

AOSpine Newsletter Issue 18

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CONTENTS

Editorial 2

FEATURE STORIES

AOSpine Question and Answer with AO Foundation President Robert McGuire 3

Claudio Lamartina—knowledge is power 5

HIGHLIGHTS

Record number of abstracts submitted to the Global Spine Congress 2019 7

AOSpine-SRS Scolio-RISK-1 study produces impactful research 8

Simulations for cognitive surgical training now available on Touch Surgery App 10

Exploring new lands: combining both specimen and live tissue 11

Global Spine Journal launches newest special issue on Spinal Trauma 12

The Top Cited and Downloaded Global Spine Journal Articles of Summer 2018 13

Ghazwan Abdulla Hasan 14

Carolin Melcher 15

Register now: Only a few places left for Davos Courses 2018 16



S. Rajasekaran
Chairperson, AOSpine International

Welcome

Editorial

It is my great pleasure to welcome you to the October issue of the AOSpine newsletter—the first since I assumed the position of AOSpine International Chairperson in July 2018.

It is not only that AOSpine has a new chairperson. The AO Foundation also has a new president, Robert “Bob” McGuire. For the first time in the history of the AO, we have a spine surgeon as president, which is great news for the spine surgeon community worldwide. On this occasion, I would like to congratulate Bob and wish him the best for his presidency.

In this issue of the newsletter, Bob McGuire shares his vision for AOSpine education and research and discusses the challenges ahead for our organization. We feature Claudio Lamartina, a spinal expert on severe spondylolisthesis and the adult deformities classifications.

Also, read about the latest activities of the AOSpine Knowledge Forum Deformity and the progress of the SCOLI-RISK study. As the former AOSpine Research Commission Chairperson, research lies very close

to my heart. One of our key objectives is to make sure that we continue to improve the dissemination of AOSpine’s research work and share the results with spine surgeons around to globe.

We bring you the new special Focus Issue of the Global Spine Journal, “Spine Trauma Treatment: Recommendations of the Spine Section of the German Society for Orthopaedics and Trauma (DGOU)”.

You will find a collection of this summer’s top downloaded and top cited Global Spine Journal articles in this newsletter.

We introduce two members of our worldwide community. Carolin Melcher (Germany) and Ghazwan Hassan (Iraq) share their stories and what it means to them to be part of AOSpine.

It’s an exciting time for AOSpine. Based on the success of the past two Davos Courses, we have put the focus of this year’s courses entirely on Minimally Invasive Spine Surgery (MISS). There are only a few places

left, make sure you register now if you would like to participate. We are currently working behind the scenes with taskforces on our MISS curriculum and hope to share the information with you soon.

Preparations for the Global Spine Congress in Toronto from 15–18 May 2019, are well underway. The number of abstracts submitted has once again exceeded abstract numbers from last year. In total, 1,501 abstracts were submitted—this is a 36% increase in abstracts submitted over last year. This will be a great event both academically and socially. I would like to encourage all AOSpine members to join us in in Canada next year.

I hope you find this issue interesting and informative. I look forward to contacting you again in the next issue later in the fall.

Yours sincerely

S. Rajasekaran
Chairperson,
AOSpine International



AOSpine Question and Answer with AO Foundation President Robert McGuire.



How long have you been involved with the AO Foundation and in what roles?

My first contact with the AO Foundation was in 1981 when I was doing my residency. My program director and chairman had been to Davos for the course and brought an AO book and a femoral intramedullary nail instrumentation set back with him, so it was there I began my training in the AO technique.

In 1988 I attended my very first course, and Howard Rosen was my table instructor. He was based in New York. We bonded and he became a mentor to me. I then became a table instructor, before moving further into lecturing, and joining committees in AO North America.

When AOSpine became a legal entity in 2003 I was on the original North America board and was subsequently elected chairman of AOSpine North America in 2006.

"We had to prove our independence and our reputation. We worked hard to show people that we were an independent organization and, importantly, an independent academic research organization."

Back then, when we had just started out, a lot of the societies thought we were an arm of Synthes. We had

to prove our independence and our reputation. We worked hard to show people that we were an independent organization and, importantly, an independent academic research organization. We are now accepted as academic organization and in the same academic realm as North America Research Societies and International Lumbar Spine. We are not viewed as an arm of our industrial partner. It was our independence that gave us the opportunity to achieve this perception shift, but we still have work to do to ensure everyone understands that we are an independent research and academic organization.

