



Spine Association of Gujarat's News Letter

Spine Times

Vol.1

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VICE PRESIDENT Dr. G. D. Tharadara JT. VICE PRESIDENT

Dr. Subir Jhaveri

SECRETARY Dr. Ajay Krishnan

JT. SECRETARY Dr. Niraj Vasavada

TREASURER Dr. Hitesh Modi

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PATRONS

EXECUTIVE COMMITTEE MEMBERS Dr. Mayur Vala | Dr. Jigar Anandji wala | Dr. Rakesh Luhana

Dr. M. M. Prabhakar | Dr. P. R. Patel

President's Message



Dear Colleagues,

Wish you all a very happy, healthy and prosperous 2019.

Every new year brings with it the drive to make new resolutions that enrich our lives in some way or the other. One of the resolutions that our association has made is to publish this news letter at regular intervals. Let me explain why.

I have seen our association right through all its stages of growth - conception to inception to development. Being the country's pioneer regional association formed by visionaries in the field of spine surgery, the onus is on us, Gujarat's torch bearing spine surgeons, to keep the flag of our association flying high. It was the vision of our Founder President Prof. Dr. Dinubhai Patel to form this association in 1996 with the aim to develop medical interventions in spine as a speciality and spread awareness about spine surgery throughout Gujarat. As a result this association was formed with orthopedic and neurosurgeons with special interest in spine surgery. As a growing orthopedic surgeon at that time, I became a part of the First Executive Committee of SAG and since then. I have been associated with all its activities.

The association has blossomed in these 23 years from an association formed by surgeons having a special interest to a fully dedicated institution of spine surgeons. The time has come to create a wider platform to accommodate the growing interest and contributions, to facilitate a wider circle of conversations and to acknowledge widely the immense commitment of the members. The young members of our association are full of enthusiasm, ideas & knowledge and are wonderful assets to our association; I believe that they will provide the thrust that will take our association to newer heights.

The SAG newsletter is both an expression of this belief and a reflection of the new-age progressive spirit of the association. It will be a first-of-its-kind amongst the regional spine associations of the country wherein effort is made to keep members of our association closely knit by giving each an opportunity to contribute. Regarding the content, not only it will have one informative article but also a selected case study giving out a crisp scientific message and another with a strong social message —both efforts to harness the best of science in our work and to contribute to the community. Apart from this, the news letter is intended to be a mine of relevant information and the channel to acknowledge the good work of our members.

Whatever we do, we do it as best as we can. Let this news letter also be an excellent example of that.

Warm regards, **Dr. Amit C. Jhala**President, Spine Association of Gujarat

Secretory's Message



As we move into this new year of 2019, I would like to thank every member for being part of our society.

I would especially like to thank everyone for their never ending enthusiasm and passion. Without the support of our members and affiliated societies, we would not have progressed this far. In the coming years, we hope to continue to contribute on a larger scale to the education and training in the field of spine through multiple scientific activities.

As we grow, we will continue to uphold our SAG mission to advance the science, art and practice of spine surgery and promulgate the maintenance of professional standards in order to provide the best professional care to patients with spinal problems in the Gujarat. We wish to contribute to health policies in India, lay down standards of care and protect our members.

"नहिज्ञानेनसदृशंपवित्रमिहविद्यते"

(Nothing is more sacred than the knowledge)

Yours Sincerely **Dr Ajay Krishnan**Secretory, Spine Association of Gujarat

Spine Times News Letter Editors

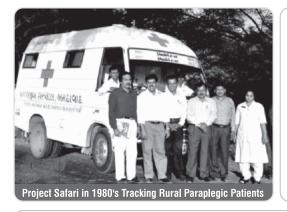
Dr. Ajay Krishnan • Dr. Niraj Vasavada • Dr. Rakesh Luhana



HISTORY OF SPINE ASSOCIATION OF GUJARAT



Prof. Dr. Dinubhai A. Patel, a versatile and wonderful human being, a great academician, a visionary, a painter, a cartoonist, a poet with literary interests, a humorist and a great orator was instrumental in persuading the Government of Gujarat to initiate and make the Paraplegia Hospital, now known as the Government Spine Institute in Ahmedabad within the Civil Hospital Campus along with then Superintendent of Civil Hospital, Dr. C.I.Jhala.



The centre offered comprehensive care in form of dedicated orthopedic surgeons, Urologists, plastic surgeons, physiotherapists, occupational therapists, orthotists, social workers and vocational trainers. Dr. Patel's vision was to make a world class rehabilitation centre like Stokes Madivelle by Ludwig Guttman. He went to Cardiff, UK in those days to replicate their model here.

