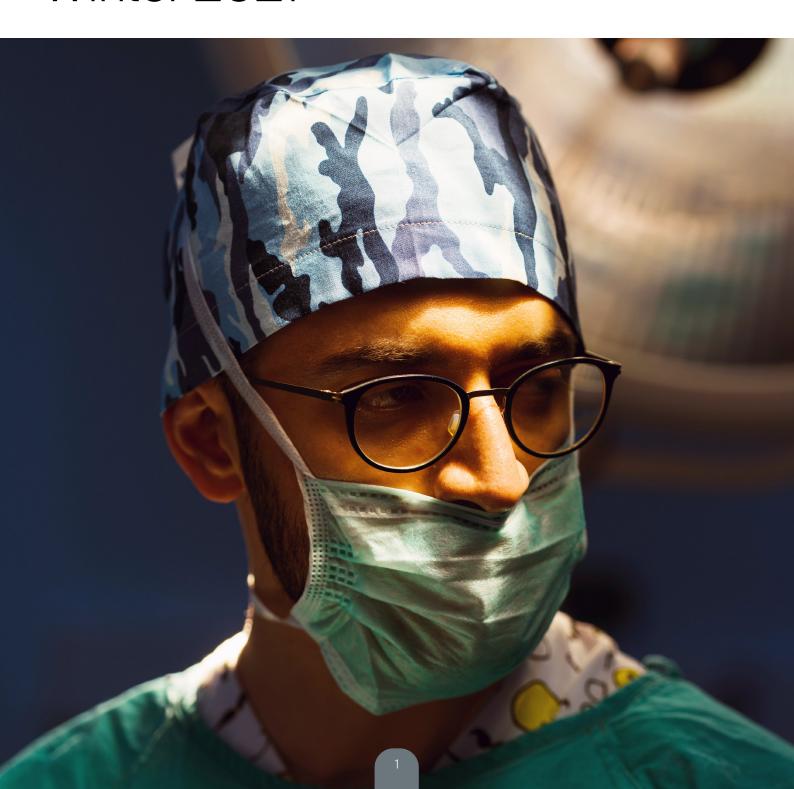


AO Spine Middle East and Northern Africa Newsletter Winter 2021





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From the Editor

We welcome everybody to our new issue of the AO Spine MENA newsletter. Although this newsletter is issued during the second wave of COVID-19 virus pandemic, globally we are still fighting and working under this emergency. I am sure that everyone across the globe is eagerly awaiting the time that this medical emergency will be under control after which, we can work together face to face. Until that problem is resolved, we will continue to work virtually as an AO Spine team. Our virtual courses and online webinars will continue to enable us to maintain our educational targets and keep in contact with our members.

This issue features two important interviews with two great men, Professor Dan Riew from Columbia and Cornell Universities, USA, and Mohammad El-Sharkawi from Assiut University, Egypt. We will storm and explore their minds to know more about their careers and life.

Furthermore, this newsletter features stories from ex-fellows from the AO Spine fellowship program, where they will tell us about their personal experience and how that experience affected their lives and career. We will inform you about the status and benefits of our membership program and ways we can engage you in our community. We will feature some of the virtual AO Spine educational events that occurred during the last months of 2020.

Finally, before I give you some time to read this exciting issue, I would like to thank our regional board and country councils as well as all AO Spine members for their commitment, active role, and contribution to AO Spine activities. I would like to thank all the AO Spine staff working with me on this issue, particularly Mary Anne Smith, Francois Brayka, Mie Jojima, and Ginny Yau for their great effort and interest in this work.

Ali Abou-Madawi

Editor of the Newsletter

AO Spine Middle East and Northern Africa Community Development Officer

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AO Spine Middle East and Northern Africa Board



Waleed Awwad (Research) Muhammed Assous (Spine Centers & Fellowships), Amer Aziz (Chairperson-elect), Mohammad El-Sharkawi (Chairperson), Muzahem M. Taha (Education), and Ali Abou-Madawi (Community Development)

Welcome and introduction of new AO Spine MENA Education Officer, Muzahem M. Taha

I am so happy with my new position on the MENA board as an education officer and as they say; "the only way to do great work is to love what you do", and I love education, it is very important part of my life and I am sure with the support of my other colleagues in the MENA board we can continue what was started before by our previous colleagues and we will try to build upon it. We plan to make the educational process more productive and easy in order to reach the AO Spine community in the region.

We have started this work in exceptional circumstances during the Covid-19 pandemic and its consequences. We have many plans for the future of education in the MENA region, these include the use of more online educational activities, new teaching strategies and incorporating new technologies in our courses. If one of the plans does not work, we will adapt, but never compromise our goal which is to improve education in our region.

Muzahem M. Taha Consultant Orthopedic Spine Surgeon

Welcome to new AO Spine Saudi Arabia Council Officer, Salah Al-Akkad



On behalf of the AO Spine Saudi Arabia Council election's Nominating Committee, we are pleased to announce Salah Al-Akkad as Education Neuro officer. His term began on February 1, 2021.

Please join us in congratulating and wishing him success in his new role!

The AO Spine MENA Councils

AO Spine Council	Chairperson	Education Ortho	Education Neuro	Research, Spine Centers and Fellowships
Saudi Arabia AO SSA	Mahdi Bassi	Faisal Konbaz	Salah Al-Akkad	Salah Addeen Khalifah
Iraq AO SIRQ	Ghazwan Hasan	Luay Al-Naser	Rashad Alsaaidi	Ahmed Alqatub
Iran AO SIR	Ali Haghnegahdar	Mohammadreza Etemadifar	Mohammadreza Ehsaei	Mohammadreza Golbakhsh
Pakistan AO SPK	Ijaz Ahmad	Waqar Alam	Aneela Darbar	Muhammed Farrukh Bashir
Jordan AO SJO	Saad Hamdan Abdullah	Mohammad Alfawareh	Tareq Kanaan	Mohd Armouti
Egypt AO SEG	Mohamed Abdel- Wanis	Hossam Salah	Basem Awad	Tarek ElHewela
Lebanon AO SLE	Firas Atallah	Joseph El Khalil	Ibrahim Ibrahim	Nakhle Mhanna
West Africa AO SWA	Kabir Abubakar	Adetunji Toluse	Wilfred C Mezue	Mutaleeb Shobode
Gulf Area GCC	Sameh Abolfotouh	Omar Alnori	Ismail Alkebsi	Alaa Zaqout
Maghreb AO SMA	Khaled Hadhri Country rep. Tunisia	Amin Henine Country rep. Algeria	Thami Benzakour Country rep. Morocco	