What is your vision for AOSpine, in particular when it comes to education and research, and what are your expectations?

I think that innovations are going to be the challenge. There a lot of other organizations that have been studying education. A number of the things that are being taught were innovations developed by the AO. A lot of other players have tagged along with us. We need to make sure we stay innovative and keep changing: we will be overtaken if we rest on our laurels. In spine, if you look at simulation, our models are extremely anatomically correct. Simulation is going to be even more important to us in the future. The old adage of "see

one, do one, teach one" is falling by the wayside.

In research, we have to be vigilant about staying innovative. We have to look at where the big innovations are taking place. We've got screws, rods, and plates, but the biology will be the thing in the future: looking at correcting problems through genetic programming and stem cells.

What are the challenges for the AO and what is your recommendation for AOSpine to play an even greater role among spine societies?

I think that we face a number of challenges, but the central one will be maintaining our reputation as independent. Especially when it comes to education and research it is important that the surgeons and academic societies understand we are totally independent, as we are creating knowledge we can provide to our members.

"The Global Spine Congress took a while to gain traction, but it is now one of the accepted international meetings from the spine standpoint. The research that is being presented at the congress is top quality."

We made a concerted effort to position AOSpine as one of the

innovative spine organizations, and we were successful—we made that jump and are now accepted as an academic organization, as the Global Spine Congress (GSC) shows. It is a one-of-a-kind event, and we took the innovative approach of having rotating host cities—so it moves around the globe. Jeffrey Wang did excellent work on this, and as a result we are seeing increasing numbers of participants each year. The GSC took a while to gain traction, but it is now one of the accepted international meetings from the spine standpoint. The research that is being presented at the GSC is top quality.

Where do you see particular challenges for AOSpine?

We needed to be agile, nimble, creative, and also had to be able to get our messages across more effectively.

There are communications challenges that remain to this day. We have to adapt to these challenges to ensure that our structure will be able to ensure that once a decision has been taken the information is disseminated in a quick and seamless manner.

What message would you like to convey to AOSpine members?

The AOSpine organization for the spine members should be their main means of gaining up-to-date spinal education.

AOSpine should be the go-to organization when you look for new innovative procedures that are being

done, the most recent education/research findings within a research environment.

What does being a member of the AO Foundation mean to you personally?

AOSpine gave me the opportunity to have interaction with a group of likeminded surgeons from around the world. The spine community is a small group when you really look at it.

There is no other opportunity like that to meet surgeons from Europe, the Middle East and North Africa, Asia Pacific, or Latin America. We can call each other if we have a problem, as these really are close relationships, and I can just drop them a line or pick up a phone and say “Hey, I’ve got a problem I need help with”. I would never have had that opportunity had it not been for AOSpine.

“There are communications challenges that remain to this day. We have to adapt to these challenges to ensure that our structure will be able to ensure that once a decision has been taken the information is disseminated in a quick and seamless manner.”

That concept of friendship is what the organization was based on 60 years ago. It had a flat hierarchy, you could discuss complications and look at things very directly: that has continued through spine. AOSpine also offers the opportunity for mentorship, something I would like to see as the 5th pillar of our organization. We

have a tremendous amount of intellectual wealth thanks to our senior members, and we need mentorship so as not to lose it. It is essential both to retain this senior talent while also attracting and nurturing younger generations.

AOSpine also gave me the opportunity to move up through the AO Foundation’s leadership. When I first started in the organization, I did not start by saying “I want to be President”, but I was given opportunities to take on leadership positions in different areas, and that is the beauty of this system—it offers you those opportunities.

And the most unique aspect of all this is that we are volunteers: we are working to build this education process, to impart our knowledge to other surgeons who may not have the experience we have. That’s what makes our organization so strong and vibrant.



Specializing in complex revision surgeries and adult deformities, he believes that progress does not hinge on high-tech implants, but on a sound foundation of knowledge and research. Here, he explains how he teaches his fellows to learn from their mistakes and always have a Plan B.

What attracted you to spinal surgery, and if you had to do it all over again, would you still choose to become a spine surgeon?

When I was in high school my main interests were mathematics, physics, biology and philosophy. However, when I had to choose for university studies, medicine was my choice because I realized this was a perfect example of empirical science: from the symptoms to the diagnosis. After my degree, Orthopedics was the most coherent choice because of the relevance of mechanics. Finally, I chose spine surgery because it is a very complex surgery and I like challenges. Without any doubt, I would become a spine surgeon again.