Armed with his great interest in spine surgery, Dr. Patel attended the first Meet of ASSI held in Mumbai under the aegis of Dr. K. T. Dholakia. The association's first conference was held the very next year in Ahmedabad in 1987. It was a 3-day affair held at Gujarat Cancer Research Institute with 300 attendees and organised by Dr. D.A. Patel, Dr. Jyotindra Pandit, Dr. Pankaj R. Patel and Dr. M.M. Prabhakar.

The academic initiative was started and taken forward by Dr. Dinubhai A. Patel. Since 1990, 6 monthly meetings have been held and Dr. V. T. Ingalhalikar and Dr. S.Y. Bhojraj have attended all of them, supporting Dr. D. A. Patel. In 1992, the first major Annual Meeting was conducted in Ahmedabad.

Initially the Spine Association of Gujarat was known as Gujarat Spine Association and was founded in 1996. The Founder-President was Dr. Dinubhai A Patel, the Vice Presidents were Dr. P. R. Thakore and Dr. Sumant Shah, the Secretary and Joint Secretary were Dr. Pankaj R. Patel and Dr. M. M. Prabhakar. The Executive Members were Dr. Nagpal, Dr. H.B. Bhalodiya, and Dr. Amit C. Jhala. The formation is actually the oldest local state chapter of India in spine surgery!

In 2007, GSA conducted ASSICON under the aegis of Dr. Bharat Dave as the Secretary.



Assicon 2007 Inaugration by

Dr. P. R. Patel, Dr. S. Y. Bhojraj, Dr. S. Rajasekaran, Dr. Bharat R. Dave, Mrs. Pushpaben Dinubhai Patel, Dr. P. R. Thakore, Dr. P. I. Joshi, Dr. M. M. Prabhakar



At the same time, Dr. K. M. Shah from the Shardaben Hospital, Ahmedabad, was instrumental in starting Scoliosis surgeries and popularized segmental spinal instrumentation in Gujarat. Dr. P. N. Nagpal was another pioneer who in the 90s contributed to a great extent to work in the field of spine surgeries in Vadodara. Informally and around the same time, Dr. P. N. Nagpal, Dr. R. N. Naik, Dr. Y. J. Desai, Dr. Nagesh Bhandari and Dr. Pravin Kanabar worked relentlessly for the development of spine speciality in Gujarat at Smt NHL Municipal Medical College, Ahmedabad and mentored many students.



Over the years, regular clinical meetings have been held and many live surgical demonstrations have been done. A regular Guest Faculty has been Dr. V.T. Ingalhalikar who would often single handedly run the show. Other faculties who contributed were Dr. S.Y. Bhojraj and Dr. D.D. Tanna. The live surgical demonstrations were Lumbar Discectomies, Lumbar Laminectomy, Classical PLIF with Tricortical Graft and Pedicle Screws, Anterior Cervical Discectomy and Fusion, Posterior Transpedicular approach for Spinal Tuberculosis with Sublaminar wires and Hartshill rectangles and Transthoracic approach for Spinal Tuberculosis. Many Cadaveric workshops on all spine exposures, pedicle screws and anterior cervical exposures were done at B. J. Medical College, NHL Municipal Medical College and Jamnagar Medical College. The meetings were also held outside Ahmedabad as part of awareness programs in the smaller cities of Gujarat like Vadodara, Junagadh, Jamnagar, Bhuj, Mehsana, Bhavnagar and Surat. These meetings were not only educative but also were great social gatherings where the surgeons bonded like one big family. Dr. M. M. Prabhakar and Dr. Pankaj Patel were largely instrumental for these meetings from the days when Dr. Patel was the President and have been very instrumental in strengthening Spine Association of Gujarat — the brainchild of Dr. Dinubhai Patel.