EducationUpcoming events and local webinars

Courses

AO Spine Advanced Seminar—Thoraco lumbar and subaxial trauma, Lebanon, Beirut: May 21, 2021

AO Spine Advanced Course—Complications Avoidance and Management in Spine Surgery, Egypt, Cairo: August 5, 2021

AO Spine Advanced Course—Degeneration and Trauma, Nigeria, Abuja: August 12, 2021

AO Spine Advanced Level Specimen Course—Minimally Invasive Spine Surgery, Jordan, Amman: August 12, 2021

AO Spine Advanced Course—Spinal Trauma, Saudi Arabia, Riyadh: August 2021

AO Spine Advanced Course—Cervical Spine Pathologies, Iraq, Erbil: September 10, 2021

AO Spine Advanced Level Specimen Course—MISS, United Arab Emirates, Dubai: October 15, 2021

AO Spine Advanced Level Live Surgery and Endoscopic Simulation Course—MISS, Pakistan, Lahore: October 30, 2021

AO Spine Advanced Level Specimen Course—The Cervical Spine, United Arab Emirates, Dubai: November 05, 2021

AO Spine Principles Course—Trauma, Kenya, Nairobi: November 12, 2021

AO Spine Chairpersons Education program, Muscat, Oman: TBC

Local Webinars

AO Spine Local Webinar-Caries Spine: Less is more

Pakistan, Lahore: March 4, 2021

Register here

AO Spine Webinar-Upper Cervical Spinal Tumors

Egypt, Cairo: April 2, 2021

Register here

AO Spine Local Webinar—My Worst Case!

UAE, Dubai: April 2021

AO Spine West Africa Webinar-Management of complex paediatric spine deformities

Nigeria: April 2021

AO Spine Jordan Webinar – treatment of spastic lower limbs

Jordan, Amman: May 2021

AO Spine Pakistan Webinar—Paediatrics caries spine

Pakistan, Lahore: May 2021

AO Spine GCC Webinar-Degenerative Cervical Myelopathy: What to do?

UAE, Dubai: July 2021

AO Spine West Africa Webinar—Pyogenic spondylodiscitis

Nigeria: July 2021

AO Spine Webinar—Surgical Management of High-Grade Spondylolisthesis

Egypt, Cairo: August 2021

AO Spine Jordan Webinar—minimally invasive spine surgery

Jordan, Amman: August 2021

AO Spine Pakistan Webinar—Post caries severe spine Deformities correction

Pakistan, Lahore: August 2021

AO Spine Webinar—All Lumbar Fusion Cases are Deformity Cases

Egypt, Cairo: September 2021

AO Spine GCC Webinar-Adult Spine Deformity: Which Surgery is the Option?

UAE, Dubai: October 2021

AO Spine West Africa Webinar-Lumbar fusion surgery (Indications & Techniques)

Nigeria: October 2021

AO Spine Webinar—Correction of Cervical Deformity

Egypt, Cairo: November 2021

AO Spine Webinar-upper cervical pathology

Jordan, Amman: November 2021

AO Spine Pakistan Webinar—Post operative Discitis

Pakistan, Lahore: November 2021

AO PEER Course

Date to be confirmed—watch our website for more information

Past events

AO Spine Seminar—Cervical Spine Deformity. ESA

This virtual seminar was held at the 10th Annual Meeting of the Egyptian Spine Association, November 26th, 2020, Hotel Steigenburger El Tahrir, Cairo, Egypt. It was chaired by Mohamed Abdel-Wanis, MD., Sohag Faculty of Medicine, Sohag, Egypt.

This AO Spine Seminar in collaboration with the Egyptian Spine Association (ESA) was a hybrid event with some faculty and participants on-site in Cairo, and some faculty and participants joining in virtually.

This event focused on Cervical Spine Deformity with the following learning objectives:

- Identify the causes of cervical spine deformities
- Determine how to evaluate cases of cervical spine deformities both clinically and radiologically by using radiological parameters
- Recognize the different options for the management of cervical spine deformities as well as the indications of each option

Prestigious faculty involved included: K Daniel Riew, USA, S Rajasekeran, India, Hani Mhaidli, Spain, Hasan Salheen, Germany, and Mohamed Abdel-Wanis, Egypt.

Almost 70 participants attended which ended with fruitful discussions between speakers and audience.

AO PEER online course: Principles of Clinical Research—Short Medical Writing

15-17 October 2020, Assiut, Egypt

This course taught the importance of research and evidence-based medicine (EBM), the relevant ethical considerations and guidelines for Good Clinical Practice (GCP) with a focus on the formulation of a clinical research question. In addition to practicing some of the skills related to critical literature review, this course offered support in working with a statistician, and navigating the AO Program for Education and Excellence in Research (AO PEER) to help make their research project a success. An online learning module mandatory pre-course activity was offered for the participants.

IOLs:

- Explain the importance of doing research and the link to evidence-based medicine
- Apply the basic principles of literature search and critical appraisal
- Follow GCP guidelines and adhere to ethical requirements, eg, informed consent
- Identify a clinical problem, formulate a clinical research question, and select the study design
- · Describe the principles of medical writing, Utilize available research environment, resources, and tools

Faculty: Mohammad El-Sharkawi, Chair, Egypt, Atiq Uz Zaman, Co-Chair, Pakistan, Osama Farouk, Egypt, Mohamed Abdel-Wanis, Egypt, Mahmoud Fouad Ibrahim, Egypt, Ahmed Shawky Abdelgawaad, Germany, Waleed Awwad, KSA, Ghazwan Abdulla Hasan, Iraq, Ahmed Jahwari, Muscat, Sameh Abolfotouh, UAE

Catch up with our Clinical Expert Advice Forums



AO Spine Clinical Expert Advice Forums document experts' advice on different everyday clinical scenarios. Click the titles to watch recorded sessions and download white papers:

