

Issue No. 99



SICOT COMMITTEE NEWS

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SICOT REVIEW

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EDITORIAL



JOHN DORMANS (UNITED STATES) SICOT President

My Term as SICOT President

I have been asked to write a brief article summarising the past two years of SICOT, in my term as SICOT President. It has indeed been an honour and a privilege to serve.

One cannot begin without mentioning the COVID-19 pandemic and how this has fundamentally changed everything, including all aspects of how musculoskeletal care is provided, education and researchers function, and also how professional organisations function.

Before summarising our SICOT "redirection" in the context of the COVID-19 pandemic, I would like to begin earlier, further back, describing an earlier timeline and thanking many individuals. No effort occurs in isolation. Successful change culminates with a group of like-minded diverse individuals who have a common vision, moving forward with efforts to support and create lasting positive change. The emphasis in most highly functional groups and situations is a shared strong group vision, not on self but rather on progress, outcomes and "paying it forward", without attempt to seek recognition.

Regarding my involvement with the SICOT presidential line, I was strongly influenced by a common vision with Keith Luk and Shanmuganathan Rajasekaran. The three of us had a common vision that included strengthening principles such as term limits, succession planning, organisational structure, and so on. Progress was made on all of those fronts with support from many others including Jochen Eulert, Maurice Hinsenkamp, Jim Waddell and the other previous involved SICOT presidents, leaders and the Head Office staff. While we still have a tremendous amount of work remaining, we have made significant progress with the creation of four councils/academies with strong, active involved committee chairs. Most recently, this has included a further growth and strengthening of the Education Academy under the leadership of Vikas Khanduja and early advancements in the newly created Research Academy under the leadership of Mohit Bhandari. One important remaining governance goal is to formally incorporate the Education and Research Academy chairs as voting members of the Executive Committee structure.

We have also tried to make term limits in succession planning an important part of our overall culture including our national delegate structure and committee chair structure. We have active, vibrant committees under their Council/Academy leadership with term limits, succession planning and specific charges that are refreshed every year. We are beginning to see more conference calls, group planning, common vision development and sophisticated organisation with these new changes.

Regarding specific projects, there are too many to list. Some of the many that have been particularly important include the redirection of education to online webinars with the COVID-19 situation, the advancement of women and orthopaedics (especially in low and middle income countries), the reactivation of our inactive Disaster Relief Committee, the activation of the Ethics Committee, the active involvement of the Immediate Past President/Governance Council Chair in long-range planning, official nominating process and congress site selection progress, and so on.

We believe in the saying "No margin, no mission". We believe that you occasionally need to spend money to make money.

We also believe in the importance of financial security. There is an important role for the SICOT Foundation to support future research and education through and in a document-based mechanism. This is currently established in the United States but open for other international contributions. We hope to establish this in Europe and perhaps Asia in the future.

We have strengthened our website, improved our technical and information system capabilities with ability to store in catalogue past video conferences and have, most importantly, continued to promote and involve young future leaders.

We have also expanded our Head Office support capabilities into other geographic regions beyond Brussels and hope to do more of that in the near future.

With the COVID-19 pandemic there was a significant redirection from a once-a-year face-to-face meeting. This was quickly redirected to a virtual online webinar learning platform now called SICOT PIONEER. There has also been impressive participation and we anticipate that this new and unique online learning platform will be a permanent fixture alongside our face-to-face meetings, once they resume.

Finally, exams. We had an exam in Mumbai that was very successful and are now planning virtual exams under the direction of Marc Patterson in collaboration with the Education Academy and Governance Council.

As I move into the role of Governance Council Chair (as Immediate Past President) overseeing the SICOT Constitution, Bylaws, Policy and Procedures, the official nominating process, ethics, and several other important committees, we will not only maintain our steadfast focus on the guiding principles that have made SICOT one of the leading orthopaedic organisations in the world, but try to reinforce other guiding principles that come about with necessary change and advancement in a changing world. We must achieve our full global potential. This will involve realising our unique mission and brand, which importantly includes a unique focus on advancing musculoskeletal care in low and middle income countries; we hold a special position of leadership in this realm.

We will continue to collaborate with others including the new Alliance of International Organizations of Orthopaedics and Traumatology (AIOT). We are moving forward with several collaborative projects particularly in the area of global musculoskeletal group advocacy.

It is indeed an exciting time for SICOT. I would like to thank all of our members, from all corners of the globe. The future is yours; and all of the past leaders and future leaders. Our goal is to always "pay it forward", achieve our potential and enjoy the process of making the world a better place, one small step at a time.

It has been a pleasure serving you as SICOT President for these past couple of years. Ashok Johari will transition into the presidency in the near future. I sincerely wish him the best of luck as he carries forward his own unique vision for SICOT with the new transitioning SICOT leadership team.

God bless SICOT and each and every one of you.

NEWS FROM THE HEAD OFFICE

New Appointments

We would like to warmly welcome the new **SICOT National Representatives** who have joined the International Council since July 2020:

Sadig Bendalla (Libya)

Hazem Al Khawashki (Saudi Arabia)

Mohammed Ali Fadhil Al-Bayati (Iraq)

Muhammad Zain-Ur-Rehman (Bahrain)

Francisco Linares (Colombia)

Yousef Othman (Jordan)

Christian Lozano (Peru)

Dan Atar (Israel)

Saeed Althani (United Arab Emirates)

Eric Tortosa (Panama)

Hans-Christoph Pape (Switzerland)

Stefan Cristea (Romania)

Shadrack Schock (Tanzania)

Hannu Miettinen (Finland)

Philippe Tracol (France)

Huub Van Der Heide (Netherlands)

Dadi Jin (China)



The newly appointed Chairs of the **Standing Committees** are:

- Research Grants Committee: Mustafa Citak
- Research Awards Committee: Margaret Fok
- Research Education and Mentorship Committee: Ajay Malviya
- Advocacy Committee: Onder Aydingoz

Chahine Assi has recently been appointed Chair of the Hip Subspecialty Committee and Roman Pfeifer is the new Vice-Chair of the Trauma Subspecialty Committee. The **SICOT Subspecialty Committees** help create our fantastic SICOT PIONEER Live Webinars.

A big congratulations and thank you to all!