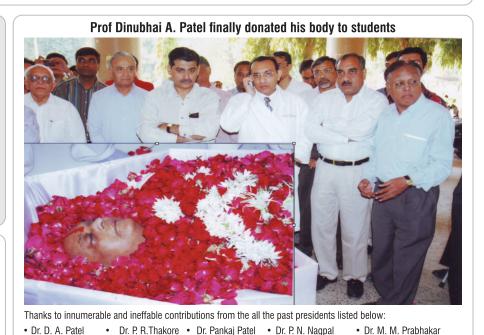
Having said that, one cannot forget the great contribution of Secretariat of the then Gujarat Spine Association, which was at time a paraplegia hospital and worked quietly in the background, Mr. Surendram - Personal Secretary of Dr. M.M.Prabhakar. During the same time, there were never-ending and persistent contributions from Dr. G. D.Tharadara and Dr. Amit C. Jhala to the informal organisation. Due to these efforts combined with those of Dr. Dinubhai Patel, the two most popular journals of today, (extremely costly in an era of no internet) were available at (and only) Paraplegia hospital. They were the "Spine" and "Paraplegia" now known as "Spinal Cord" (official journal of International Spinal Cord Society). From those journals and through the Gujarat Spine Association, a journal abstract booklet of selected articles was also distributed in name of "Spine Digest".

Then in 2001, in the wake of the devastating earthquake, traumatic cases forced everyone to rise to the occasion. Young practicing spine surgeons ended up working on more spine cases than they had imagined and the hands-on experience added to their versatility and indirectly contributed to the rise of number of exclusive spine surgery specialists.

After 2002, the next generation of spine surgeons took over the challenge of developing the society. The association was renamed and registered as the Spine Association of Gujarat (SAG) due to logistical needs in 2006-7 and PAN was obtained during the tenure of Dr. Bharat R. Dave and Dr. G. D. Tharadara. They brought together the scattered members by creating a directory and membership certificates. The initiative to start a Gujarat spine registry to maintain and build a common pool of data for prospective research was laid by Dr. K. P. Pathak and Dr. Subir N. Jhaveri. Besides Government institutes, the private institutes under Dr. Bharat Dave and Dr. Amit C. Jhala were the pioneers to start exclusive work in spine speciality and take it to the grassroot level across the country along with many fellows trained exclusively in the field of spine by them. Another unique SAG legacy is the close association it forsters between orthopaedic surgeons and neurosurgeons. In today's time nationally or state wise neurosurgical and orthopaedic spine societies do not work together and actually sit on the opposite sides of the table on many occasions. It is really appreciation worthy that Dr. P. R.Thakore and Dr. Mukesh Patel in spite of being neurosurgeons have held the posts of Presidents in an association dedicated to spine specialists. Other associated societies in Ahmedabad have also contributed to SAG whenever needed. The members of both AOS(Ahmedabad Orthopaedic Society) and GOA (Gujarat Orthopaedic Association) have participated without fail in most of our programs. So have all the members of SONG (Society of Neurosurgeons of Gujarat); their special contributors have been Dr. Dipak Patel and Dr. Y. C. Shah, to name just two.



It was a dedicated centre for comprehensive rehabilitation care for paraplegics – the first of its kind and the only one in India at that time. The year was 1978 and Mr. Morarji Desai, the then Prime Minister of India inaugurated the hospital.



• Dr. Bharat R. Dave • Dr. K. P. Pathak

• Dr. Yogesh Parikh • Dr. Mukesh Patel • Dr. R. N. Naik



Memento of First ASSICON 1987 under Dr. Dinubhai A. Patel



ASSICON 2007



The 2007 Conference Memento Maintainined the Legacy and Spirit of 1987 Its Hand crafted and painted!

Minimally invasive Spine Surgical Society of India and the first MISSICON was held under Secretary, Dr. Amit C. Jhala



Left to centre: Dr. Amit C. Jhala, Dr. P. R. Patel, Dr. M. M. Prabhakar

At centre Jay Narayan Vyas: Health minister at inauguration

Right to centre: Dr. G. D. Tharadara, Dr. Bharat R. Dave, Dr. Arvind Jaiswal



SAG ACADEMICS

Annual Program

This full day program is held once a year usually in June-July and focuses on the bigger vision of SAG and includes a General Body Meeting and a look at the SAG work audits. This year, this grand event was held on July 29, 2018 and 143 surgeons attended it. Dr. Neil Cleaver (Gold Coast-Australia) was the international faculty, while the national faculty included Dr. S. K. Srivastava (KEM-Mumbai), Dr. Ranjith Unnikrishnan (KIMS-Kerala) and Dr. Anand Naik (Medanta - New Delhi).



Quarterly Programs

This is a half/one day program held every 4 months in Ahmedabad on specific themes or topics. This includes the Annual Meet and the SAG Outreach Program. In 2017-18, practically the other 2 programs were:

1. Safe Spine Surgery Date: July 16, 2017

National Faculty: Dr. Ajoy Shetty (Ganga Hospital-Coimbatore),

Dr. Bhavuk Garg (AllMS-New Delhi) & Dr. Thomas Kishen (Manipal-Banglore)

2. Research Innovations Ethical Market Date: October 1, 2017

National Faculty: Dr. Ashok Shyam

(IORG, Research Head: Sancheti-Pune) & Dr. Kshitij Chaudhary (Reliance-Mumbai)

International Faculty: Dr. Anand Aggraval (Ohio-USA) conducted a webcast.

