normal population (Pehrsson). Most patients with scoliosis of 60° or more present with major spinal deformity, restrictive lung disease, and, if left untreated, rapid progression of the deformity (Kim). To leave a scoliotic spine to its natural fate, is cosmetically unacceptable (rib hump, waist asymmetries, shoulder imbalance, etc.) for many patients ($50\text{--}80^\circ$ curves) or leads to significant cardiovascular and pulmonary impairment in case of severe curves $>80\text{--}90^\circ$. The majority of AIS patients experienced more pain and time away from activity than their normal counterpart. Therefore, not treating scoliosis effectively and timely can mean a lower quality of life and even shorter life span. Surgical treatment of correcting these deformities require implants which are expensive. Pedicle screw instrumentation (PSI) provides better biomechanical fixation in AIS surgery than hybrid instrumentation using hooks, wires, and lumbar pedicle screws (Ledonio).

The relative paucity of detailed information and lack of consensus on the best strategy to improve surgical care for AIS patients in low income groups in developing nations has led to this query. Current evidence

indicates many surgical procedures are as cost-effective as many commonly prioritized global health interventions.

The increased activity in charitable surgical platforms resulting from these findings compels policymakers and donors to determine the most effective method of improving access to surgical care for low-income populations. The review found short-term missions can effectively perform simpler procedures but are less appropriate for more complex surgeries (1). Short-term surgical trips platform sends surgeons, anesthesiologists, nurses, and/or supporting staff—along with, at times, surgical instrumentation and technology—into LMIC hospitals and clinics for short periods. Often, these NGOs perform a restricted set of surgeries, relying on local physicians for follow up. The effectiveness of short term surgical mission is limited to simple surgeries. It is common view that the condition most commonly treated by the charitable sector, the more complex the surgery, the more unsatisfactory the results.

The economic benefit of operations are estimated by the human capital approach method. The human capital approach provides a conservative estimate by multiplying the number of DALYs averted by the National Income per capita.

The cost-effectiveness ratio was calculated by dividing the total cost during the one-year study period by the estimated total DALYs averted by all surgeries performed. The total operating costs of the surgical

center included wages for local staff, travel expenses for volunteers, equipment and supplies (including shipping), depreciation of building and infrastructure, repairs and maintenance, and utilities. Included the estimated value of all donated equipment and supplies as well as the opportunity cost of foregone salary for all volunteers, including surgeons, nurse anesthetists, nurses, and technicians. Similarly, we included estimates for expenses incurred by patients and their caregivers in order for the patient to receive surgery, such as food, transportation, and lodging.

According to the World Bank, in 2014 there were estimated to be 7 surgical specialists in the workforce for every 100,000 people.⁴ Although this number may have increased since this estimate, there is a gap between the need for surgical management of spine conditions and surgical workforce availability. India's health expenditure as a percentage of GDP in 2023-24 was 1.9% which has improved from 0.98% in 2014-15. The total health expenditure per capita, which indicates health expenditure per person in India at current prices for 2021-22, was calculated to be Rs 6,602 (approx. USD\$80). This marked an 82% jump from Rs 3,638 (approx. USD\$43) in 2013-14, the report released by the National Health Authority of India. About half of all healthcare expenses are borne directly by households. Lack of medical personnel

disproportionately affects healthcare in rural areas. Between 2005 and 2022, shortfall of specialists such as surgeons in rural areas increased from 46% to 79%. Therefore, surgical patients e.g. spinal deformity in children and adults go untreated.

The average cost of surgical treatment for Scoliosis in India ranges from USD\$9,000 to USD\$12,000, is significantly lower than the expenses incurred in the United States, where it can reach USD\$100,000 to USD\$250,000. Itemized costs related to surgery have increased with technological advances. Although these results only show changes in costs for AIS surgery, but a greater challenges are faced by the healthcare economy (Kobayashi).

To help bridge this gap, Operation Straight Spine (OSS), a charitable organization that aims to provide spinal surgery and medical services to individuals in India who would not be able to access care otherwise.⁵ OSS pledged to improve the quality of life to children and young adults with spinal deformities through surgical interventions and related activities that strengthen the underserved communities (both rural and urban). The aim of this paper is to detail the outcomes of the OSS surgical missions over the past 17 years and detail the costs associated with operating OSS.