SICOT COMMITTEE NEWS



MARGARET FOK (HONG KONG)
SICOT Hand Subspecialty Committee Chair

SICOT Hand Subspecialty Committee

The Hand Subspecialty Committee has a long history in SICOT. It started with a group of hand surgeons who were passionate to share their experiences on different aspects of hand pathologies and to educate young fellows and trainees. Through symposia, instructional lectures, and free paper sessions at the SICOT Congresses, the Hand Committee provides a platform for both hand surgeons and general orthopaedic surgeons globally to come together for knowledge exchange, recommendations and inspiration through case discussions. Many international collaborations have been made possible through this platform.

Hand pathologies comprise of many different disciplines, including congenital hand anomalies, trauma, degenerative conditions, peripheral neuropathy as well as soft-tissue defects. With a growing interest in the management of hand pathologies, the SICOT Hand Committee has gradually grown in size. In 2016, Microsurgery (formerly part of the Hand Committee) formed a separate committee. However, the Hand and Microsurgery Committees continue to work together and share some faculty members.

I joined the Hand Committee of SICOT in 2014 and have benefited from many exciting opportunities the committee have made possible over the years. I was honoured to be the successor of Dr Frédéric Schuind as Chair of the Hand Committee last year. This position allows me to pass on what I have learnt over the years and to lead the group to strive towards our objectives. With the restructuring of all committees since the end of last year, we now have members from different continents working together. I hope this new arrangement will draw new inspiration as well as new collaborations internationally.

Unfortunately, the annual SICOT Congress this year has been postponed due to the COVID-19 pandemic but this has not stopped the Hand Committee from working as a team. In the coming months, we have arranged for two SICOT PIONEER webinars co-organised with partner hand societies:

- SICOT / Asia Pacific Wrist Association (APWA):
 Current Concepts in Managing TFCC Tears
 24 October 2020 (14:00 GMT+1)
- SICOT / Hong Kong Society for Surgery of the Hand (HKSSH): Current Concepts in Managing Congenital Anomalies 14 November 2020 (14:00 GMT)



Please stay tuned for more details on the upcoming events. Of course, a face-to-face meeting cannot be replaced but we must adapt to continue our work. With the hope of the pandemic dissipating in the near future, we have arranged an exciting programme for the SICOT meeting in Budapest, September 2021, and we do look forward to seeing you there.



Faculty after the Microsurgery/Hand symposium in Rome 2016:

- the immediate past Chair of the Hand committee, Frédéric Schuind (far right)
- immediate past Chair of the Microsurgery Committee, Marko Bumbasirevic (middle)
- current Chair of the Hand Committee, Margaret Fok (third from left)

Current committee members:

Chair: Margaret Fok (Hong Kong SAR)

Vice Chair: Ferdinando Da Rin (Italy)

Immediate Past Chair: Frédéric Schuind (Belgium)

Aly Amr (Egypt)

Sha-Lin Chen (China)

Anil Dhal (India)

Mohamed Ali Fadhil (Iraq)

Duretti Fufa (United States)

Bo Liu (China)

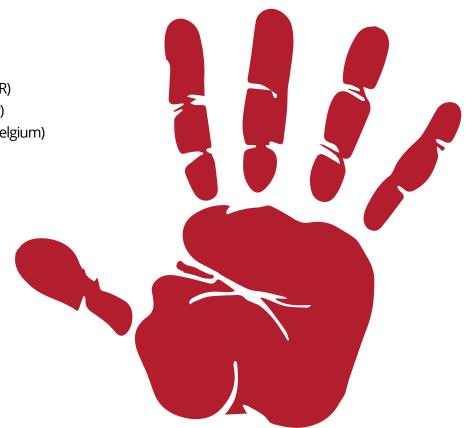
Fabian Moungondo (Belgium)

Essam Elkaref (Egypt)

Sanjeev Kakar (United States)

Marco Yanex Quito (Brazil)

Joao Carlos Nakamoto (Brazil)



SICOT PUBLICATIONS



HATEM SAID (EGYPT)SICOT-J Editor-in-Chief

SICOT-J is now indexed in Scopus!

The editors of SICOT-J, Hatem Said and Jacques Caton, and EDP Sciences are proud to announce that SICOT-J has been accepted into Scopus. This is a result of a great cumulative work by the Editorial Board, editorial team and super active reviewers.

SICOT-J was founded in 2015 as an Open Access journal for SICOT. Since then, it has successfully been indexed in PubMed, PubMed Central, Emerging Sources Citation Index and Directory of Open Access Journals (DOAJ).

Its indexing in Scopus marks a big leap in its reach to more researchers and its worldwide recognition. With a self-calculated impact factor of around 1.7, this would potentially place SICOT-J in a high Q3 rank.

As an Open Access journal, articles in SICOT-J are easily accessed and downloaded, with some articles surpassing 20,000 downloads. SICOT-J has benefited from its wide base of SICOT members and their colleagues that has led to publication of strong scientific articles. We are proud to receive articles from all five continents, which confirms SICOT's role as an advocate of global education and research.

SICOT-J has published several special issues on the most recent orthopaedic topics including orthobiologics, deformity correction, musculoskeletal tumours, arthroscopic treatment of hip chondral lesions, computer-assisted orthopaedic surgery and the latest being on hip and knee replacement in 2020. Since its foundation, SICOT-J has published 288 peer reviewed articles with a rejection rate of 65%.

The SICOT-J website (www.SICOT-J.org), is very user friendly and easy to navigate. Each article has its live metrics including details about views and downloads and can be downloaded in several formats. You can also follow us on our Twitter account @SICOT-J with the latest news and our highest performing articles.

SICOT-J welcomes the submission of original articles in addition to review articles, surgical techniques and case reports. We welcome you to submit your research and also the addition of interested reviewers to join our active Editorial Board.



SICOT BY REGION



FERNANDO ROSA (BRAZIL)SICOT National Delegate of Brazil



TATIANA GUERSCHMAN (BRAZIL) Young Surgeons Committee Member

SICOT in Brazil: Current Scenario and Future Plans

The national orthopaedic society of Brazil, the largest country in Latin America, SBOT (*Sociedade Brasileira de Ortopedia e Traumatologia*), has 14,302 orthopaedic surgeon members as of today. However, only a few Brazilian orthopaedic surgeons are currently members of SICOT.