This year, with ASSICON 2019 in January, the quarterly meets have been cancelled; only the Annual Meet will be held around April.



SAG Outreach Program

Once a year, a big SAG team travels to one destination outside Ahmedabad to collaborate with the local ortho-spine-neuro society for a half/full day program. This is called the SAG Outreach Program and its aim is to reach the grassroot level and improve spine care across Gujarat. The whole program is organised by SAG and so far, they have been held in Mehsana, Jamnagar, and Surat. The last program was conducted with the Rajkot Orthopaedic Society in November 2018 under leadership of Dr. Hitesh Modi and Dr. Amish Sanghvi.



SAG outreach program with ROS on the theme: Let's learn surgical steps in spine surgery



SAG Collaborative Program

This is a program conducted on an invitation from any ortho or spine or neuro organisation or company or speaker who is already conducting a short program of 2 hours or half a day. In such an instance, a SAG representative goes and adds value to the program. Such events are organized by the local body and the SAG participants are valued guest speakers. On October 21 2018, SAG participated in one such excellent event organised by the Baroda Orthopaedic Association on the theme Dilemma/Decision-making in Spine. Dr. Jinil Doshi was instrumental in organising the conference, Dr. Gautam Zaveri (Mumbai) was from the national faculty and Dr. Bharat R. Dave, Dr. Subir Jhaveri and Dr. Hardik Suthar represented SAG.

Monthly Learning Meet (MLM)

This meet is conducted on the last Friday of every month under a new MLM Marshal and Coordinator, Dr. Mayur Vala. It is a relaxed 'dine and learn' event that runs over 2 hours and where the Gujarat Medical Council Credit points are also awarded. The occasion also offers an opportunity for youngsters to come forward and represent SAG. 5 unique meetings were successfully hosted till now in 2018.

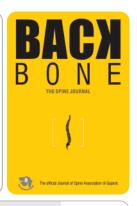




SAG Vision in progress:

SAG Spine Journal - Editor-in-Chief: Dr. Hitesh Modi

Backbone, the spine journal keeps in mind the increasing trend towards specialization in spinal surgery. It is devoted to spine surgery and all related para medical branches, including functional and surgical anatomy of the spine, bio mechanics and pathophysiology, physiotherapy, pain management, neurology and diagnostic/surgical procedures. The goal is to provide an integrated and balanced view of research with treatment and enhance collaboration among specialists worldwide. Work on the journal has already begun and the publishing is being done by IORG. The aim is to release 2 issues in the first year and soon progress to 4 and then scale towards inclusivity in Pubmed and other indexing resources. It will encourage original basic science/clinical articles, case reports, technical notes, reviewed articles & invited articles.



SAG Fellowship applications will be invited soon.

The purpose of an SAG Spine Fellowship is to provide additional and a more complete experience for trained orthopedic and neurosurgeons interested in going further in spinal surgery. Quality, consistency and academic qualifications are key to any fellowship program and we ensure our program achieves all of these.

The Fellows will be mentored by selected spine surgeons from the SAG Centres of Excellence at accredited, academic institutions in Gujarat. Each institution will bring unique aspects to the fellowship experience depending upon the clinical focus and the expertise of the hosting surgeon. Special interests of the Fellows will be taken into consideration by the host institution as well, resulting in a complete and well balanced spinal experience. The host centre will ensure that the Fellow becomes conversant in the principles, indications, planning, techniques and complications of simple to complex aspects of spinal surgery.

The Fellowship is a 3 months program and one teacher will be assigned as the Chief Guide, who will mentor and guide the student in his/her selected research topic. The research topic will need to be specific and the research will have to be completed and submitted for publication before the Fellow is awarded the Fellowship Certificate. All accepted applicants are expected to be fully committed to the program. The SAG Spine Excellence Centers, namely the hospitals or clinics throughout Gujarat that will be accredited to participate will be declared soon.