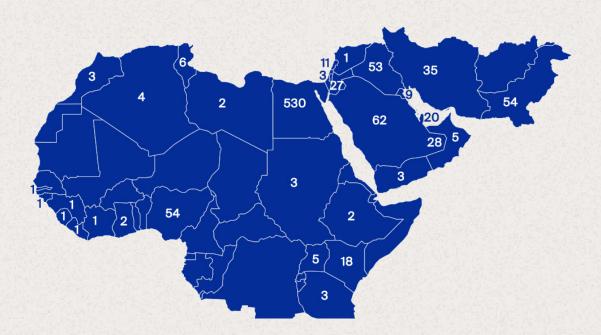
- Management of Intraoperative Vertebral Artery Lacerations
- Incidental durotomy with leakage of cerebral spinal fluid
- Pedicle screws that are dangerously positioned but asymptomatic
- Management of L4-L5 instability with asymptomatic disc disease at L3-L4 or L5-S1
- Best practices in intraoperative neurophysiological monitoring

Coming in April:

The management of early post-operative spinal infection in the presence of implants, interbody cages, and bone-grafting

Community Development

Membership Report by country: Middle East and Northern Africa



Egypt: 530 Saudi Arabia: 62 Pakistan: 54 Iraq: 53 Nigeria: 54 Jordan: 27

United Arab Emirates: 28

Iran: 35 Qatar: 20 Kenya: 18

Lebanon: 11

Kuwait: 9

Tunisia: 6

Oman: 5 Morocco: 3

Algeria: 4 Uganda: 5

Uganda: 5 Palestine: 3

Yemen: 3

Tanzania: 3

Bahrain: 3 Ethiopia: 2 Ghana: 2 Libya: 2

Sudan: 3 Syria: 1

Cote d'Ivoire: 1

Gambia: 1 Guinea: 1 Liberia: 1

Guinea-Bissau: 1

Total: 951

...exclusive member sessions and networking events





...free training assets and clinical tools to keep you up to date

...reduced registration fees



As a voting member of AO Spine, you can shape our future and enjoy...



...full access to the AO Spine Member Directory

...fellowship, faculty, and research opportunities at all stages of your career





...European Spine Journal, Journal of Neurosurgery: Spine, Spine, and Curated Articles (Membership Plus only) Membership is the key that unlocks all that AO Spine offers: it gives you access to free and discounted education, opportunities to apply for grants or to become faculty, the right to vote and participate in elections, and more.

Members find a lot more than "member benefits" with AO Spine—they enjoy belonging and being part of the world's leading academic spine society.

Visit our website at www.aospine.org/membership to find out more today! We look forward to welcoming you into our community!

Meet our members

Ahmed Algatub

AO SIRQ Research, Spine Centers and Fellowships Officer

What attracted you to join the AO Spine community?

In 2015, when I was a fellow in spine surgery, there was a need to improve my knowledge, skill and understanding in spine. Moreover, connecting with regional and international surgeons was also a goal of mine. AO Spine met this need, as it gives opportunities to juniors to improve their skills and introduces them to a global network of spine surgeons. At the same time, AO Spine gives every spine surgeon a voice that can be heard, even to those working in challenging circumstances.

What AO Spine activities have you been involved in?

Over the last six years I participated in over 40 AO Spine webinars, 7 face-to-face events and in 2 Global Spine Congresses. I started as a junior participant and graduated through the AO Spine academy until I became an AO Spine faculty, Country Council member (for Research, Spine Centers and Fellowships officer). I moderated several webinars, presented lectures as a faculty, and hosted an AO Spine event in my city. Moreover, I was granted an AO Spine fellowship in Germany in 2017 and was given another chance to participate in a fellowship in 2021, in South Korea.

How would you like AO Spine to help you develop in your career?

AO Spine's educational offerings can improve the academic development and skill of each surgeon. I improve my skills through my connections with people in the AO Spine world who improve my knowledge and keep me updated. Academically I believe that teaching other surgeons is the best way of learning, so being faculty at the next AO Spine event is a great thing to hope for and I am looking forward to working on the next event.



What attracted you to join the AO Spine community?

I first stumbled across AO Spine in 2004 while searching for more training opportunities in spine surgery. I later secured a fellowship in India with K.V. Menon, which was eventually converted to an AO Spine fellowship. The opportunities for spine surgical development were the first thing that attracted me to the community.

When I joined AO Spine, I met great surgeons who mentored me and didn't only impart surgical skills but also imparted selfless human relationship and personal development skills. The community also encouraged me to mentor and give back to others.

AO Spine courses and Fellowships are delivered by a community of astute academicians and surgeons, creating opportunities for improvement in spine practice. There was an exciting opportunity to acquire mentors from this vast field of experience in spine practice.

What AO Spine activities have you been involved in?

Several. Over a 10-year period from 2005, I took part in AO Spine courses in Kuala Lumpur, Dubai, India and Nigeria, both as faculty and participant. The Global Spine Congress in Dubai and the AO Spine Scoliosis week in Kochin, India. I observed AO Spine fellowships in India, South Africa and Turkey.

I participated in organizing the AO Spine Program for International Resource-based Education (ASPIRE) project course in Lagos in 2009. In November 2020, I chaired an online AO Spine organized seminar hosted at the National Orthopedic Hospital, Lagos, where I work. Currently, the National Orthopaedic Hospital in Lagos is the first AO Spine Fellowship Centre in Nigeria.

How would you like AO Spine to help you develop in your career?

In a country of 200 million people with a significant population in need of spine services, support is needed to inspire more interest in spine surgery specialization and in the training of interested surgeons to become highly skilled in the provision of appropriate spine services to the population. Refresher courses in advanced spine surgical skills on a regular basis for practicing surgeons would go a long way to enhance service provision.

I am pleased to see that Nigeria has an annual AO Spine course which is a great start to AO Spine's educational offerings in West Africa. with people in the AO Spine world who improve my knowledge and keep me updated. Academically I believe that teaching other surgeons is the best way of learning, so being faculty at the next AO Spine event is a great thing to hope for and I am looking forward to working on the next event.





Dialogue with Dan Riew, USA

Can you introduce yourself to our members in a few words?

I am a cervical spine surgeon and Professor at Columbia and Cornell Universities.

Why did you choose to go into spine surgery? Did you always want to be a surgeon?

When I went to medical school, I wanted to be a pediatrician. Then I found out that hospitalized children were often subjected to very painful procedures, which turned me off to pediatrics. Then I decided I wanted to be an orthopedic surgeon but in my 4th year, I took an elective in cardiology and fell in love with that. So I first did an internal medicine residency. Afterwards, while doing research in congestive heart failure, I realized that I had made a mistake and that I really wanted to do orthopedics. So I did another residency in orthopedics. During my ortho residency, I thought about several different subspecialties but was drawn to the complex nature of spine. It requires careful attention to detail during history taking, physical exam, review of imaging studies, formulation of the surgical plan, the surgery itself and post-surgical care. In other words, every step requires careful planning, thoughtful execution and attention to detail to get great results. The complexity is what makes it interesting for me, similar to chess being more interesting than checkers.