With orthopaedics becoming highly specialised, in the last decade we have noticed the evolution and growth of many subspeciality-based societies, as well as a few regional societies, in Brazil. But we have not achieved the same expansion in SICOT membership. The partnership between Brazil and SICOT, however, is long-lasting and strong. With SICOT playing a key role in the global dissemination of evidence-based knowledge, and good practices in orthopaedics, as well as offering a wealth of opportunities for training and research for orthopods around the world, we aim to come back as one of the leading contributors to SICOT (Figure 1).



Figure 1: Brazilian members of SICOT at the Networking Event of the SICOT Orthopaedic World Congress 2019 in Muscat, Oman (from left to right): Cristiano Saliba, Fernando Rosa, Gabriel Riffel, Darci Lopes Junior

Our national society is globally known for its training and diploma examination, with written questions, clinical case-based oral discussions, technical examinations (physical examinations and technical evaluations) and, most recently, behavioural examinations. SBOT has more than 190 active orthopaedic resident training centres and evaluates between approximately 700 and 1200 candidates per year.

Brazil has its own unique characteristics in the field of trauma. Every day it faces the fall-out from civil war. Unfortunately, the number of violent deaths and orthopaedic trauma in Brazil is greater than those from recent civil wars. With a size roughly equal to that of continental Europe, Brazil employs a dual healthcare system, with both universal free public care as well as a separate private system, with more than 70% of people using the public system. This duality in healthcare means there is a range in centres from those with high resources (similar to most developed nations) to those with a scarcity of resources. On one hand, we have a private system to manage in a sophisticated way, and on the other hand, we have the public sector where we manage to offer quality orthopaedic care, with little available technological resources. In Brazil we have the dual experience of offering quality healthcare in resourceful as well as in resource-constrained scenarios. This duality of healthcare challenges us technically and as a consequence develops our ability to get out of various pitfalls both in traumatology and in elective orthopaedic cases. Brazilian orthopaedic surgeons have the adaptability and technical expertise to treat orthopaedic pathologies with limited use of technological resources, and we think that we can spread this know-how around the world and share those experiences (Figure 2).



Figure 2: Brazilian teaching faculty represented by Fernando Rosa and Luis Fernando Jordão participating in the Cadaver Lab during the SICOT Orthopaedic World Congress 2019 in Oman.

In recent years, the Brazilian public system of care has expanded to rural areas, embracing a higher number of patients, with better care at a lower cost. This has allowed for the emergence of more resident training centres. One of our goals over the next few years is to take advantage of this opportunity and spread the word of SICOT inland.

As Brazilian National Delegate (Dr Fernando Rosa) and Young Surgeons Committee Latin American representative of SICOT (Dr Tatiana Guerschman), our goals for the near future are to retain the current active Brazilian members of SICOT by involving them in SICOT's activities, and to increase the membership of Brazilians as new SICOT associates. We will be looking not just to increase membership numbers, but also to raise collaborative efforts and to improve SICOT's visibility in our country as an inclusive and high-quality society with great networking opportunities.

To achieve these goals, we intend to improve our contact with current members as well as to increase the diversity of new members. We plan to promote more participation in official events such as the global webinars, the Orthopaedic World Congress and fellowship programmes. We intend to spread awareness about SICOT across orthopaedic groups in medical schools, resident programmes, among young orthopaedic surgeons, and female orthopaedic surgeons.

As we know, the number of women in orthopaedics is proportionally one of the smallest in all medical specialties, not only in Brazil, but worldwide, even though women are half of all trained doctors. During last year's SICOT Orthopaedic World Congress in Oman, the first Women in Surgery meeting was held, headed by Dr Patricia Fucs and Dr Evalina Burger, which brought together 14 female orthopaedic surgeons from 11 different countries. Following this initiative, the Brazilian Women in Orthopaedics Association (AMOB) (Figure 3) was founded. This newly-formed group already has 380 registered members, with the objective of uniting all women in orthopaedics (from medical students to fellowship-trained surgeons), encouraging mentorship and research, and facilitating access to scholarships and exchange fellowships. AMOB also aims to expand networking among orthopaedic surgeons globally.



Figure 3: Logo of AMOB (Associação de Mulheres Ortopedistas do Brasil), Brazilian Women in Orthopaedics Association

We look forward to leveraging the extensive resources provided by SICOT, strengthening our partnership, and spreading knowledge to the future generations of orthopaedic surgeons.



SICOT HISTORY



MAURICE HINSENKAMP (BELGIUM) Past President of SICOT

Memories from the SICOT Annual International Conference Cuba 2004

Article from SICOT Newsletter Issue No. 89 (October 2004)

The SICOT Annual International Conference held in Havana, Cuba, in September 2004 was a great success. The previous SICOT meeting held in Latin America, a Triennial World Congress, was in Rio de Janeiro in 1981. Thanks to the efforts of Prof Rodrigo Alvarez Cambras, SICOT was able to come back to Latin America, not only in 2004 but also in 2006, when the Annual International Conference was held in Buenos Aires, Argentina.

In total 1033 participants from 68 countries attended the meeting in Havana. In all, 362 Cuban orthopaedic surgeons were able to participate. The scientific programme was excellent and focused mainly on external fixation, paediatric orthopaedics (with a special interest in the paediatric spine), bone oncology, the shoulder and sports traumatology. A workshop on SICOT Telediagnostic was also conducted.

The sessions were well attended and gave an opportunity for full, relevant discussions even when the attraction of the old city and the Cuban beaches was so great. The SICOT sessions were preceded by a Trainees' Meeting chaired by Prof Dr Patricia Fucs. A half day was dedicated to SIROT. The second SICOT Diploma Examination took place under the supervision of Chief Examiner Tony Hall. More than 400 abstracts were submitted, 211 oral presentations were given and 124 posters displayed. There were 40 guest and five plenary lecturers who gave state-of-the-art talks on a wide variety of hot subjects. It is worth noting that the whole procedure of abstract submission, registration and payment was handled online. The Conference President, Prof Alvarez Cambras, was deeply involved in creating the scientific programme and he dedicated his support to the promotion of the Conference. He organised unforgettable social events: the Welcome Party at the Bucan



Restaurant, a farewell party at Club Habana and a wonderful spectacle of Cuban dance and song in the Karl Marx Theatre. The President's Dinner at the Tropicana Cabaret was outstanding. All participants really enjoyed these great social events; a good demonstration of one of the objectives of SICOT, the sharing of high-level scientific knowledge in a very convivial atmosphere.