A website about SAG key activities with in depth and comprehensive information both for members and patients is coming soon on URL

www.spinegujarat.in



Spine Surgery; Safety before numbers

by Prof. S. Rajasekaran

Safety is a big word in medicine and is ofcourse applicable to spine surgery as well. Spine surgery is one of the fastest growing sub-specialties with an increasing number of surgical and non-surgical interventions. Many factors including modern life style, occupational factors have increased the incidence of back pain and the increasing involvement of the industry has ushered in numerous new implants and interventional procedures. Although these have improved the outcome for patients, spine surgery stands apart since it has a higher complication rate with an overall incidence of 16.4%. There are also frequent gaps in patient expectations and outcomes leading to a number of medico-legal law suits with the highest amount of compensation payment amongst all fields in orthopedics.

In a scenario where spine surgery is becoming more complex and challenging, it is important that the surgeon is well versed in all aspects of surgery and adopts the latest in technology to make the surgical procedure safe for the patient. Technologies like computer navigated spine surgery and intraoperative spinal cord monitoring are now proven beyond doubt to improve the safety and must be used wherever necessary and whenever possible. Similarly, safe anesthesia and equipments like cell savers improve the safety of surgery and are an absolute must in all major surgeries. The surgeon must not only be technology savvy but also be aware of the pros and cons of each new innovation so that they are used judicially.

But, safety in surgery goes beyond technology. Technology can help overcome some procedural challenges and intraoperative difficulties but safety applies to much more than just the procedure. It involves precision in all the steps of management of preoperative evaluation, preoperative preparations, patient education, informed consent, meticulous surgical procedure, good post-operative care and appropriate rehabilitation. A surgery involves multiple teams from different specialties leading to the potential for communication errors. This being the

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case, the spine surgeon must adorn the mantle of a leader and co-ordinate with everyone on the team and guide them to play their roles during the entire treatment. A detailed discussion on the nature of the disease, the need and type of intervention and the realistic outcome must be discussed at length so that the gap in the patient's expectations and outcomes is reduced. A perfect diagnosis is must and can be achieved only through adequate patient interaction and diligent clinical examination. No surgery, however well performed and any technology however well advanced, can give good results based on a wrong indication. The preoperative preparation must be adequate and be tailored to meet each patient's needs for no two patients are the same. Patients now live longer, have multiple co-morbidities and the procedures are more complex, therefore targeted and specific preoperative preparation is important. The entire team must be disciplined to follow all proven protocols such as 'Time out' protocol for every patient, correct timing and appropriate use of antibiotics, a good discussion of the actual plan and procedure with the anesthetist and a routine pre-operative check to confirm that all special equipments, implants and blood products that are essential for the procedure are available. The surgeon himself must be true to his conscience and be sure of his and his team's capability to perform the required procedure. The post-operative period must be managed well with high emphasis on pain management, adequate blood replacement, frequent neurological examinations and appropriate rehabilitation.

While there is a lot of emphasis on surgical techniques and implant usage, there is a relative lack of focus on education in safety for young surgeons. Safety cannot be learnt just from books but has to be learnt through good mentorship and learning by example from seniors. It is important that education in spine surgery must be proactive and imparted in the outpatient department, surgical wards and in operating theatres and not just in the meeting rooms of five star hotels and convention centres through instructional course lectures, sponsored lunch symposia or saw bone workshops. A lot of responsibility lies on the able shoulders of the professional bodies to form guidelines and supervise the teaching and training of young surgeons.

However good a surgeon or his team may be, there is always scope for improvement and this should be a continuous process. There should be a robust internal audit which periodically identifies areas where the entire team can improve itself for its own and the patient's good. To quote Aristotle, "Excellence is never an accident. It is always the result of high intention, sincere effort, and intelligent execution; it represents the wise choice of many alternatives - choice, not chance, determines your result" and it certainly applies hugely to safety in surgery also. To strictly maintain the unbroken chain of precautions at every stage of treatment and to improve safety of procedures in the interests of the patient must be the main aim of all surgical units.



Prof. S. RajasekaranMS, DNB, FRCS(Ed), MCh (Liv), FACS, FRCS (Eng), PhD
Chairman-Dept of Orthopaedics& Spine Surgery, Ganga Hospital
Chair, AOSpine International 2018-21

Past President, SICOT Past President, ISSLS Past President, ASSI

Future Challenges Of Spine Surgeons

by Prof. Sarat P. Chandra

As we move towards 2020, the digital age, we move towards a future where Artificial Intelligence is expected to rule the roost. Robots combined with the strength of AI are likely to take over many surgical procedures including those related to the spine.