In your career, when did you start focusing on cervical spine surgery? is there a story beyond this?

Like many things in life, it was mostly luck. I trained with Henry Bohlman, who was considered by many to be the top cervical spine surgeon when he was in practice. Washington University in St. Louis hired me after fellowship because I had trained with him. To introduce me, they sent out cards to referring doctors describing me as a "Cervical Spine Surgeon." I was alarmed and asked them to send another card saying that I was a "Spine Surgeon," since I thought that no one could make a living just doing cervical spine surgery, not even Henry Bohlman. But they had no money left, so most of the referring docs thought I just did cervical spine. As a result, even at the start of my career, my practice was 60-70% cervical. After a few years, I found that I enjoyed cervical cases

new patient office slots.
By about my 5th year
of practice, I stopped
seeing any noncervical patients and
have never looked
back. Had they not
sent that card out
saying that I was
a "Cervical Spine
Surgeon," who
knows, I might
have remained
a general spine
surgeon.

much more than lumbar so gradually

shut down my lumbar practice

by limiting the number of

What or who inspires you in your work?

I have been fortunate to have many mentors who have guided and inspired me. In addition to Henry Bohlman, John McCulloch was a great mentor to me. I spent two weeks with him after my fellowship, learning how to do microsurgery. A few years later, we had become great friends and he said to me, "if you don't surpass me as a surgeon and academically in 5 years, I have failed you as a mentor." He unfortunately died in a skiing accident at a meeting that he had invited me to as the guest lecturer.

I have also been inspired by Richard Gelberman, former Chair of Orthopedics at Washington University, who gently pushed and prodded me to be academically productive. These days, my partners and the fellows inspire me to do the very best that I can for my patients.

What is your favorite hobby? And how can you manage time for that?

My favorite pastime since about 3 years ago has been going on long hikes in the state parks and mountains around New York with my wife and family. We go hiking most weekends and it is a great way to exercise and spend time with my family. Thanks to the pandemic, we have had more time to do that and our grown children have been able to spend more time with us.

Few tips from your side for young surgeons beginning clinical research.

Like everything in your career, you must plan ahead and have a goal in mind. If, like me, you need some external pressure to keep you on track to achieve those goals, you will need a mentor or boss who monitors your productivity and holds you accountable so that you can meet your goals. Collaborate with a senior author who will put your needs ahead of theirs and helps you to plan your research activities and mentors you thru the writing phase of the project. When you first start, you do not have enough clinical volume to do many case-based studies.

But you can do studies involving radiographic measurements or interpretation, complications, database studies and other such studies. In the meantime, you can start to plan some long-term prospective studies that will take 5+ years to complete and collaborate with colleagues to design and execute some multicenter studies. Plan to do at least 3 studies each year and if you do, it becomes habit-forming and it will become easier to be productive throughout your career.

Personally, how do you see new technologies?

I am excited by all the modern technologies that are being utilized in spine. While not every new tech turns out to be useful or safe, new tech keeps the field exciting and fresh. But you have to balance the desire to try new things with the knowledge that not all things turn out to be safe or effective in the long-term.

Working on the cervical spine. Can you tell us more about current projects you are working on?

I have many projects that I am currently working on. They include studies on artificial disc replacement, surgeon knowledge regarding EMGs, surgical drains for anterior cervical surgery, deformity correction, among others.

Do you see any differences in treatment approaches globally?

There are definite differences. For example, myelopathy is treated with laminoplasty much more frequently in Asia than North America. Radiculopathy is treated surgically much more frequently in 1st world countries than 3rd world countries.

Many parts of the world allow for hybrid procedures with arthroplasty at 1 level and ACDF at another, whereas in the US, insurers do not reimburse for that.

Could you tell us about the challenges and innovations in cervical spine surgery?

The biggest innovation in cervical spine surgery currently is cervical disc arthroplasty. We are now approaching 20 years of its use in the US, starting with the FDA-IDE trials. So it's not really new but we still don't know for sure when we can bend the rules and implant them in patients who don't fit the original FDA-IDE inclusion criteria. That is certainly a challenge, as we stretch the indications and try to determine if that makes sense in the long run. I used to do more CDAs in the past in patients with spondylosis and collapsed discs but have backed away some because I have found that long-term, the spondylotic spurs tend to recur and can become symptomatic.

Looking for the future, where do you expect the main progress in cervical spine surgery?

I believe that we will have more accurate and reliable navigation tools that will allow for more widespread usage of navigation. I do not use navigation currently but foresee a day when the technology gets so good that I can use it routinely. I think that we will also have more 3D printed, customized implants for patients. Finally, I believe that we will be using more biologics in the future to enhance bone healing or to prevent HO or other complications after an arthrodesis procedure.

What do you consider your biggest achievement in your career?

This one is easy. I have helped to train fellows and visiting surgeons. In medicine, we pay it forward and pass on to our mentees all of the knowledge that our mentors shared with us and that we acquire throughout our career. One's mentees are academic progenies and no parent ever wants their children to be as good as they are; they want them to be far better. I am proud to say that many of those who I helped to train have far surpassed

me in terms of knowledge, surgical skills, academic productivity and renown. There is a quiet satisfaction in knowing that I played a small role in helping them become competent and caring spine surgeons.

How do you unwind outside of work?

I consider myself very fortunate in that my wife is my best friend. So as long as we're together. we're relaxing and having a good time. After I get home from work, we usually have dinner with the family, which right now consists of my mom, who moved in with us last month (my dad died at age 92 of Covid this year), as well as our daughter, who is taking senior year off during the pandemic. Occasionally, our two sons join us. We often go for a walk in the neighborhood after dinner. I then do a few hours of work before bed and I usually read the NY Times and Wall Street Journal on my iPad



before falling asleep. I rarely work on weekends so that's time for the family to go on hikes and work around the house. That is how I recharge for the work week ahead.