Excerpts from an exclusive interview with Rodrigo Alvarez Cambras, Conference President of SICOT/SIROT 2004 Third Annual International Conference:

How did you fare as Conference President?

I am very happy with the result, all the more so since we have been working so hard. I would never have thought running a conference was such a difficult task. But it is worthwhile to work in close collaboration as we did with SICOT, SIROT and the local organising committee when everything ends well.

How did this Presidency impact your country?

This Conference is very important to my country because it has been awaited since a long time, not only by me but also all Cuban orthopaedic surgeons. It is the first time that a conference of that level is taking place in Central America

and we are proud that Cuba has been chosen. From a scientific point of view it is of meaning because we are receiving great professors who give excellent lectures. But also the opportunity is given to Cuban orthopaedists to show what they can do.

What is the role of SICOT in your country?

All Cubans would like to become members of SICOT and that is why we will take the opportunity of this Conference to increase the SICOT Cuban membership. But as the economic situation of the country is difficult the Frank Pais International Orthopaedic Complex and the Cuban Orthopaedic Society, of which I am President, pay the SICOT membership.

What can your country bring to SICOT?

First of all our warmth. Then our expertise, among other things in external fixators, colloid of bone marrow, banks of tissues, sports traumatology etc. We are very happy to welcome members of SICOT to our country and we were proud to offer the gala show at the Karl Marx Theatre. I asked the best artists if they would agree to present a show and they did, free of charge. And even the Karl Marx Theatre offered the places free of charge. I think we have offered something very special to SICOT.

What is the effect of the political system of your country on the health system?

Our country is not a rich country but nor is it a poor one. Everybody goes to school, is well dressed and has a healthy diet. There is no starvation in Cuba. And the public health is very good. The result of the impact of the socialist system on health is that healthcare is free for 100% of the population. As a result all diseases that you normally encounter in developing countries have been eradicated (infectious and respiratory diseases, dysentery etc.) and we now suffer from the same diseases as in developed countries (cancers, vascular and cardio-vascular diseases). Furthermore we have achieved a very low infant mortality rate of 6.2%, the third lowest rate in the world. Life expectancy is now 80 years for women and 78 years for men.

As a Cuban orthopaedist what is the advantage for you of belonging to SICOT?

SICOT is the representative of world orthopaedics and represents the gathering of fraternity among orthopaedists. Today there are a lot of specialised orthopaedic societies and even if it is important to belong to these societies, there is also a need for global societies gathering orthopaedists throughout the world, and this is what SICOT does.

SICOT EDUCATION



VIKAS KHANDUJA (UNITED KINGDOM)
SICOT Education Academy Chair

SICOT PIONEER: Onwards and Upwards!

The summer has been a busy time for SICOT PIONEER! We launched our virtual education programme in May, and began the season with a joint webinar hosted by the Hong Kong College of Orthopaedic Surgeons (HKCOS) led by chair Peter Yau on 'Management of ACL Injury'.

We ran our first webinar on the new PIONEER platform Panopto on 6 June; a Foot & Ankle webinar in partnership with ESSKA-AFAS on 'Acute Injuries & Return to Sport' which saw over 1600 pre-registrations. This was followed two weeks later by another successful Sports & Arthroscopy webinar with HKCOS who this time explored 'Current Concepts and Recent Advances in Orthopaedic Sports Surgery'. From that point forwards SICOT PIONEER has only gone from strength to strength.

In July, SICOT PIONEER ran four webinars: 'Cartilage Defects in 2020: How Do I Deal with Them?', 'Bone and Joint Infections: What Have We Learnt?', 'New Normals' and 'Advanced Technology in Spinal Surgery'. The cartilage defects webinar was run as a partnership with the International Cartilage Regeneration & Joint Preservation Society (ICRS) and the event on the 'new normals' for orthopaedic surgeons during our current worldwide health crisis was jointly organised with the Alliance of International Organizations of Orthopaedics and Traumatology (AIOT). We had eight more webinars in the months of August and September, and the calendar for winter 2020 is filling up fast! We must thank our Education Academy leads for continuing to show such energy and enthusiasm for the virtual programme and providing us with such rich and relevant proposals to work with.

All of our webinars have also been broadcast on OrthoTV India; a collaboration which has reliably brought in an additional audience of 1000+ viewers. We are also exploring options for broadcast on mainland China, as well as the possibility of translation of our webinars from English into Mandarin and Spanish. Watch this space for more information!



Feedback for the programme has been overwhelmingly positive, and we are grateful for everyone who has taken the time to fill out a feedback form and let us know what they think. We still have a long way to go to get these events perfect, but to hear comments like "It was superb and very well organised"; "I learn new things that will help me in my career"; and "I'm absolutely impressed with the webinar design and presentation!" motivates us to keep striving for bigger and better things for our membership. There is clearly an appetite for these virtual sessions with key opinion leaders, and we intend to keep feeding that need!

As well as the ongoing webinars, behind the scenes the SICOT PIONEER thinktank has many exciting projects in the pipeline; podcasts, a 'VTrain' virtual training programme, a virtual Congress and much much more. I cannot write a report about PIONEER without thanking **Gowreeson Thevendran** and **Rebecca White** who have been the backbone of this digital educational journey. Your continued support is appreciated more than we can express. In the words of Henry Ford, "If everyone is moving forward together, then success takes care of itself"!









FABIO VALERIO SCIARRETTA (ITALY)SICOT Sports & Arthroscopy Subspecialty Committee Vice-Chair

SICOT PIONEER Webinar Report: Cartilage Defects in 2020: How Do I Deal with Them?

ICRS-SICOT joint symposia have become, over the last five years, a must and increasingly crowded event during each of the last SICOT World Congresses. 2020 will be remembered for the online webinar version!