We are now already in an era where the use of spine implants have peaked. We have every conceivable device in market, most of them providing overlapping technologies. We have a host of posterior implants (pedicle screws, lateral mass screws, plates etc), lateral devices (XLIF etc) or anterior devices (cages, plates etc). There is a lot of interest in biodegradable devices. Most of the technologies are now focusing on spine stabilization/fixation even though motion preservation devices are also available.

If we go through the patents available on website (Indian, PCT, USA), we come across amazing ideas for spine implants. However, with the regulatory authorities becoming more stringent (e.g. FDA in USA), it is progressively becoming more difficult to introduce new implant devices in the market. Currently it is estimated that if a new spine implant is to be introduced in USA after clearing all the FDA regulations, it would cost around 30 million USD! Thus, it is not surprising that no new significant developments are taking place for the development of spine implants. For example, a quick glance at patents available in US show some indigenous devices like rod-less lateral mass cervical screws. But again, they have not been yet commercialized because the high cost in their implementation (including cost for clinical trials and more) would not justify the replacement of existing cervical lateral screw system. The investment required for replacing an existing system cannot currently fetch profit let alone break even.

On the other hand, Type II instruments (e.g. instruments that aid surgery and do not require to be retained inside the body) have much easier approvals from FDA. Thus reducers, compressors and distractors etc. can be more easily introduced for clinical use. Robotic devices do come under this category and thus require less of regulatory hassles. Thus, it is not surprising that there is an explosion of robotic devices which are designed for use in spine surgery.

Having all these said this, whether we like it or not, we are living in a world open to 'market forces' where every treatment used at

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some point has to make business sense. Again, whether we like it or not spine implants are in the thick of this market.

We are treading on thin ice.

It is not difficult for an outsider to see that most of our educational activities are sponsored by manufacturers of spine implants. While most of the indications have been laid down rigidly for use of spine implants, there are grey areas e.g cervical laminoplasty vs laminectomy with fixation; low grade lumbar listhesis; anterior or posterior fixation of cervical spine. There is always the danger of inappropriate or over use of spine implants.

Overuse is to be strictly discouraged. Not only its over use is harmful but it can even wipe out a procedure with merits as well! The 'infamous' Walter Freeman (circa 1895-1972) proved this beyond doubt. A psychiatrist, he took to pre-frontal leucotomy after Egas Moniz showed that it was very effective for serious psychiatric disorders. In an era where effective anti-psychotic medications were unavailable, this procedure brought hope to thousands confined to mental asylums. In the beginning, Freeman employed a neurosurgeon to perform a modified version of the procedure, but later, he started doing these procedures himself. He was not qualified to do perform the surgeries; he neither wore gloves nor ever sterilized his instruments. He performed over 4000 such surgeries; 100 patients died and several others became permanently disabled. In time, the procedure was labeled as "one of the most barbaric mistakes of modern medicine".

In another instance of callous malpractice, spine surgeries on the whole earned a lot mistrust. Self-proclaimed minimally invasive spine surgeon, Mr. Death or Dr. Kimberly Morgan Duntsch (currently serving a prison sentence in Texas) crippled over 30 patients and killed 4 patients in 2 years with 'blotched up' spine surgeries under the influence of cocaine. Almost every surgery ended in para/quadriplegic results or severe disablement.

In a nutshell, to summarize the two biggest challenges for spine surgeons-1.) Increasing complexity in regulatory mechanisms that deter the introduction of innovations 2.) The prevention of overuse or inappropriate use of implants in spine surgery.

Both challenges need to be addressed with equal fervor if spine surgery has to be accepted in society as a safe, effective and a necessary surgery required to heal patients. To tackle the first, it is important for spine surgeons to create robust mechanisms to allow education sponsorships without creating a conflict of interest. This is especially relevant in today's social structure where information can be too easily passed on within the social network. Secondly, it is important to be transparent in the pricing of implants and the pricing should be uniformly maintained. Thirdly, proper regulatory mechanisms are very important for a country like India to allow for safe, and cost-effective innovations. Last but not the least, spine surgeons should demonstrate integrity in using implants, using them only when indicated. While this is being usually followed, but one 'blotched up' surgery neutralizes all the benefit done to thousands of patients.

We should be aware that we are always in the public eye. It is important for us not just to provide safe, effective and compassionate surgery but also to demonstrate integrity and rationality.



Prof. Sarat P. Chandra Professor, Neurosurgery, AIIMS, New Delhi References: 1. http://childnervoussystem.blogspot.com/2016/12/dr-death.html
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Members' Area

Members' commendable Achievements in 2018

Dr. Amit C. Jhala

Unanimously elected as Vice President of Minimally Invasive Spine Surgeons of Bharat (MISSAB) 2018

Dr. Shakti A. Goyal

- Recipient of Canada-India SCI Innovation Award for his 2 projects worth Canadian Dollar \$ 60,000/-.
- He has had 4 publications in journals of repute in 2018.