Life during COVID-19 with Joseph El Khalil

The year 2020 has been one full of many hardships on Lebanon as a whole, with an unprecedented economic collapse and political turmoil compounded by the Covid-19 pandemic and

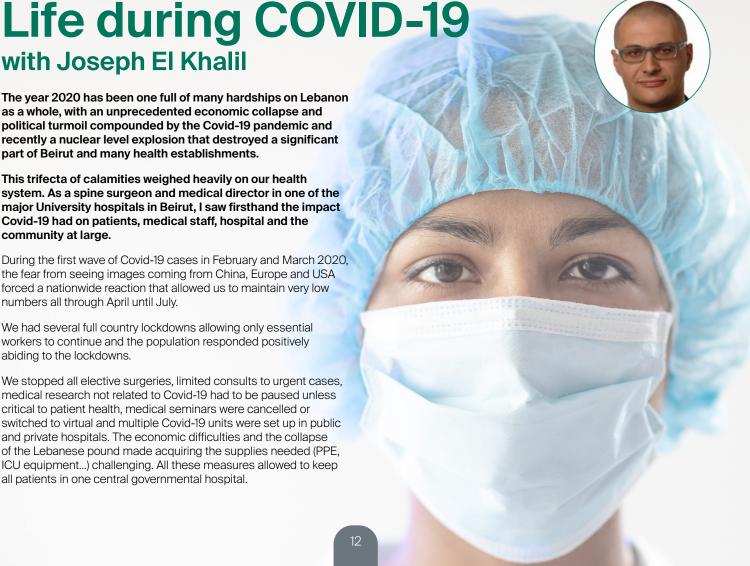
part of Beirut and many health establishments.

This trifecta of calamities weighed heavily on our health system. As a spine surgeon and medical director in one of the major University hospitals in Beirut, I saw firsthand the impact Covid-19 had on patients, medical staff, hospital and the community at large.

During the first wave of Covid-19 cases in February and March 2020, the fear from seeing images coming from China, Europe and USA forced a nationwide reaction that allowed us to maintain very low numbers all through April until July.

We had several full country lockdowns allowing only essential workers to continue and the population responded positively abiding to the lockdowns.

We stopped all elective surgeries, limited consults to urgent cases, medical research not related to Covid-19 had to be paused unless critical to patient health, medical seminars were cancelled or switched to virtual and multiple Covid-19 units were set up in public and private hospitals. The economic difficulties and the collapse of the Lebanese pound made acquiring the supplies needed (PPE, ICU equipment...) challenging. All these measures allowed to keep all patients in one central governmental hospital.



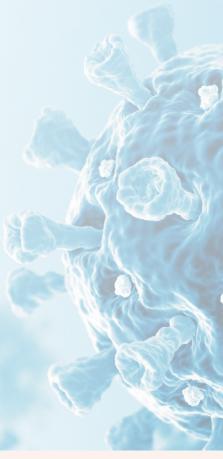
The next 6 months were much more difficult. The Beirut explosion destroyed 3 major hospitals, one of which was my own, and the population became more careless culminating with a complete lack of safety during the December holidays. Although, we managed to return to operating elective surgeries after May and came back to near normal occupancy and number of surgeries, the high numbers with the severe second wave, overwhelmed our hospitals.

Most serious was that nearly 20% of medical staff are now infected adding to the 20% of the most experienced and qualified who left the country because of the economic hardship. Currently the situation is dire, with resource allocation going towards the management of Covid-19, and with the devaluation of the Lebanese pound, we are faced now with a substantial shortage of surgical implants. Up until December the number of Covid-19 patients needing urgent or semi urgent surgeries was very limited, but recently numbers have grown exponentially making management more difficult, without clear guidelines for management of these patients (risk benefit ratio for early versus delayed care) and especially with the shortages in implants.

With shortage of beds, implants, personnel and the inherent risks with treating Covid-19 patients, surgeons in Lebanon have been facing daily dilemmas not only about who to treat, but also how to treat. As spine surgeons, besides postponing all deformity surgeries, we have been forced to steer towards more conservative treatments (pain management, bracing...) even for traumatic pathologies sometimes with suboptimal results. With mental, emotional, physical and financial strains; surgeons are trying their best to keep from burning out and resist the lure of immigration many have followed in the past few months.

As the world is trying to emerge with the help of the vaccine, we are still waiting to receive our first batch and fear financial difficulties hindering the purchase of enough doses to reach herd immunity required to go back to normal social life.

Many surgeons and I, physicians, and health care workers are hopeful our ordeals will soon be on their track towards resolution.



Spinal Surgery in The Time of COVID-19 Pandemic



Basem Awad, MD.

Neurosurgery Department, Mansoura University Hospital, Egypt During the COVID-19 pandemic, health care workers caring for patients in the perioperative period have faced many medical and ethical challenges regarding the decision to perform surgical procedures, the responsibility to reduce the burden on the health care systems, and the precautions taken to reduce the risk of transmission of infection.

Patients needing emergency spinal surgery (e.g., significant spinal cord compression with neurological deficit or cauda equina syndrome) or those with specific pathologies (e.g., vertebral fractures, tumors, or metastasis) should receive optimal perioperative care and undergo the indicated surgeries without delay, but performing the more elective procedures is under debate.

In our practice, we exclude Coronavirus infection during the pre-anesthetic evaluation. Patients with no manifestations (e.g., sore throat, fever, cough, dyspnea), normal peripheral oxygen saturation, no suspicious laboratory values (e.g., lymphopenia), and no recent contact with infected persons are allowed to undergo surgery without further assessment. Surgery for patients suspected to have the infection is postponed for further assessment and definitive diagnosis. We perform surgeries for patients with history of previous infection after sufficient time has passed since confirmed clinical, laboratory, and radiological resolution.

Special precautions are taken to reduce the risk of transmission to or from the patients undergoing surgery especially those receiving general anesthesia. For example, the use of disposable airway kits, ventilator filters, and disposable ventilator tubes, the strict sterilization of the reusable equipment, and the cautious handling of aerosols and airway secretions.

After surgery, we encourage our patients to strictly follow the social distancing rules, and we shorten the length of hospital stay as much as possible guided by the protocols of enhanced recovery after surgery. In short, the current pandemic has affected the practice of perioperative care starting from the decision to perform surgery to the time of hospital discharge. Effective patient counselling and education increases patient safety through the perioperative period.

Research

Announcing Mohammad El-Sharkawi as Deputy Editor for *Global Spine Journal*

We are delighted to announce that Mohammad El-Sharkawi has taken up his position as Deputy Editor of the Global Spine Journal (GSJ)!