On 17 July at 13:00 CEST we began our Sports & Arthroscopy Committee SICOT-ICRS webinar entitled 'Cartilage Defects in 2020: How Do I Deal with Them?', moderated by Fabio Valerio Sciarretta from Italy, Vice-chair of the SICOT Sports & Arthroscopy Committee and Chair of the ICRS Education Committee, and Steve Abelow from the United States, first Chair of Arthroscopy and Sports Medicine for SICOT and guru of sports medicine with experiences in FIFA and Ski Tour.

The webinar included as speakers several world-renowned masters of cartilage regeneration: Ramon Cugat from Spain; Julio Fernandes from Canada; Mats Brittberg from Sweden; Steve Abelow; Alberto Gobbi from Italy; and Fabio Valerio Sciarretta. The speakers were all brilliant and accurate in presenting very detailed case-based lectures, providing a complete literature background and offering final take home messages with clear indications, suggestions and tips and tricks on each technique. The webinar went on over the 90 minutes expected. The final intense and interactive discussion was brightly guided by Vikas Khanduja, Chair of the SICOT Education Academy, which involved all the speakers providing their indications and their experienced suggestions on specific clinical scenarios.

The Sports & Arthroscopy Committee, extremely content with the webinar's great world success, achieved live and through later views of the recording, is planning various new online events in the following months in order to continue spreading knowledge on ligaments, cartilage and menisci. The SICOT PIONEER team will continue expanding in the years to come, performing the most important function of SICOT: 'extending training and knowledge to all regions of the world, even the most remote'.





KHALED EMARA (EGYPT) SICOT Infections Subspecialty Committee Chair

SICOT PIONEER Webinar Report: **Bone and Joint Infections: What Have We Learnt?**

On 23 July 2020 after several months of organisation and working hard on so many details, the moment came; a webinar on bone infection from a global point of view. This webinar included representation from several angles and approaches. Different orthopaedic specialties dealing with infection: trauma, arthroplasty and paediatric orthopaedics. Different geographical areas: speakers from the five continents of the world. Different approaches in diagnosis, clinical assessment, treatment and dealing with the problem of infection.

The webinar included several big names from the field of bone infection from different orthopaedic subspecialties. Ashok Johari, SICOT President Elect; Hans-Christoph Pape, the inventor of the damage control concept in trauma management; Carlos Higuera, the President of the Musculoskeletal Infection Society; Gow Thevendran, the SICOT PIONEER Programme Chair; and me Khaled Emara the Chair of the SICOT Infections Committee.

Special attention was given in all the talks to focus on technical tips that could affect the clinical practice of different orthopaedic surgeons in different geographical areas, of different cultures and economies and working with different levels of equipment and facilities. The talks included surgical videos, the required information that every orthopaedic surgeon would need to know to do a proper assessment of infected orthopaedic cases, proper planning for treatment and the right steps and how to do them to get our patients to safety and cure.

Thousands of orthopaedic surgeons from all over the world attended the webinar live or watched the recording later on. The feedback was excellent. The success was not only due to the speakers or the quality of the talks and the cooperation and harmony of the panel, but it was also due to the great effort made behind the scenes by the SICOT PIONEER team. We are looking forward to the next webinar, the next success, the next step in spreading knowledge and skills about the proper ways to deal with bone infection.







ONDER AYDINGOZ (TURKEY) AIOT Chair

SICOT PIONEER Webinar Report: **AIOT Webinar: New Normals**

AIOT, the Alliance of International Organizations of Orthopaedics and Traumatology, was established in 2018 to provide a platform of communication and collaboration between the five leading international organisations in the field of orthopaedics and traumatology. The members of the alliance are: APOA (Asia Pacific Orthopaedic Association), EFORT (European Federation of National Associations of Orthopaedics and Traumatology), PAOA (Pan Arab Orthopaedic Association), SICOT (International Society of Orthopaedic Surgery and Traumatology) and SLAOT (Latin American Society of Orthopaedics and Traumatology).

Given the severity of the pandemic's impact on our daily routine, member organisations of AIOT prepared the 'COVID-19 Best Practices Joint Statement' and featured it on their websites on 27 April 2020. The first AIOT webinar was broadcast on 25 July 2020, and also related to the subject. Following a brief introduction to AIOT, outcomes of the COVID-19 pandemic, disparity of its global impact and principles of returning to elective orthopaedic surgery were discussed. 'New normals' of daily practice, education and research were among the topics of the webinar. The speakers were: Onder Aydingoz, Mohit Bhandari, Vikas Khanduja, Patricia Fucs, Javad Parvizi and Enrique Gomez Barrena.

The feedback from viewers all over the world has been very positive and the webinar showed that the orthopaedic community is interested in the 'new normal'.















View Webinar



ALAA AZMI AHMAD (PALESTINE) SICOT Spine Subspecialty Committee Vice-Chair

SICOT PIONEER Webinar Report: **Advanced Technology in Spinal Surgery**

We began our Spine Committee webinar activities on Friday 31 July with a webinar entitled 'Advanced Technology in Spinal Surgery: Navigation, Robotics, 3D Printing and Simulation', which was moderated by Alaa Azmi Ahmad from Palestine and Vikas Patel from the United States. The speakers, from different regions, shared their experiences of advanced technology in spine surgery. The speakers (and the topics they discussed) were Roger Hartl from the United States (Advanced Technology in MIS), Hani Anwar from the United Kingdom (Navigation and robotics in spine tumour surgery), Shanmuganathan Rajasekaran from India (Navigation in complex spine surgery), Lin Cong from China (Robot-assisted pedicle screw technique in spine surgery) and Ahmed Jahwary from Oman (3D-printing techniques in spine surgery).

The presentations were successful in their goals of clarifying the role of advanced technologies in spine surgery and correcting common misconceptions about the use of advanced technology in this field. The speakers emphasised a number of important points, including that the application of advanced technologies in spine surgery goes beyond the placement of pedicular screws; that navigation decreases radiation exposure, contrary to what was thought before; and that the cost of these tools must be calculated in relation to the benefit of complication avoidance. It was also stressed that these tools are promoting human skills and not a substitute to them, as Prof Rajasekaran said, "a fool with a tool is still a fool".