“Have a Plan B in cases of complex surgery.”

What achievement are you most proud of?

The treatment of severe spondylolisthesis and the adult deformities classifications.

Who has had the greatest influence on your career, and why?

Max Aebi, because he introduced me to AOSpine and has been an example

of a great surgeon and a person with original ideas about what the future could be like.

What does a typical work day look like for you—how many surgeries do you perform, and what is your most frequent operation?

My typical week is: Monday grand round, Tuesday surgery, Wednesday office, Thursday surgery, Friday meeting with research team and European Spine Journal job. I carry out two or three revision surgeries in adult and complex deformities per week.

What do you consider your biggest learning as a surgeon?

To have a Plan B in cases of complex surgery.

You are one of the top-level spinal experts on deformity assessment and treatment in degenerative spine and complex spinal cases. What is the biggest challenge in your specialty and how do you see it developing in the next 5 years?

To achieve the same result of standard surgery with MIS, reducing risks for the patients and radiations for both patients and surgeons. The

most important thing however, is improving and expanding our knowledge instead of developing new implants. In fact, the best progress in adult deformities treatment have been achieved thanks to the research put into it: like sagittal balance principles.

“The best advice I was given was to hate any mistakes, but not the person who made the mistake. You can learn more from complications or poor results than from a perfect surgical result.”

You are also active in research—what projects are you working on currently?

I am running more than one project at the moment. My current activities include coronal unbalance in adults, new anterior approaches to the spine, and how to predict the postop result during the operation.

Outside of your own research, what has been the most interesting paper that you have seen in the past twelve months?

Catharina Parai, Olle Hägg, Bengt Lind and Helena Brisby, ‘The value of patient global assessment in lumbar spine surgery: an evaluation based on more than 90,000 patients’ Eur Spine J (2018) 27: 554-563

What was the best advice you were ever given, and what advice would you give to a young spinal surgeon today?

The best advice I was given was to hate any mistakes, but not the person who made the mistake. You can learn more from complications or poor results than from a perfect surgical result. The advice I would offer is to first, become a very good surgeon. Second, become independent. Third, increase your credibility. Fourth, increase your income. It should happen in that order.

“A good leader should be able to create a great team. Apart from the surgical knowledge this is the most important point.”

What are the biggest challenges facing young surgeons today?

Their challenge lies in their belief that technologies and not knowledge can improve their surgical results.

What is your approach to fellowships? Do you see a difference between today’s younger surgeons and your own generation?

I have the great pleasure to have had many fellows coming from different countries. My selection process

focuses on avoiding any overlap: first come, first served. I try to teach not only surgical principles but also to create a personal relationship, inviting my fellows home for a dinner, showing my family and I as we are. I do not see any difference between today’s younger surgeons and when I was young.

“The Global Spine Congress is one of the most important demonstrations of AOSpine’s scientific independence and neutrality from the industry.”

How do you inspire and mentor your fellows? In your opinion what makes a good leader, what is most important apart from surgical knowledge?

A good leader should be able to create a great team. Apart from the surgical knowledge this is the most important point.

You have also been involved with the Global Spine Congress. What makes it special to you, and why would you recommend that surgeons attend?

GSC is one of the most important demonstrations of AOSpine’s scientific independence and neutrality from the industry. I do recommend attending

because you can be in an international global event in the typical AO atmosphere.

Outside of spine surgery, how do you unwind? What or who inspires you?

Traveling is one of my great passions. In the past I had the opportunity to visit many countries on vacation. Today I travel mainly for business, but I love traveling itself despite the destination, so I still really enjoy it. My other great passion is diving, which I enjoy doing with my wife Lara and son Davide.

What does being a member of AOSpine mean to you personally? Why would you recommend becoming a member?

For me, being an AOSpine member means being part of a scientific community with a lot of very good friends. This is the reason I strongly suggest becoming a member.



Record number of abstracts submitted to the Global Spine Congress 2019

Let the planning begin! The number of abstracts submitted has once again exceeded abstract numbers from last year. In total, 1,501 abstracts were submitted—this is a 36% increase in abstracts submitted over last year. Find out how each region contributed and which were the most popular topics here. If you plan on attending the next Global Spine Congress (GSC) taking place in Toronto from May 15–18, 2019, make sure to take advantage of our early bird savings by registering before December 20, 2018.