20th-22nd Nov 2024

Invited Keynote speaker at British Scoliosis Society annual meeting at Birmingham,UK

British Scoliosis Society Annual Conference

21st & 22nd November 2024

Thursday 21st November 2024

Time	Session Detail	Location
07:45-08:30	REGISTRATION, EXHIBITION & POSTERS	Foyer & Affinity 2
08:30-08:45	OPENING ADDRESS Girish Swamy & Lennel Lutchman	Affinity 1
08:45-09:30	PAPER SESSION 1 - Adolescent Idiopathic Scoliosis <i>Moderators: Andrew Cook / Tom Marjoram</i>	
11	Assessment of Shoulder Imbalance in Scoliosis: Reliability and Validity of Radiographic and Clinical Parameters Presenter: Pankaj Kandwa	
17	Long-Term Follow-up Reports Non-Utility of Nonsurgical Management in Moderate Adolescent Idiopathic Scoliosis: A Comprehensive Meta-Analysis Presenter: Eduardo Hevia	
56	A Comparison of the Efficacy and Fusion Levels Required between Anterior Fusion versus Posterior Spinal Fusion for the Treatment of Adolescent Idiopathic Scoliosis Presenter: Jack Williams	
65	Immediate Post-Operative Recovery Assessment with QoR-15 in AIS Patients on ERAS Pathway Presenter: Eslam ElSherif	
74	Evaluation of Scoliosis Brace Wear and Adjustment Needs in Initial Treatment Phase for Adolescent Idiopathic Scoliosis Presenter: Charalampos Geremtzes	
76	Vertebral body tethering and postoperative thoracic kyphosis in adolescent idiopathic scoliosis patients: preliminary long-term results and a comparison to posterior spinal fusion Presenter: Krunal Patel	
	<i>Final Questions & Discussions</i>	
09:30-10:15	KEYNOTE LECTURE: Growth Guided Experience: My journey into the Active Apex Correction Technique Speaker: Alaa Ahmad <i>Moderators: Girish Swamy / Colin Nnadi</i>	
10:15-10:45	PAPER SESSION 2 - Growing Spine <i>Moderators: Adrian Gardner / Alex Gibson</i>	
13	Does growth sparing techniques improve lung functions in idiopathic EOS Presenter: Sai Gautham Balasubramanian	
45	Outcomes of a 5-Year Project to Improve Coding Accuracy for Paediatric Spinal Procedures Presenter: Conor Boylan	

Friday 22nd November 2024

Time	Session Detail	Location
07:45-08:30	REGISTRATION & EXHIBITION	Foyer & Affinity 2
08:15-08:45	BASIS Study progress meeting <i>Speakers: Ashley Cole & Katie Ridsdale</i>	Affinity 1
09:00-10:00	PAPER SESSION 5 – Miscellaneous & Adolescent Idiopathic Scoliosis <i>Moderators: Niall Eames / Nick Steele</i>	
12	Adjacent Segment Disease following Long Segment Instrumentation of Lumbar Spine: A Finite Element Analysis Presenter: Pankaj Kandwal	
41	Surgical Complications in Neuromuscular Scoliosis Surgery: Systematic Review and Meta-Analysis of the Last Ten Years. Presenter: Mostafa Elmeshneb	
53	A Pre-Operative Surgical Education (POSE) Programme Part of Surgical Pre-Assessment Increase Preparedness and Understanding for Surgery, Reduce Anxiety, and Associated with Reduced Length of Stay Presenter: Jonathan Lucas	
58	Can postoperative Cobb and pelvic obliquity corrections be predicted using supine traction X-rays in non-ambulatory patients with cerebral palsy fused to L5? Presenter: Jonathan Lucas	
60	Single Sitting Correction of Severe Rigid Scoliosis using a Rib-Spine Construct with Gradual Internal Distraction. Presenter: Ahmed Sh Amer	
63	Late presentation of scoliosis, does deprivation and demographics influence the Odds? Presenter: Ahmad Hussien	
73	Long Term Surgical Outcomes of kyphectomies in Spina Bifida (Myelomeningocele) Presenter: Aman Sharma	
83	Reducing effective radiation dose from whole spine X-rays using a high kV protocol. Presenter: Vinay Jasani	
	<i>Final Questions & Discussions</i>	
10:00-10:45	KEYNOTE LECTURE: Global Outreach Scoliosis Program: the need of the hour. Our Experience and future collaborations Speakers: Ujjwal Debnath <i>Moderators: Girish Swamy / Jayesh Trivedi</i>	
10:45-11:15	Pregnancy and Scoliosis: Challenges and experience	

5th KOLKATA SPINE DEFORMITY CONFERENCE

Date - 2nd March 2025 (Sunday) , Time - 10 AM to 4 PM
Venue : JIMSH, Budge Budge, Kolkata