Mohammad has been a Deputy Editor for the GSJ for several months, following a trial period of six months, and his position was made official in November 2020.

A Deputy Editor's main role is to review papers. After a paper has been peer-reviewed, Deputy Editors provide their recommendation, which the Editor-in-Chief takes into consideration when making a final decision. Deputy Editors must be able to justify their decisions.

Main tasks of a Deputy Editor are to:

- Help the Editors-in-Chief establish the overarching strategy and goals for the journal
- Oversee manuscript processes and policy, including input into development and implementation of journal policy
- Advocate for the Journal in the spine care community
- Decide on manuscript recommendations by reviewers and
- Review articles assigned to them by the Managing Editor

Once a year the Deputy Editors meet the Editorial Board and Publisher for discussions



regarding the strategy of the GSJ. Sometimes the Deputy Editors may be called upon to vote on a decision that the Editors-in-Chief and Managing Editor may need to make, e.g. choosing a new publisher.

Please join me in congratulating Mohammad!

For a complete list of Associate Editors and to access the Global Spine Journals click here.

Top Global Spine Journal articles: 2020

Top cited regular issue articles

- Degenerative Lumbar Spine Disease: Estimating Global Incidence and Worldwide Volume
- 2. Incidence of Osteoporosis-Related Complications Following Posterior Lumbar Fusion
- Comparison of Anterior Cervical Discectomy and Fusion With a Stand-Alone Interbody Cage Versus a Conventional Cage-Plate Technique: A Systematic Review and Meta-Analysis
- 4. Surgical, Radiographic, and Patient-Related Risk Factors for Proximal Junctional Kyphosis: A Meta-Analysis
- 5. Lumbar Interbody Fusions for Degenerative Spondylolisthesis: Review of Techniques, Indications, and Outcomes

Top cited special issue articles

- Treatment of Odontoid Fractures: Recommendations of the Spine Section of the German Society for Orthopaedics and Trauma (DGOU)
- 2. Essential Concepts for the Management of Metastatic Spine Disease: What the Surgeon Should Know and Practice
- 3. Spinal Tuberculosis: Current Concepts
- 4. Classification of Osteoporotic Thoracolumbar Spine Fractures: Recommendations of the Spine Section of the German Society for Orthopaedics and Trauma (DGOU)
- 5. Cell Therapy for Treatment of Intervertebral Disc Degeneration: A Systematic Review

Top downloaded regular issue articles

- The Impact of COVID-19 Pandemic on Spine Surgeons Worldwide
- COVID-19 and Spine Surgery: A Review and Evolving Recommendations
- An Assessment of Nonoperative Management Strategies in a Herniated Lumbar Disc Population: Successes Versus Failures
- Perioperative Anticoagulation Management in Spine Surgery: Initial Findings From the AO Spine Anticoagulation Global Survey
- 5. Artificial Intelligence and Robotics in Spine Surgery

Top downloaded special issue articles

- Evolving Navigation, Robotics, and Augmented Reality in Minimally Invasive Spine Surgery
- 2. Anticoagulation and Spine Surgery
- RE-CODE DCM (REsearch Objectives and Common Data Elements for Degenerative Cervical Myelopathy): A Consensus Process to Improve Research Efficiency in DCM, Through Establishment of a Standardized Dataset for Clinical Research and the Definition of the Research Priorities
- Essential Concepts for the Management of Metastatic Spine Disease: What the Surgeon Should Know and Practice
- The Use of Intraoperative Neurophysiological Monitoring in Spine Surgery

Message from our Research Officer, Waleed Awwad



High-quality research which has an impact on clinical practices are produced with collaboration from esteemed groups of well-motivated surgeons/researchers to a given clinical question.

In our region, we have multiple well-known surgeons with vast expertise and up to date clinical practices. Furthermore, numerous surgeons produce high-quality papers despite the lack of research infrastructure.

We are aiming to have a collaborative project between surgeons in our region who will act as thinkers, researchers and mentors to develop a sound MENA special edition (2022) in the *Global Spine Journal (GSJ)*.

We will produce multiple papers that follow a main theme that reflects a common topic of concern in our region.

To be successful and produce high quality papers, we seek the collaboration and help of our senior researchers to act as mentors and facilitators to the well-motivated surgeons who will participate in this *GSJ* MENA special edition.

You are all welcome to be part of this exciting project; our great efforts will be heard worldwide!

Topic	Group mentor	Title
Early onset of Scoliosis	Alla Ahmad	Complications in the early onset of Scoliosis
Complications	Sameh Abolfotouh	Incidence and predictors of postoperative wound infection in spine surgeries in the MENA region
Impact of Endoscopic Techniques on Patients' Reluctance to Undergo Spine Surgery	Muhammed Assous	Impact of Endoscopic Techniques on Patients' Reluctance to Undergo Spine Surgery
Virtual Reality in Transforaminal Endoscopic Lumbar Discectomy	Muhammed Assous	Virtual Reality in Transforaminal Endoscopic Lumbar Discectomy
Spine operations in the Covid era or Tuberculosis Spine	Atiq Uz Zaman	To be confirmed
Spinal infections	Mohamed Abdel-Wanis	To be confirmed
Spinal fractures	Mohammad El-Sharkawi	To be confirmed
Traumatic Spinal Cord Injury (SCI)	Vafa Rahimi-Movaghar	To be confirmed
Create a questionnaire for registry of each spine disease	Vafa Rahimi-Movaghar	To be confirmed
Artificial intelligence	Alla Ahmad	To be confirmed



Join a group if you:

- Are an AO Spine member or will join AO Spine once you have been accepted in a group
- Are committed and active in your chosen group
- Preferably hold an academic position, research degree, or have completed an AO PEER Course, or Research event

Please send your group preference and current CV to aosme@aospine.org by March 14, 2021.



Can you introduce yourself to our members in a few words?

My name is Mohammad El-Sharkawi. I am a professor of Orthopaedic and Trauma Surgery, specializing in Spine Surgery and practicing spine surgery exclusively since 2005. Currently, I am the head of the Department of Orthopaedic and Trauma Surgery, Faculty of Medicine, Assiut University, Egypt and the Head of the Spine Surgery Unit.

Can you tell us how you have been involved in AO Spine?