The GSC scientific program will include pre-courses, AOSpine Symposia, Society Symposia, and peer reviewed abstracts, scheduled to be presented as oral or ePoster presentations. The GSC will also provide exclusive AOSpine members-only sessions on a variety of exciting topics.

We are expecting over 2,000 participants at the GSC in Toronto. This will provide you the opportunity to network with spine professionals from around the world, a chance

to further develop your career and access to the world's best research and clinical experts.

Register by December 20, 2018 to take advantage of early bird savings of up to \$80 (USD).

In addition to our early bird discount, AOSpine members receive a \$150 (USD) discount on the GSC registration fee. Not an AOSpine member? Sign up for membership today.



The clinical trial collaboration between AOSpine and SRS exceeded all expectations (Istanbul, Turkey, 2012)

AOSpine-SRS Scolio-RISK-1 study produces impactful research for adult spinal deformity patients undergoing complex surgery

The landmark Scolio-RISK-1 study evaluating the neurologic complications associated with surgical correction of complex adult spinal deformity recently published its two-year results in *The Journal of Bone and Joint Surgery (JBJS)*. Scolio-RISK-1 is an example of successful academic collaboration between two leading societies—the Scoliosis Research Society (SRS) and AOSpine.

“Even for someone who has practiced spinal deformity surgery for 27 years, one of the biggest fears is that the patient has neurologic complications during these complex operations,” principal investigator (PI) Lawrence Lenke explains. Co-PI Michael Fehlings agrees that even with the many advances in adult spinal deformity (ASD) techniques, the risk of peri-operative neurologic deficits remains high.

“Surgeons can already better inform their patients of the risks.”

For the first time, the prospective multicenter observational study Scolio-RISK-1 did a formal neurologic assessment of patients undergoing complex ASD surgery. The 15 participating institutions from North America, Europe, and Asia collected information on all complications and patient

reported outcomes from 272 patients. Data was collected before surgery and at various timepoints after surgery up to 2-year postoperative.

Data helps understand risks and increases patient satisfaction

The Scolio-RISK-1 6-month outcomes were published in *Spine* in 2016 and established an early complication rate two to three times higher than previously reported. “Nearly one in four patients had neurologic deficits at the point of discharge, and the non-neurologic complication rate was at 60 %,” says Kenneth Cheung, site investigator. The 2-year outcomes recently published in the *JBJS* showed a significant improvement in neurologic outcomes at 2-years post-operative; more than half the patients having improved their neurologic weakness or deficits.

“If surgeons can identify the individuals that are prone to developing complications, we can take preventative measures.”

“The rate in neurologic decline was much higher than expected, which gives us a baseline to work off to lower the rate of complications,” Lenke states. Site investigators believe surgeons can already better inform their patients of the risks.

This will save on health costs and increase patient satisfaction.



Michael Fehlings sees collaboration possibilities between the AOSpine Knowledge Forums in developing guidelines and care pathways.

Risk factors for postoperative neurologic decline and factors that predict patient reported outcomes were also identified and published in *The Spine Journal* and *Spine Deformity*, respectively. "If surgeons can identify the individuals that are prone to developing complications, we can take preventative measures preoperatively. This will not only save on health costs, but with proper counselling, increase patient satisfaction," Fehlings adds. The data can be used for risk stratification or to strategize how to reduce complications.

Landmark collaboration changing clinical practice

All participating surgeons see Scolio-RISK-1 as a great example of a mutually beneficial collaboration between two leading spine societies, the SRS and AOSpine. Many AOSpine Knowledge Forum Deformity members are also members of the SRS, so intellectual collaboration is ongoing, and the hope is that such study collaborations will continue whenever opportunity arises.

The next step is to develop care pathways and guidelines.

Lenke and Fehlings are proud to describe Scolio-RISK-1 as a landmark and collaborative study that will be referred to as one that changed practice. "It is one of the most detailed, well-orchestrated, and thorough studies ever done on complex ASD for complications and outcomes," Lenke says and adds AOCID's expertise was instrumental for its success.



"The AO has a high integrity scientific process for collecting this kind of data and translating it into meaningful outcomes. Both the data we acquired and the AO tracking and processing it, helping us present and publish it, it is a class act, it's like a well-oiled machine," Lawrence Lenke says.