The webinar lasted 90 minutes, accomplishing the main SICOT goal of sharing experiences globally. Around a thousand orthopaedic surgeons from all over the world attended the webinar live, with more watching the recording later. After the presentations concluded, the speakers engaged with the audience and responded to questions, and the ensuing discussion was excellent and thought-provoking. With the resounding success of this event, we in the Spine Committee are looking forward to the next three spine webinars whose goal is to continue to spread knowledge about important spine topics globally.





GANDHI NATHAN SOLAYAR (MALAYSIA)SICOT Newsletter Editorial Board Member

SICOT Fellowships during the COVID-19 Pandemic: First-Hand Accounts

This year has presented us with many challenges in the face of the corona virus pandemic. The international orthopaedic community were not spared the ravages of the pandemic both directly and indirectly. Below are a few excerpts from SICOT fellows who describe in their own words their experiences on a SICOT fellowship while dealing with the COVID-19 crisis in the year 2020.

First of all, I would like to thank SICOT for selecting me for the SICOT/Marmara University Arthroplasty Fellowship 2019 for three months and would like also to thank Prof Dr Fatih Kucukdurmaz for his cooperation from the first moment I received the confirmation email. I was supposed to start my fellowship last year but the delay in getting my visa postponed this to the current year. I travelled to Turkey and started my training from 1 March 2020; at that time COVID-19 had begun to spread in a number of countries and many began to implement precautionary measures. A week after the discovery of the first case of COVID-19 in Turkey and with the increase in numbers, I was told to suspend my fellowship and return to my country. I had to travel back via Cairo, and the journey was hard and with risks of infection from the virus. It was a difficult and trying time for me and my family. After that the training was suspended permanently and I cancelled my fellowship because I will not be able to get a new visa easily. The COVID-19 crisis made this experience exceptional in every way.



MOHAMMED S. AL SAIFI (YEMEN)



HOSSAM ELDEN ABODONIA (INDIA)

From October 2015 until early 2020, I worked as an orthopaedic resident at Kafr Eldawar General Hospital (Egypt). I moved recently after the fellowship to work at Dorset County Hospital (United Kingdom). As I am interested in hand surgery, I applied for the SICOT meets SICOT Fellowship Programme at the Clinic of Hand Surgery, Rhön-Klinikum - Bad Neustadt (Germany). It was a great honour to be selected as a candidate for the fellowship. I was very happy to have seven weeks' training (12 January – 29 February) at one of the biggest hand centres in Europe. The COVID-19 pandemic did not affect starting my fellowship; as the infection spread to Europe started in mid-February. Whilst the last two weeks of the fellowship included serious instructions and precautions to avoid infection spread, these precautions did not affect my fellowship progress and plan at all.

I completed my 2019 SICOT meets SICOT Fellowship at Evangelisches Waldkrankenhaus Spandau, Berlin. I was there for four weeks in February 2020. COVID-19 had already begun to spread in China but it had not reached Europe by the end of January before I left India. No one had anticipated that it would become a pandemic. Therefore, I went ahead with my fellowship plans. The day I was boarding my flight, the first case was reported in India. During the first three weeks of my fellowship I was keeping a close watch on the news and how it was spreading all over China. During my last week, everyone was wondering when COVID-19 would reach Europe and just before I was about to leave, the first case was reported in southern parts of Germany. I was worried that I might be quarantined in Delhi or Berlin airport. I wondered if my medical insurance would cover it if I got infected during my stay in Berlin. I had been sightseeing and had been in crowded tourist places on all the weekends I spent in Berlin; this made me nervous. I suddenly found myself checking my emergency funds, just in case I had to extend my stay or take any kind of medical treatment. My accommodation was also reserved for four weeks only. My family in India were worried too. There were reminders in the operating theatre (OT) including the judicious use of masks as the supply from China was not coming. Only the mandatory number of people were allowed inside the OT to reduce the consumption of disposals. All of a sudden the hospital was looking at a crunch of masks and gloves.



ARCHIT AGARWAL



ZEESHAN ALI KHAN (PAKISTAN)

I am Dr Zeeshan Ali Khan, Assistant Professor Orthopaedic Surgery, working in Pakistan. I was selected for a three-month Hip & Knee Arthroplasty Fellowship programme in Marmara University, Istanbul, Turkey, through the platform of SICOT, from January 2020 to March 2020. I appreciate and pay thanks to SICOT for providing me the opportunity to have international exposure to orthopaedic surgery through this fellowship. It had been a wonderful experience until the COVID-19 breakout. My fellowship was of three months starting on 1 January 2020 but at the end of March when there were only two weeks left, I had to shorten my stay and plan my return home, as elective cases of arthroplasty were not being performed for the safety of patients and doctors in Turkey. I also had to face some difficulty as I had confirmed a return ticket on 1 April 2020 which was not refundable and I had to book a new ticket urgently as everything was going into lockdown. There remained an apprehension in my mind throughout this period about whether I would be able to reach my home country and be reunited with my family or not. I regret being unable to receive the fellowship certificate personally at the annual SICOT meeting which has been postponed due to the COVID-19 epidemic (I received it via email). Otherwise, the whole experience before that was remarkable. Fortunately, I remained safe and healthy throughout the epidemic period. I am thankful to SICOT for making this fellowship an outstanding experience of my life.

SICOT RESEARCH



MOHIT BHANDARI (CANADA)SICOT Research Academy Chair

Research Academy: Embracing The Future

"When it comes to accelerating performance, there's a paradox: if we want to have greater impact, faster, we have to slow down enough to reflect on what we've done and what we're going to do." Hagel, Seely-Brown, de Marr, Wooll

The first half of 2020 has shown us that slowing down may be the right thing to do. Slowing down in the context of SICOT Research has not meant 'doing nothing'; rather, it's been a critical opportunity to reflect, develop a forward-looking strategy, and begin steps towards implementing changes. Change is inevitable. Change is good. Change requires collaboration. Change, aligned with SICOT's vision, will allow us to ultimately accelerate our path towards greater future impact.

Our research vision

Ensuring that we engage members, surgeons and scientists, by supporting grants, rewarding scholarly activity, collaborating with other SICOT committees to promote the vision and mission of SICOT.

Our guiding statement

As surgeons and researchers we focus on developing a culture of innovation and collaboration by conducting clinically relevant, patient-important research to guide evidence-based practice.