Dr. Hitesh Modi

- AO Spine Asia pacific grant of 6000CHF for conducting research on clinical correlation of intra-operative neuromonitoring in 300 individuals undergoing posterior decompression and fixation of spine.
- 4 publications in 2018 (2 journal articles & 2 chapters) out of his total 90 publications till date.

Dr Nisarg Parikh

• Visited Rizzoli Orthopedic Institute, Italy and completed Clinical fellowship in Spine Onco-surgery in September & October 2018.

Dr. Bharat R. Dave, Dr. Ajay Krishnan, Dr. Devanand, Dr. Denish Patel, Dr. Shivanand Mayi and Dr. Ravi Ranjan Rai

• The team Stavya alumni has 7 journal articles and 2 chapter publications in 2018.



Members' Articles

Current Status of Stem Cell Treatment for Spinal Cord Injury

by Dr. Amish Sanghvi

Spinal cord injury leading to complete paralysis of both lower limbs (Paraplegia) or of all four limbs (Quadriplegia) is a devastating problem that not only affects the patient but his/her entire family. In search of a cure for paralysis and in desperate need to walk and work again, patients are often ready for any kind of remedy that they believe can help them. One such publicised remedy is stem cell transplantation but to date it is still under research worldwide.

There is no established clinical evidence so far to prove that stem cells transplants are useful in treating human spinal cord injuries. Since spinal cord injury leads to significant physical and psychological impairment to the sufferer; it is quite natural that they are susceptible to false claims promising recovery, even when the costs are high and the potential risks are unknown. Patients are often impressed by other patient testimonials which cannot be relied upon because of the possibility of biases brought in by many factors like the placebo effect as well as the naturally changing behaviour of spinal cord injury (SCI).

As per the latest national guidelines for stem cell research published by ICMR (Indian Council of Medical Research) and DBT(Direct Benefit Transfer), 'Any stem cell use in patients must only be done within purview of an approved and monitored clinical trial with the intent to advance science and not as a therapy. In accordance to this stringent definition, every use of stem cells in patients with spinal cord injury outside an approved clinical trial shall be considered as malpractice'.

In future, it is likely that stem cell transplants may be accepted as a valid choice of therapy for spinal cord injury, but the evidence for the same must come from an approved clinical trial. Till then, it is unethical to offer such experimental interventions that are not only ineffective but are often unsafe and exorbitantly priced.

On a concluding note, it must be mentioned that only ICMR can give an approval for stem cell research. One such approved trial conducted by ISIC (Indian Spinal Injuries Centre-Delhi) did not show any positive results of stem cell transplant on human SCI.



Dr. Amish SanghviMS (Ortho), FNB (Spine surgery)
Consultant and HOD of Spine Surgery,
Sterling hospital, Rajkot

Reference: 1. www.iscos.org.uk/statement-on-stem-cell-therapy, 2. www.closerlookatstemcells.org, 3. www.wingsforlife.com, 4. www.isscr.org 5. https://www.ncbi.nlm.nih.gov/pubmed/19488051/

Concerns About Pediatric Scoliosis and Other Congenital Spinal Deformity

Often in our clinical practice, we encounter kids with spinal deformities. Many a times, pregnant women and their relatives come to us a with USG report mentioning vertebral malformation and concerns about a future "crooked spine". The evaluation of pediatric spinal deformities has undergone tremendous change in last two decades, with emphasis more on optimization of lung development rather than only spinal deformity control. It is important for medical care providers (Orthopedic Surgeons, Pediatricians, General Practioners) to understand the importance of proper lung development and consequences of "Thoracic Insufficiency Syndrome" in kids with spinal deformities. This is important because many a times early intervention with simple procedures like plaster cast may lead to the resolution of deformities and prevent them from worsening. Also, since the current beliefs focus on growth preservation surgeries till pulmonary development is complete, it is vital to plan for surgery as early as 5 to 6 yrs of age rather than waiting till adolescence and allowing the spinal deformity to progress.



Dr. Dhruvin Patel,Consultant Spine Surgeon
Spine Clinic, Surat.