The next step is to take this knowledge and research activities to the next level and optimize outcomes by developing care pathways and guidelines for prevention and management of high-risk surgeries.

Awards

Scolio-RISK 1 was awarded the Whitecloud Award for Best Clinical Paper at the International Meeting on Advanced Spine Techniques (IMAST) two years in a row (2015 and 2016), won the Russell A. Hibbs Award for the Best Clinical Research Presentation at the SRS Annual Meeting 2013, and was nominated in 2016 and 2017. It was also the winner of the Best Paper Award at the Global Spine Congress 2015.

Read more about KF Deformity and the ongoing studies at www.aospine.org/kf-deformity

Read the interview with Larry Lenke in the August 2018 issue of the AOSpine newsletter

The AOSpine Knowledge Forum Deformity sponsored study was performed with the AO Clinical Investigation and Documentation support.

Publications

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Simulations for cognitive surgical training now available on Touch Surgery App

In extending its offerings in digital learning, AOSpine is developing simulations for cognitive surgical training through an app called Touch Surgery.

Touch Surgery is a mobile interactive surgical simulation app that provides a detailed guide to every step of a surgical procedure. Users can study all steps of a surgical procedure, immediately test their knowledge, and prepare for surgery. The app enables users to practice surgery anytime, anywhere, and is available for both smartphone and tablet.



Steve Theiss
Leader of the
Educational Strategies
Task Force

“The AOSpine Touch Surgery modules are exciting additions to AOSpine’s educational offering. They let surgeons learn the various steps of a surgical procedure in an interactive fashion and allow AOSpine to continue deliver innovative education to surgeons worldwide.”

Touch Surgery features a user-friendly platform and 3-D graphics help to simulate real-life surgical environments. An expert AOSpine faculty member has endorsed the accuracy of all medical content and 3-D simulations, and all the work it contains has been peer reviewed to guarantee accuracy and surgical validity. AOSpine will create 12 Touch Surgery spine surgery simulation modules over the next few years.

AOSpine Touch Surgery modules can be used effectively as stand-alone educational resources, as part of pre- and post-course learning activities, and in face-to-face courses for demonstration and interaction purposes.

First AOSpine modules published

The first three AOSpine modules have been finalized and are now available for download through the Touch Surgery app:

- L4/5–Degenerative spondylolisthesis MIS TLIF using AP/lateral fluoroscopy — Authored by Avelino Parajon and Roger Härtl
- L4/5 Degenerative spondylolisthesis Open TLIF— Authored by Emiliano Vialle
- C5/6 Cervical spondylosis treated with an anterior cervical discectomy and fusion— Authored by Satish Rudrappa

To access the AOSpine modules, start by downloading the Touch Surgery app to your iOS or Android mobile device. Inside the Touch Surgery app, first register and then search for the AOSpine procedures you are interested in.

The Touch Surgery app is available for download for iOS and Android.



Exploring new lands:

AOSpine advanced-level course combining both specimen and live tissue

In April 2018, AOSpine explored a new course concept combining specimen and live tissue in Norderstedt near Hamburg, in Germany's far north.



Christoph Mehren



Uwe Vieweg



Patrick Tropicano

In the course titled “TheAOSpine Advanced Level Specimen/Live Tissue Course—Minimally invasive anterior approaches to the lumbar and thoracic spine and their complication management”, Chairmen Christoph Mehren and Uwe Vieweg took a completely new approach to teaching orthopedic, neuro-, and trauma spine surgeons the principles of minimally invasive anterior approaches to the lumbar and thoracic spine. As there are possible complications associated with anterior approaches, the course also dealt with the management of such complications with live tissue training in parallel.

Their courage to try this new setting was a great success: 28 participants from across Europe as well as from Brazil and Saudi Arabia gathered in Norderstedt to benefit from the unique opportunity and its outstanding faculty.

As spine surgeons tend to be hesitant to make anterior approaches—even in cases where these approaches are more adequate than posterior techniques—the two-day event began with

lectures by experts in the field. The theoretical segment was followed by the practical sessions during which participants were split into two groups. A rotating system allowed them to benefit maximally on both specimen and live tissue. The MISS experts were supported and complemented by the expertise of a vascular surgeon and a visceral surgeon.

After two intense and productive course days, Mehren and Vieweg—and their vanguard approach—earned stakeholders’ praise.