Ensuring that we engage members, surgeons and scientists, by supporting grants, rewarding scholarly activity, collaborating with other SICOT committees to promote the vision and mission of SICOT. Using a TARGET approach, we will set three-year benchmarks:

Tell research 'success' stories through focused marketing

Advocacy and mentorship to accelerate research

Reinvest in global collaborations

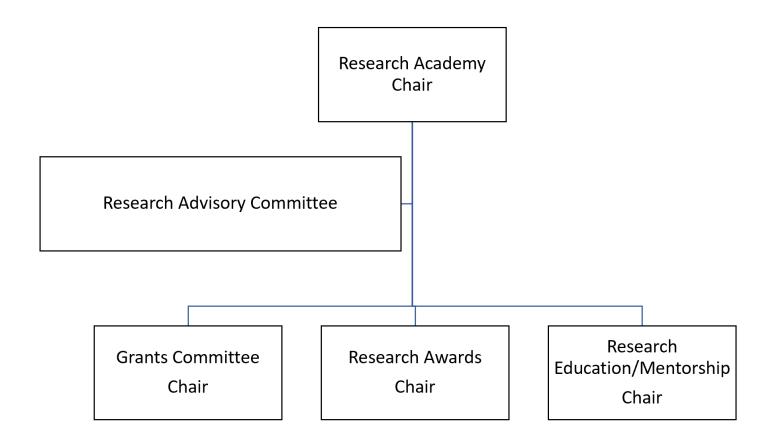
Grow research through education offerings

Engage members in high impact publications

Transform research funding with multistakeholder involvement

Our organisation

SICOT has an exceptional leadership, and many outstanding members around the world. As we look to the future, we have developed a working organisation structure to ensure progress on numerous initiatives simultaneously. With three core committees we will advance our directives to mentor and educate in research, provide research support to high potential projects, and acknowledge scholarship with SICOT awards.



Research Grants Committee:

- Mustafa Citak (Chair)
- Anthony Howard
- Rajesh Malhotra
- Caroline Hing
- Xinhong Pei
- Ashok Gavaskar
- Pradeep Kafle
- Tao Ji
- Michael Tanzer

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- Sattar Alshryda
- Jean-Louis Rouvillain
- Pablo Slullitel
- Sachin Tapasvi
- Chingiz Alizadeh
- Shady Mahmoud
- Mohamed Rashed

Research Education & Mentorship Committee:

- Ajay Malviya (Chair)
- Muhammed Tahir
- Iulio Fernandes
- Francesco Benazzo
- Thomas Hilton
- Luigi Meccariello
- Man Hong Steve Cheung
- Neritan Borici
- Saseendar Shanmugasundaram
- Aju Bosco

Our roadmap

With an exceptional, collaborative team we will begin to execute against our short-term goals. These include improving our 'Connectedness, Education, and Collaborations'. We will achieve our goals through greater frequency of Research Academy communications to membership, greater focus on identifying and highlighting high impact researchers and programmes within our community, and connecting surgeons and researchers on common themes. Working closely with the leadership of the Education Academy, we will increase our research education course offerings. Lastly, we will develop SICOT led global research initiatives to leverage the high quality of clinical care, and offer mentorship to those members with research interests.

Let's double everything!

Let us be bold. We are now poised with the right people, in the right positions to manifest a meaningful change. In no other time in history has change been more needed. SICOT is leading change daily, and our research platform is an engine fueled by ideas and propelled by initiative.

Stay tuned as we, your Research Academy, work for you towards doubling our impact and sharing your successes with the world.



Double our Marketing on "success" stories

Double our Mentorship to accelerate research

Double efforts to create New Collaborations

Double our Research Education offerings

Double High Impact publications

Double Funding (leveraged from SICOT grants)

KNOWLEDGE HUB



NASEF MOHAMED N. ABDELATIF (EGYPT) SICOT Foot & Ankle Subspecialty Committee Member

Expert Opinion from the Foot & Ankle Subspecialty Committee

Arthroscopy of the Foot and Ankle: Still Lots More to Come So Stay Tuned!

Arthroscopy or endoscopy of the foot and ankle has certainly come a very long way over the years. The ankle joint itself was once designated as being "not suitable for arthroscopy"[1]. A few years later, in 1939, Dr Takagi[2] presented the first systematic arthroscopic examination of the ankle joint. The year 1972 marked the first case series of patients who underwent ankle arthroscopy[3].

Then, 30 years ago, Ferkel and Fischer[4] described advancements in ankle arthroscopy, especially in the anterior compartment using distraction and smaller sized scopes. Just at the turn of the century, van Dijk et al[5] introduced the posterior ankle arthroscopy technique for the management of various pathologies that were, until that time, treated via open surgeries.

We and other authors started contemplating managing combined lesions through both anterior and posterior arthroscopies[6,7], while others were interested in trying to manage these combined lesions simultaneously albeit through single patient positioning[8-10].

By then, arthroscopy and endoscopy of the ankle and foot had grown from just anterior and posterior ankle arthroscopy to include subtalar, talonavicular, and first metatarsophalangeal joint arthroscopies as well as tendoscopies of the Achilles tendon, posterior tibial tendon, and peroneal tendons. There was a heightened interest in biologics coinciding with industrial advancements in the development of biological adjuvants and synthetic scaffolds.

At that point in time, perhaps many had thought we had reached our limits regarding what could be feasibly performed arthroscopically. However, innovation and persistence were still driving surgeons to push their limits and explore 'uncharted waters'. This was applied to almost all aspects of foot and ankle surgeries, from simple anatomical 'discoveries' to complex foot and ankle fusions.

Initially, a lot of the anatomical basis for arthroscopic procedures was performed by Golanó and co-workers[11-13]. Later, Vega et al[14] described previously "unrecognised anatomical structures" such as the lateral fibulotalocalcaneal ligament complex describing both superior and inferior fascicles of the anterior talofibular ligament (Figure 1).



Figure 1: Lateral view of anatomical dissection of ankle joint and supporting ligaments and tendons: (1) ATFL superior fascicle; (2) ATFL inferior fascicle; (3) arciform fibres of the LFTCL complex; (4) CFL; (5) peroneus longus tendon; (6) peroneus brevis tendon; (7) extensor digitorum brevis muscle; (8) cervical ligament; (9) interosseous talocalcaneal ligament; (10) dorsal talonavicular ligament; (11) anterior tibiofibular ligament and distal fascicle; (12) interosseous tibiofibular ligament.