18th OSS 'OPERATION STRAIGHT SPINE'

MISSION

SPINE DEFORMITY SURGICAL WORKSHOP

3rd – 8th March 2025

Under aegis of



WBOA President
Prof (Dr) A. K. Bera

WBOA Secretary
Dr Rajeev Raman



Before Operation



After Operation

OPERATION STRAIGHT SPINE TRUST



Hope Lives here

President : Piyali Roy Burman
Chairman : Prof (Dr) Ujjwal Kanti Debnath



Jagannath Gupta Institute of
Medical Sciences & Hospital

Chairman : Mr K K Gupta
Vice Chairman : Dr Balram Gupta

Debnath UK et al. Vitamin D deficiency and surgical outcome in adolescent idiopathic scoliosis (AIS) in low socioeconomic group in rural India.

Introduction- Patients with adolescent idiopathic scoliosis (AIS) have a higher prevalence of vitamin D deficiency compared with healthy peers.

Hypothesis- Vit D deficiency in AIS patients do not have good functional outcome after posterior instrumented corrective spinal fusion.

Methods- A prospective consecutive study of sixty-two (62) children who underwent surgery for AIS had preoperative measurement of Vitamin D levels [serum 25-hydroxyvitamin D (ng/mL)]. Postoperative AIS patients were followed up for 2 years after surgery. Data on history of back pain, socioeconomic status, curve magnitude, age and gender were recorded. Patients were categorized based on vitamin D level: deficient (<20 ng/mL), insufficient (20 to 29 ng/mL), or sufficient (≥30 ng/mL). The correlation between vitamin D levels and Scoliosis Research Society (SRS) -22

scores was analyzed using multivariable analysis and pair-wise comparisons using Tukey method.

Results- Sixty-two (62) AIS patients (47 Females and 15 Males) were enrolled who underwent posterior instrumented spine fusion. Mean age at time of surgery was 15.24 ± 4.5 years. Major coronal curves had a mean of 68.08 ± 12 degrees preoperatively and 12.19 ± 4.2 degrees postoperatively. It was found that 35 (56.45 %) of patients were vitamin D deficient, 23 (37.09 %) were insufficient, and 4 (6.45 %) were sufficient. Although there was no correlation between vitamin D level and Pain, Mental Health, or Satisfaction domains ($p > 0.05$), vitamin D-deficient patients were found to be younger than 18 years of age ($p < 0.001$) and had lower SRS-22 function ($p = 0.010$), Self-image ($p = 0.049$), and total scores ($p = 0.007$).

Conclusion- AIS patients with vitamin D deficiency (<20 ng/mL) are more likely to be younger age at time of surgery, and report lower function, self-image, and total SRS-22 scores postoperatively.

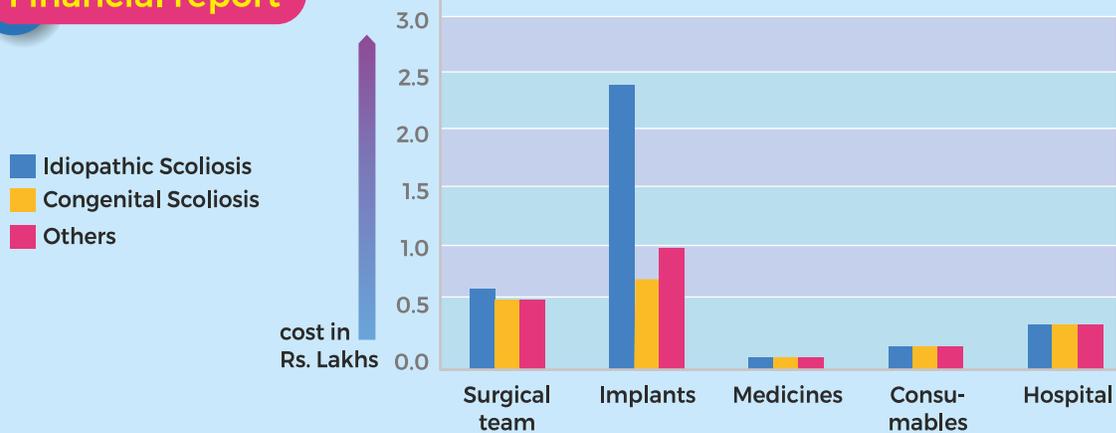


SNAPSHOT of Operation Straight Spine Trust

1st Global outreach program for spinal surgery in India since 2006



Financial report



Average cost of surgery per patient

Adolescent Idiopathic scoliosis: INR 5 Lakhs
Congenital scoliosis: INR 2 Lakhs
Other deformity (e.g. TB): INR 2 Lakhs