I have been introduced to the world of AO since the very beginning of my training in the Orthopaedic department in 1990. I joined AO Spine in 2004 when it was created as a separate clinical division. I was elected to chair the AO Spine Egypt Council in 2012. I was also elected to become the Middle East Education Officer (Ortho.) in 2015, and in 2018, I was honored by colleagues electing me to become the AO Spine Middle East and Northern Africa Chairperson.

What is your favorite hobby, and how do you manage your time for it?

A long time ago I used to play tennis, volleyball, and collect stamps. Nowadays, my only hobby is AO Spine.

Why did you choose to go into spine surgery? Did you always want to be a surgeon?

Yes, I always wanted to be an Orthopaedic Surgeon and enjoy the challenge of spine surgery.

As a GSJ deputy editor, when did you start focusing on editorial work and how was your career through it?

In 2010 I became a reviewer in *Spine* and I found this a unique learning experience and challenge. Later, I became a reviewer in many other reputable journals including the *GSJ* and *EBSJ*. I am also the Spine Section Editor of the *SICOT-J* since 2016. In mid-2020 the Editor In Chief of *GSJ* asked me if I would be interested in becoming a Deputy Editor? After a trial period of 6 months, the editorial board nominated and confirmed my position.

What or who inspires you in your work?

Very early in my life, before joining the Faculty of Medicine, I had the honor of knowing Professor Galal Zaki Said, the founder of the Orthopaedic Department in Assiut University, and I always wanted to follow his footsteps. When I joined the Orthopaedic department, I discovered a great school of perfection, professionalism, and dedication to teaching and patients' care. I learned and still learn daily from all professors and colleagues in my department.

Three tips for young surgeons beginning clinical research.

As everything in our profession, you need to learn and train well before practicing, and I believe, the same applies to clinical research. It is not enough to read papers and try to replicate studies. One should also read about, learn about and preferably be trained and mentored by senior researchers too. The AO PEER provides basic knowledge and tools to start clinical research in the right way.

How do you personally evaluate new technologies?

Cautiously. During my career I witnessed many new inventions and technologies. Some of them stood the test of time and have survived and contributed significantly to the better outcome of our surgeries, and more importantly the quality of life of our patients. Yet many new inventions, despite the amazing initial reports, have failed and vanished. One common feature is that every new technology is expensive, and this is a strong reason not to try anything new before making sure it really adds value to our practice and patients.

Can you tell us more about projects that you are currently working on?

I am currently busy with my colleagues in the MENA Board in promoting clinical research in our region. We are planning to organize many new AO PEER courses of different levels and trying to establish many dedicated cross-countries pathology-oriented research groups to push further clinical research in our region.

Do you see any differences in treatment approaches internationally?

Naturally, the treatment of any condition considers not only the best available evidence from the literature, but also should incorporate into the decision-making process, the cultural differences, regional norms, patients' preferences, physicians/surgeons experience, and availability of the equipment and technologies.

Where do you think are the main challenges and developments coming through in spine research?

In our region, the main challenge is the lack of reliable database for clinical research and multicenter studies.

Looking forward to the future, where do you think the biggest developments in spine are going to be?

Navigation and Robotic surgeries are coming and sooner or later will prevail for safer surgeries and better patients' outcome. The real challenge is the cost, and as everything in our practice, the accuracy gradually increases and with competition between companies, costs will decline with time.

Throughout your career, what do you consider your biggest achievement?

I am happy with all what I have achieved so far in my life, but I would rather think of what I still want to do as a recently appointed Head of Department of Orthopaedic and Trauma Surgery, and I just hope by the end of my term to render my department bigger, more advanced, and well prepared to work with future developments and challenges.

How do you unwind outside of work?

Travelling and spending time with my family is my preferred method.

Spine Centers and Fellowships

Fellowships in MENA

Muhammed Assous

AO Spine MENA Spine Centers & Fellowships Board Officer

Dear friends in the Middle East and Northern Africa region,

2020 was a year marked by the pandemic and by the challenges it has called upon us. But every cloud has a silver lining and this one will not be different.

Our fellowship program was highly impacted in 2020. Most of our fellowships had to be postponed or cancelled. And unfortunately, the beginning of 2021 does not look very different and we are doing our best to relocate our fellows to the second half of the year when hopefully the situation will have improved.

I am glad to announce that there was an impressive growth in the number of official AO Spine Centers in the region. We have state of the art Spine Centers in the region with highly qualified surgeons that are eager to receive fellows and share knowledge with our community.



Country	Spine Center	Director
Egypt	Ain Shams University, Cairo	Mohamed Khattab
	Spine Unit Department of Orthopaedic Surgery, Faculty of Medicine, Alexandria	Hesham El Saghir
	Assiut University Hospitals—Department of Orthopedics and Trauma—Spine Unit, Assiut	Mohammad El-Sharkawi
	Tanta University Hospital, Tanta	Tarek Ahmed
Iran	Chamran Hospital, Shiraz University of Medical Sciences, Shiraz	Babak Pourabbas
Jordan	Al Khalidi Hospital and Medical Center, Amman	Muhammed Assous
Pakistan	Ghurki Trust Teaching Hospital, Lahore	Amer Aziz
Saudi Arabia	King Khalid University Hospital, Riyadh	Khalid Alsaleh
	Dr. Soliman Fakeeh Hospital, Jeddah	Mahdi Mohammad Bassi
	King Abdullah Medical City, Makkah	Salahaddeen Khalifah
Nigeria	Lagos National Hospital	Mustapha Alimi

This is an opportunity for surgeons looking to expand their skills. Among the advantages of doing a fellowship in one of our centers are the lower chances of cancellations (yes, we are still receiving fellows!), higher chances of scrubbing in, creating a local network, the language, and so on.

We have organized a series of virtual meetings with the Spine Center Directors and their teams to present their Centers, discuss the cases and techniques often seen by their fellows, and answer any questions you might have.

Please join our meetings to find out more about the expertise and training opportunities of our Centers.

I will be the first to present my Spine Center, on **February 27**, 17h, Amman time. To register, click here.

Stay safe.

With kind regards,

Muhammed Assous

My AO Spine fellowship experience

Saad Hamdan Abdullah

Neurosurgery Consultant, Amman, Jordan

Dear friends and colleagues,

I am a practicing neurosurgeon since 2003, but luckily, I had the privilege to do my first AO Spine fellowship for six weeks in 2020. I once suggested to the AO Spine MENA board that we should encourage middle east fellowships, and that is why I decided to do my fellowship here in Jordan with one of the pioneers in spine endoscopy in the Middle East. To be honest, it was a very fruitful experience. I learnt from a great teacher; saw how he tackled problems and had the chance to perform the surgery with assistance. The ability to do what I thought is impossible for me gave me great confidence and enthusiasm to start a new line of work in my career.