“Congratulations to this very nice educational event; it was a great success,” said educational advisor Patrick Tropicano. “This format is definitively the best. I was much honored to be the first Educational Advisor of this course.”



Global Spine Journal launches newest special issue on Spinal Trauma

This special issue brings together all of the relevant aspects of spinal trauma treatment. It systematically follows the medical aspects and focuses specifically on the indications for treatment.

The issue, featuring eight articles and one editorial, is sponsored by the German Society for Orthopaedics and Trauma (DGOU) and is led by Prof. Dr. Frank Kandziora, Head of Department at the Center for Spinal Surgery and Neurotraumatology at BG Unfallklinik Frankfurt am Main GmbH, Germany.



Dr. Frank Kandziora

“These comprehensive treatment recommendations for spinal trauma summarize the current standard of care in Germany. They were designed to optimize diagnostic, classifications and treatment and to provide orientation for spinal surgeons in this challenging sub-specialty.”

The unique German approach to the treatment of spine trauma patients

All of the papers are written by authors from Germany, and it is a contribution of the “German approach” to the world literature of spine trauma treatment. All of the authors are experts in spine trauma care and have used their extensive clinical experience to formulate their recommendations in this issue.

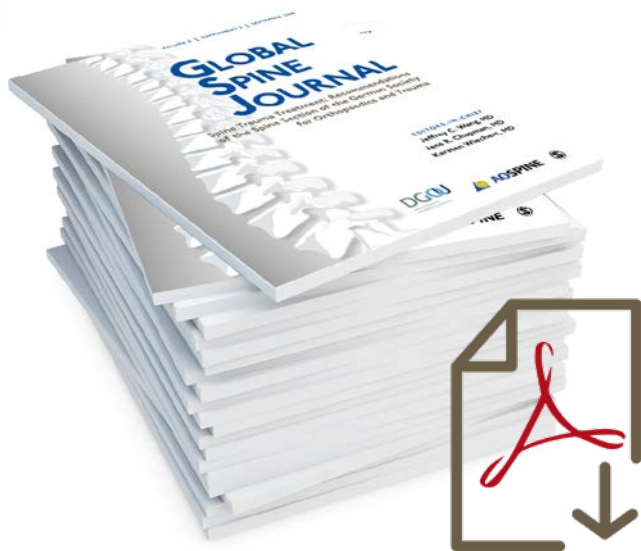
Global Spine Journal Editor-in-Chief Karsten Wiechert, based at the Schön Klinik Munich, Germany comments: “The unique German approach to the treatment of spine trauma patients is condensed in this fantastic collection. Summarizing expert opinions, based on hundreds of clinical years’ experience and tens of thousands of patients will prove to be a very valuable tool for spine professionals and may find reflections in the truly international scope of the Global Spine Journal. This will set a great example for the future”.

Global Spine Journal is an Open Access journal; this supplement is available to read online for free on our website at <http://journals.sagepub.com/home/gsj>.

Readers are also able to download all of the articles to read offline at a later date.

Global Spine Journal is AOSpine’s official scientific, peer-reviewed journal. Publication is free of charge for all AOSpine Members (non-Members pay USD 1,500).

Become an AOSpine Member now at: www.aospine.org/membership.



The Top Cited and Downloaded Global Spine Journal Articles of Summer 2018

Summer is now officially over and we are moving towards the end of the year. Global Spine Journal had a surprisingly busy summer with a lot of new submissions and a record number of citations and downloads in July and August. To celebrate the end of this successful summer we are honoring the most cited and downloaded articles of the summer.

Top cited articles of the summer—this includes the articles that received the most citations in June, July and August.

1. **“Approach-Related Complications of Anterior Lumbar Interbody Fusion: Results of a Combined Spine and Vascular Surgical Team”** from Volume 6, Issue 2.
2. **“The Thoracolumbar AOSpine Injury Score”** from Volume 6, Issue 4
3. **“Impact of Operation Time on 30-Day Complications After Adult Spinal Deformity Surgery”** from Volume 7, Issue 7.
4. **“A Clinical Practice Guideline for the Management of Patients With Degenerative Cervical Myelopathy: Recommendations for Patients With Mild, Moderate, and Severe Disease and Nonmyelopathic Patients With Evidence of Cord Compression”** from Volume 7, Supplement 3
5. **“Iliac Crest Bone Graft versus Local Autograft or Allograft for Lumbar Spinal Fusion: A Systematic Review”** from Volume 6, Issue 6.
6. **“Correlation and Reliability of Cervical Sagittal Alignment Parameters between Lateral Cervical Radiograph and Lateral Whole-Body EOS Stereoradiograph”** from Volume 6, Issue 6.
7. **“Risk Factors for Venous Thromboembolism following Thoracolumbar Surgery: Analysis of 43,777 Patients from the American College of Surgeons National Surgical Quality Improvement Program 2005 to 2012”** from Volume 6, Issue 8.