Reference: PEDIATRICS Vol. 137 No. 1 January 01, 2016 doi: 10.1542/peds.2015-0709

Are we safe in a car with just the seat belt?

by Dr. G. D. Tharadara

We have seen many road accidents and moralities due to lack of seat belts. Now-a-days, almost all cars have seat belts, but does that mean we are safe inside the car?

That's because seats belts are not enough for our safety inside a car. In fact, we have seen many shear fractures of the spine when the victim was wearing only a horizontal seat belt. With oblique and horizontal seat belts, our trunk will be held properly but what about the head and neck? When the impact is from the front, the body is held by the seat belt but the head and neck experience a severe flexion that leads to a compression injury of the cervical spine with quadriplegia. If a car is equipped with seat belts and airbags, then the seat belt will hold the trunk in case of an impact from the front and the simultaneous inflation of the airbag will prevent the sudden flexion of head and neck. Thus, the passenger will be protected from severe spine injury. So, it is mandatory to have both seat belts and airbags in a car to prevent severe injuries.

Again, for an airbag to open, a certain force or momentum is required. Which means airbags go hand in hand with high speed vehicles. Does that mean that those who drive at a relaxed pace cannot use airbags in their cars? Think of the force generated when someone rams into another car at a high speed. You will have your answer.



Dr. G. D. TharadaraConsultant Spine Surgeon,
Saviour Hospital, Ahmedabad.



Teriparatide the Miracle Molecule

by Dr. Bharat R. Dave

The second is on its way if the first osteoporotic fracture is not treated properly. That's a fact. Hence it is mandatory to treat established osteoporosis aggressively. In this context, after so many years of practice, I have come to the conclusion that, teriparatide is a wonder molecule and it has made a tremendous difference in the conservative treatment of osteoporosis in patients at the Stavya Spine Hospital. The fact cannot be refuted that our cement augmentation procedures have been reduced to nearly 2 per year from around 50 per year. At the same time, the unpublished outcome in severe Osteoporetic fixations and infections have become outstanding. It is indeed a miracle molecule.

But let us not forget:

- 1. There have been instances where teriperatide has been overused and there are controversies around it being used rampantly for fractures in spite of it being a reserve drug.
- 2. Serum Calcium and PTH level must be checked before teriparatide is prescribed.
- 3. Cost of therapy and medical insurance covers need to be considered; we must ask ourselves Is cost outweighing the patient's suffering and his/her total expense?
- 4. Adding to the challenges is the development of biosimilars and Denosumab.



Dr. Bharat R. DaveSpine Surgeon & Director
Stavya Spine Hospital & Research Institute, Ahmedabad

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Criticism vs Decorum: What to discuss about fellow medical comrades

by Dr. Professor J. V. Modi

"No man is an island" it is common saying in life and it extends as much to the social context as to the professional one. No professional can deliver a 100% single-handedly; teamwork is always involved. This holds true to medical professionals as well. Only effective collaboration between doctors can offer a patient the best possible healthcare delivery, especially with reference to complex and challenging diseases and conditions.

However, doctors are also human and, money, ego, prestige, hierarchy, groupism and other such inhibiting factors may affect the working relationships between doctors. As a result, doctors may knowingly or unknowingly behave in a manner that negatively affects their colleagues. This includes deliberate incoordination, passing on conflicting information, blaming others, and disrespecting professional codes. All of this can be remedied by being true to the medical code of ethics and to oneself.

While that holds true, criticism is one strong stimulus to facilitating enriching work relationships. Taken and given in the right spirit, it can nurture growth and better outcomes; received or imparted negatively, it can destroy careers and lives. Like in all other fields, criticism in medical practice can not (and should not) be avoided. It is most likely to occur during medical audits, peer reviews and medical board inquiries due to patient's complaint. Apart from this, criticism comes greatly into play when a patient seeks a second opinion. The positive power of criticism is commonly misused to express one's bias about the competence of other practitioners or treatment methods. This is not good for the patient's wellbeing and only results in the patient losing trust in the doctors. One should not criticise other doctors to prove his or her superiority; doctors should not use the patient as a medium for personal gain. Again, a medical practitioner must understand that even a rational and justifiable comment offered in good faith can become inappropriate criticism; therefore he/she must should always think before speaking in instances of a second opinion.

After all, we all are here to deliver the best of healthcare solutions as befits our noble profession; we all have the patient's welfare at heart and in that we are co-workers not competitors. Let us uplift ourselves together for a better life for all



Dr. Professor J. V. ModiHoD, Orthopedics
Civil Hospital Ahmedabad

Reference:

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Sincerely,



Dr. Subir N. Jhaveri Organizing Secretary

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