Average cost of team from abroad

Air fares x 10 member team : INR 12 Lakhs
Fooding & lodging x 14 : INR 5.2 Lakhs

Average cost of 10 spinal surgeries

[AIS (6), Congenital (2), Others (2)] :
INR 49.2 Lakhs

Operational & Admin expenses

INR 1.2 Lakhs

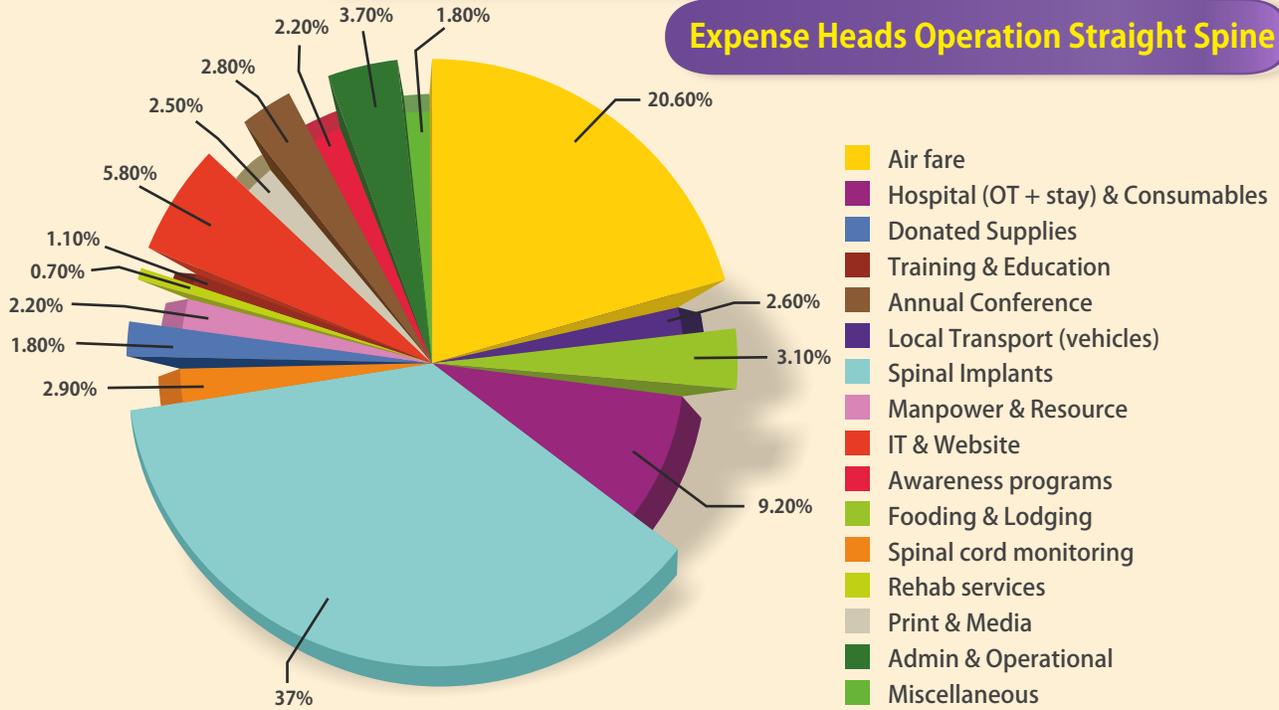
**Average annual costs :
INR 50.4 Lakhs**