Top Downloaded articles of the summer—these are the articles that received the most downloads from the website in June, July and August (These include OnlineFirst articles that are not yet assigned to an issue but are available to read online).

1. **“A Clinical Practice Guideline for the Management of Acute Spinal Cord Injury: Introduction, Rationale, and Scope”** from Volume 7, Supplement 3.
2. **“Recurrent Lumbar Disc Herniation: A Review”** available OnlineFirst.
3. **“Is Cervical Bracing Necessary After One- and Two-Level Instrumented Anterior Cervical Discectomy and Fusion? A Prospective Randomized Study”** from Volume 8, Issue 1.
4. **“Is There an Optimal Wound Closure Technique for Major Posterior Spine Surgery? A Systematic Review”** from the EBSJ section of Volume 8, Issue 5.
5. **“Lumbar Interbody Fusions for Degenerative Spondylolisthesis: Review of Techniques, Indications, and Outcomes”** available OnlineFirst.
6. **“The Challenges of Renal Cell Carcinoma Metastatic to the Spine: A Systematic Review of Survival and Treatment”** from Volume 8, Issue 5.
7. **“Spinal Compression Fracture Management. A Review of Current Treatment Strategies and Possible Future Avenues”** from Volume 7, Issue 1.

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Ghazwan Abdulla Hasan



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"We have lots of trauma cases with spinal cord injuries, degenerative disorders and tumors, with no insurance companies that can manage the health care—only the government which supports the government hospitals, which concentrate on basic, essential instruments with trauma and life support."

Why did you decide to become a spine surgeon?

To successfully impact your field, you have to like and love your job. From the beginning of my career, I have had great motivation to be a spine surgeon. When I started my residency in orthopedics, I concentrated in spine by attending local and international events and observed a spine surgery.

Where were you trained?

I got my training from my mentors: locally, Dr Dawood Al-Obidi, an orthopedic spine surgeon, who has had a great impact on my carrier, and Dr Hayder Qatran, a neurosurgeon. And, in 2014, I finished my fellowship in Frankfurt BGU with Prof Frank Kandziora. Additionally, I have had many fellowships and clinical attachments, including the Seattle Science Foundation with Prof Jens Chapman in the US, a Catholic University fellowship in Seoul, South Korea with Prof Jim Luke Kim, as well as fellowships and clinical attachments in Turkey, France and Austria.

Who has inspired you?

Actually, I have met many people who have greatly impacted and inspired me like Dr Dawood Al-Obidi, an orthopedic spine surgeon in Baghdad, Iraq; Jens Chapman of the Seattle Science Foundation; Jim Luke Kim at Catholic University in Seoul; Dr Jeffrey Wang, co-director of the University of Southern California Keck School of Medicine Spine Center in the US; Dr Alexander Vaccaro, president of the Rothman Orthopedic Institute in Pennsylvania (US), and Dr S Rajasakaran of Ganga Medical Centre & Hospitals in Coimbatore (India).

Can you tell a bit in general about spine surgery in your country?

I live in Iraq, where spine surgery is not well developed. As we have faced lots of political problems and wars, we have lots of trauma cases with spinal cord injuries, degenerative disorders and tumors, with no insurance companies that can manage the health care—only the government which supports the government hospitals, which concentrate on basic, essential instruments with trauma and life support. In private hospitals, the patient has to pay for the full package of the surgery fees, which is too costly. We try to improve spine surgery by attending courses abroad, bringing the possible latest technology and applying it in my country, and by doing some research activities.

What do you consider the biggest challenges for spine surgeons in your country?

We have lots of obstacles in our work in my country. These include lack of insurance companies to help in the health care system and lack of infrastructure like upgraded hospitals and centers, as well as a lack of research centers and database systems for research activities.

What does being a member of AOSpine mean to you, and how has AOSpine influenced your career?