The good thing about my fellowship in the era of COVID-19 were, I did not have to travel, to look out for border restrictions, cancelations, delays or change flights. Additionally, I did not have any language barriers which allowed me to communicate with the patients and their families freely. The cons were few but the most significant one was that the number of cases were not as many as usual due to the pandemic.

I do encourage all the young spine surgeons to join the AO Spine and to take part in the fellowship program. Also, I encourage them to be part of Middle East fellowship programs because they offer more training experience, good quality trainers and the chances of getting hands on training is greater.

Message from an AO Spine fellow, Tarek El Hewala



It is always said that there are many benefits from traveling, and this is fully fulfilled in the AO Spine fellowship. I attended my fellowship at the end of 2015, where I spent nearly two months in the spine unit of orthopedic department of Uppsala University Hospital with Yohan Robinson. One of these benefits is the change in the way of thinking and looking at things from a different perspective. I also experienced a change in the speed and way of learning. During the fellowship, you have the opportunity to share ideas, way of solving problems and treating your patients. Usually, you are the ambassador of your medical school with this new community. It was my first time to be introduced to the microscope and MIS spine surgeries and I eventually transferred these experiences to my spine unit in Zagazig University.

One of the great benefits of AO Spine fellowship is the communication and friendship you develop during your stay which continues after the fellowship as well. Exchanging thoughts, cultures and traditions are also one of the important things during these fellowships. Through this fellowship and these communications, I became one of the steering committee of the AO Spine Past Fellow Alumni. We plan different social and scientific events during the Global Spine Congress, yearly now since 2017. During these events we try to gather all the spine fellows together.

I am very grateful to the AO Spine for giving me this unforgettable opportunity.

Rohail Mumtaz's fellowship experience

Thank you for giving me the opportunity to express my experience I had during the AO Spine fellowship at Ghurki Trust Teaching Hospital. The hospital is one of the best training centers across Pakistan and probably even in the Middle East. All the staff are well trained and very experienced. They have a variety of cases and a huge turnover. This gave me the opportunity to improve and hone my surgical skills as a fellow. I gained a lot of confidence as a surgeon after this fellowship. All the staff were very humble and helpful. All in all, it was a great experience, and I am especially thankful to Prof. Amir Aziz for his kindness in accepting me as a fellow.

Muhammad Ali's fellowship experience

Thank you for the opportunity extended to share my experience at Ghurki Trust Hospital.

What I can say cannot by any means encompass the truth and depth of experience and knowledge one can gain from such an experience at Ghurki Trust hospital. The team of professionals at Ghurki under the lead of Dr Amir Aziz are by far the definition of excellence in the field of spine surgery and humanitarian cause. It is a teaching hospital and I had the opportunity to visit and work in their new Spine surgery facility which has state of art equipment being rightly utilized by some of the highly skilled and trained surgeons. These surgeons are living examples of AO spine principles and care methodology. Being a trust hospital, their number and variation of cases are far more complex and challenging than observed anywhere else in the region. They are a tertiary care facility for spine trauma and deformities are referred to from local hospitals and from across borders. Their numbers and their successfully treated patients are proof of their mettle. My experience was overwhelming there but regretfully very short and I hope can revisit in the near future.

Abdul Waheed's fellowship experience

January-March 2019, Ghurki Trust Teaching Hospital, Lahore, Pakistan

I have gone through a rewarding fellowship training under the Division of Spine Surgery, at the AO Spine Centre, Ghurki Trust Teaching Hospital Lahore, Pakistan. Spine surgery has always fascinated me during my training in orthopedics and this fellowship was a great opportunity for me. This is a world-renowned center, with excellent Professors and staff. They are in the forefront of research in the different spine problems. I was overjoyed and honored when I received the opportunity to be accepted in this program. The schedule was full and demanding.

Every morning, we had the trauma meeting, where I got to see new cases of trauma. If the patient needed emergency surgery, they were operated by the team on duty. Most of the cases that came were polytrauma and were managed by a qualified team. This gave me a chance to see difficult cases and receive the opinion of experts. Here, I learnt how to handle different kinds of trauma cases and how to manage them individually.

We were divided into three teams of which each team was supervised by a Consultant. Each team had two days for OPDs clinics, two days for operations theaters and two days for ward rounds. In these clinics, I saw a variety of cases from patients with mechanical low back pain, cervical myelopathy, degenerative spine conditions and infections like Tuberculosis and tumor.

In the operating theatre, I was assisted by different members of the team in various types of spine surgeries. It was a wonderful experience learning from these great surgeons especially Professor Amer Aziz (Father of Spine Surgery in Pakistan). They shared their own tips and tricks for each kind of surgery. For this, I am very thankful for the invaluable knowledge and experience that I have gained.

During our rounds, after I presented each spine case admitted, the spine team together with other departments discussed the case. This multidisciplinary approach struck me the most and ensured that the best and most holistic care was given to each patient.

Every morning we had a preoperative conference, during which trainees presented the cases scheduled for operation. This gave me the chance to analyze the different cases and understand why these patients were undergoing the planned operations. This also gave me the opportunity to discuss the best surgical plan and approach for each patient which enabled the operations to run smoothly.

For research, I was able to help in the data collection of ongoing studies. I was able to observe and see their set up and how they go about in producing quality world class papers.

Due to this, I managed to meet and make new friends from all over Pakistan. I have met excellent spine surgeons from all over the world especially the renowned surgeon Professor Max Aebei. I have learnt much from them as well. Also, I attended the scoliosis week in Ghurki Hospital where I had the opportunity to see and learn difficult cases and hear the opinion of world-renowned surgeons. I would like to thank the Spine Team for the invaluable lessons that they have taught me. This program makes you a better doctor and person. I am very grateful and honored to have been part of this program.

I was able to explore Lahore during weekends, in particular historic places. Lahore is one of the wealthiest, largest, and the most historically significant city in Pakistan.

Lahore is also known for its delicious food. It was a treat going around the different restaurants and being able to eat the delicious local food.

Remember, we look forward to receiving your ideas, comments, and suggestions for the next issue of your newsletter!

Please send to Ali Abou-Madawi: aamadawi@gmail.com

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