SNAPSHOT of Operation Straight Spine Trust

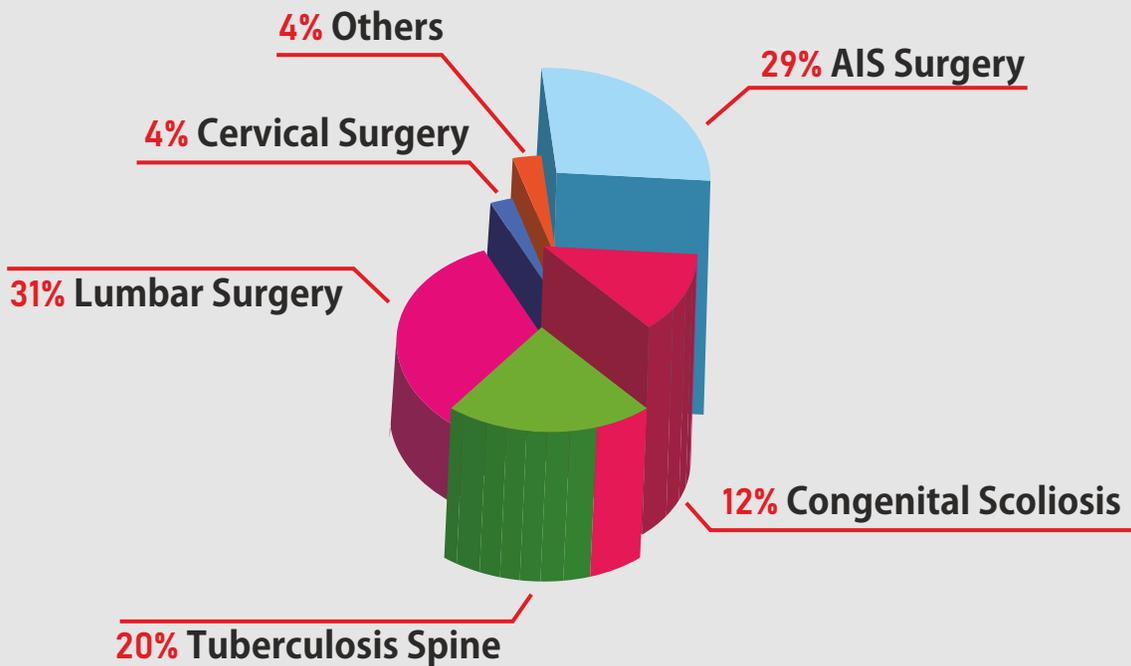
1st Global outreach program for spinal surgery in India since 2006

Expense Heads Operation Straight Spine



OSS Surgery : 2006 - 2024

[18 years]



ACKNOWLEDGMENTS

Our accomplishments would not be possible without the support of our donors, volunteers and partners. We extend our deepest gratitude. Your support fuels our mission and inspires us to reach greater heights.

Our Sincere thanks and acknowledgements goes to :

Operation Straight Spine Trust, Kolkata, India

JIMSH, Budge Budge, Kolkata, India

West Bengal Health Services

Tollygunge club Pvt Ltd.

Rishabh Saraogi, Calcutta South round Table 17

Cadilla pharmaceuticals

Jayon, India

Universal Nutriscience, India

Qurewell Health Science Pvt Ltd., India

Sundyota Numandis, India

Orthoend, India

Lupin, India

Yam Medical Supplies Medtronics pvt ltd.

India Sanofi, India Pharmed, India

Emirates Airlines Foundation, Dubai, UAE

Veedol India (Tidewater Oil India Pvt Ltd.)

Norfolk and Norwich NHS Trust, UK

British Scoliosis Society, UK

Hem-Kamal Chemist & Druggist

Ventura Wellness Clinic

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Ashutosh Jaiswal (Century Cement)

Gesco, India

Pharmed, India

Intas, India

Sun Pharma, India

Brisk Pharma, Kolkata

Pharmed Ltd ACE, India

HOW TO DONATE FOR OSS

Your donation helps to pay for the cost of equipment, supplies, medication and transportation.

You can go to online

<https://oss.org.in>

Please go to window
"Donate"
You will find the following
which is self explanatory

OR

You can send cheque favouring

Operation straight spine

Add : 30, Ballygunj place, Kolkata 700019

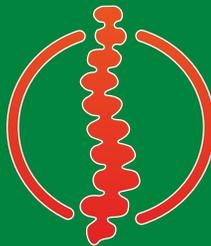
once you have donated inform by

email : operationstraitspine@gmail.com

The screenshot displays the 'donate using qr code' interface on the OSS website. It features a table with columns for 'cost', 'units', and 'amount'. Two rows are visible: 'General Fund (more)' and 'Corpus Fund (more)', both with an 'enter an amount' field and a '₹ 0' value. A 'total : ₹ 0' is shown at the bottom. Below the table, there are icons for 'verified & secured', 'UPI payment', 'QR code', and 'international gateway'. A 'donate now' button is present, along with the 'powered by danamojo' logo. A green banner reads 'make a quick donation using upi app'. Below this, instructions state 'open upi app > scan qr code > make payment. confirm details > get receipt'. A large QR code is shown on the left, and on the right, there are icons for various payment methods: GPay, PAYTM, WhatsApp, and FB. A form on the right asks for 'upi ref no.', 'upi ref no.', 'amount', and 'amount', with a 'confirm' button at the bottom.

THANKS FROM

OPERATION STRAIGHT SPINE TRUST



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