AOSpine is a global organization that has had a great impact in my country with lots of courses, symposia and seminars since 2012 when the local AOSpine council started in Iraq. AOSpine has provided many opportunities for fellowships, as well as participation in the annual Global Spine Congress (GSC).



Carolin Melcher

Dr Carolin Melcher
Department for Orthopedic
Surgery, Physical Therapy and
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“Germany is a highly developed country, and as in many other fields, anything is possible in spine surgery. That is part of what I love about it. From conservative treatment to complex osteotomies and fixations from the cervical spine to the pelvis—spine surgery has got everything. Being a woman in surgery is still challenging. I think women still have to be a little better, have to fight a little harder to get recognition—from patients and as well as from colleagues. Sometimes I am still considered the nurse even after talking to a patient for 20 minutes explaining a planned procedure.”

Why did you decide to become a spine surgeon?

When I first started my residency, I wanted to become a shoulder and elbow surgeon, but from the first moment I got more accustomed to spine surgery, I realized how fascinating it is. You have every chance to do very small and very big things; you treat small children and old people. No case is like the one before. You are always challenged, you have to get better every day.

Where did you get trained?

I got trained at the Department of Orthopedic Surgery of the Maximilians University in Munich. My biggest advantage was and still is that I had the opportunity to learn from two amazing, but very different surgeons, who gave me the chance to become better every day, step-by-step. I had the great opportunity to see what they do, to try and decide which way I like best, to develop my own way.

Who inspires you?

It's two things that inspire me. First, it is my patients. The people who trust me with their health and sometimes even with their lives, who trust in what I do and what I am. It's the little girl, who couldn't eat and breathe properly anymore before her operation and who now runs through outpatients clinic every time she sees me and jumps into my arms.

Secondly, it is the people that helped me become a better surgeon—my two consultants, my AO mentor Roger Hartl and Larry Lenke, who I had the chance to spend some time with. It is the people that let me watch, listen, learn and ask questions.

Can you tell a bit in general about spine surgery in your country?

Germany is a highly developed country, and as in many other fields, anything is possible in spine surgery. That is part of what I love about it. From conservative treatment to complex osteotomies and fixations from the cervical spine to the pelvis—spine surgery has got everything. On the other hand, spine surgery in Germany is still divided in between three different specialties—orthopedic, trauma and neurosurgery, which I think is wrong.

What are the biggest challenges in your job/ what do you consider the biggest challenges for spine surgeons in your country?

As mentioned, becoming a fully trained “spine surgeon” is difficult as many different and separated departments are treating spinal pathologies. Therefore you'll rarely see the whole spectrum of pathologies. On top of that, being a woman in surgery is still challenging. I think women still have to be a little better, have to fight a little harder to get recognition—from patients and as well as from colleagues. Sometimes I am still considered the nurse even after talking to a patient for 20 minutes explaining a planned procedure.

How has being part of AOSpine influenced your career?

Becoming an active AOSpine member made a huge difference to me. From one minute to the other I was part of an organization that is very special. I got to talk to people whose names I read daily on the spines of my books. I was treated as an equal, was listened to, and got opportunities I had never dreamed of. The opportunity to become an AO Mentee changed my life even more—personally and professionally.



Register now:

Only a few places left for Davos Courses 2018

After selling out of available spaces early in the registration period, AOSpine has enhanced the setting for its Davos Courses to make space for more course participants. This year's Davos Courses—December 8–11, 2018—focus entirely on minimally invasive spine surgery (MISS).

Participants of all levels of practice will have the opportunity to improve their use of the microscope and the endoscope and to work on their percutaneous fixation skills.

All three courses include case discussions and hands-on sessions on a lifelike simulator as well as online course preparations. They promise to provide an outstanding occasion to train under the supervision of world-renowned MISS experts. With the small faculty/participant ratio and focus on hands-on training, this will be an outstanding opportunity to advance your surgical skills.

Discover the detailed course program and register:

Course 1: Microdecompression and endoscopy

Course 2: Endoscopy and percutaneous fixation

Course 3: Percutaneous fixation and microdecompression

Also, make sure you don't miss "the good, the bad, the ugly—a case that taught me a lesson" discussions in the afternoon. They are great opportunities to benefit from the experiences of others and to discuss best practices with your peers.

As always during the Davos Courses, you will have plenty of time for discussions and networking with spine specialists from all over the world.