Reprinted with permission. License Number: 4903680710591. Springer Nature.[14]

This in itself was the basis for the development of 'newer concepts' regarding ankle instability and consequently micro-instability has been recently introduced[15] (Figure 2). Arthroscopic management of the calcaneofibular ligament as a part of chronic lateral ankle ligament instability treatment became labeled as 'feasible' and authors have begun managing even greater degrees of ankle instability[16].



Figure 2: Intraoperative arthroscopic photograph showing management of a case of right ankle micro-instability with use of knotless anchor fixation.

In a similar fashion, ankle arthroscopy was being used more and more commonly in managing ankle fractures, and syndesmotic injuries[17,18].

When treating Achilles injuries or pathologies, arthroscopy started being used as a tool especially for chronic Achilles tendinopathies or chronic neglected tears[19]. We took that concept one step further and described the use of an all endoscopic flexor hallucis tendon (FHL) transfer for the management of acute Achilles tears[20] (Figure 3).

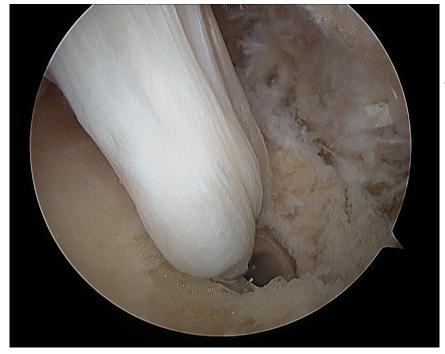


Figure 3: Intraoperative arthroscopic photograph showing fixation of a transferred FHL tendon to the posterior aspect of the calcaneal bone and fixation with interference screw in management of a case of acute Achilles tendon tear.[20]

Meanwhile, industry tried to focus more on the biological and cellular level to provide surgeons with alternatives for cartilage loss by providing scaffolds such as the particulate juvenile cartilage allograft (DeNovo NT; Zimmer Biomet Inc.) and micronised cartilage allograft (BioCartilage; Arthrex Inc.) that may be used to stimulate hyaline-like cartilage repair in the ankle joints. There have been good short-term results, however, the data is still premature[21].

In other areas around the ankle and foot, endoscopic procedures were being used for coalition resections[22], tarsal tunnel syndrome treatments[23], and even for performing 'minimally invasive' joint fusions; ranging from simple subtalar fusions to double and triple fusions[24].

So, to conclude, ankle and foot arthroscopy and endoscopic procedures have certainly evolved, particularly during the last 25 years. Milestones have been achieved recently for foot and ankle arthroscopic surgeries, where previously these techniques would have been inconceivable. However, it seems highly unlikely that this has reached its pinnacle, and on the contrary, there still seems to be a lot of room for improvement, innovation and advancements. Refinements in both surgeon knowledge and industrial developments have paved the way for this progression.

Further development of both arthroscopic and biomedical devices will undoubtedly open opportunities for novel techniques to achieve better clinical results. It certainly seems there is still a lot more to come, so stay tuned!

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MOHAMED SUKEIK (SAUDI ARABIA) SICOT Newsletter Editorial Board Member

Knowledge Exercises – Multiple Choice Questions: Culture-negative Periprosthetic Joint Infections

Questions

Regarding culture-negative periprosthetic joint infections (CN-PJIs) after hip and knee arthroplasties please answer the following questions:

1. The most commonly used antibiotics for treatment are:

- a. Vancomycin and cephalosporins
- b. Teicoplanin and penicillins
- c. Gentamicin and macrolides
- d. Linezolid and quinolones
- e. Meropenem and aminoglycosides

2. Two-stage revision arthroplasty shows a success rate of:

- a. 10-20%
- b. 30-40%
- c. 40-50%
- d. 50-60%
- e. 70-100%

3. Cutibacterium acnes requires up to how many days of incubation for detection?

- a. 3 days
- b. 5 days
- c. 10 days
- d. 14 days
- e. 21 days

4. The most significant contributor to culture negative findings is:

- a. Inadequate culture medium for atypical organisms or those encapsulated in biofilm
- b. Antibiotic administration prior to obtaining samples for culture
- c. Improper culture handling and sample transfer
- d. Inadequate incubation times that are inadequate for rare and indolent organisms
- e. Suboptimal number or method of obtaining tissue specimens

5. Which of the following Candidal species has been shown to form biofilms and produce larger complex molecules that confer a more resistant biofilm than other Candidal species?

- a. Candida albicans
- b. Candida tropicalis
- c. Candida glabrata
- d. Candida parapsilosis
- e. Candida krusei

Answers

1. a

Vancomycin and cephalosporins are the most commonly used antibiotics for CN-PJI.

2. e

Two-stage revision arthroplasty in CN-PJIs shows a success rate of 70–100%.

3. e

Cutibacterium acnes requires up to 21 days of incubation for detection.

4. b

Antibiotic administration prior to obtaining samples for culture is the most significant contributor to culture-negative findings. A study from a major PJI referral centre in the USA reported that 53% (32/60) of CN-PJI patients received antibiotic therapy prior to culture sampling. The same institution conducted another study which showed that prior use of antibiotics and postoperative wound drainage were associated with increased odds of culture-negativity (odds ratio [OR], 4.7; 95% confidence interval [CI], 2.8–8.1; and OR, 3.5; 95% CI, 1.5–8.1, respectively).

5. a

Candida albicans in particular has been shown to form biofilms and produce larger complex molecules that confer a more resistant biofilm than other Candidal species.

Reference:

Kalbian I, JW Park, Goswami K, Lee YK, Parvizi J, Koo KY (2020). Culture-negative periprosthetic joint infection: prevalence, aetiology, evaluation, recommendations, and treatment. Int Orthop. 44:1255-1261.



SATTAR ALSHRYDA (UNITED ARAB EMIRATES) SICOT Newsletter Editorial Board Member

Knowledge Exercises – Multiple Choice Questions: Cervical Spine Instability

Questions

1. Regarding cervical spine instability:

- a. Only a few clinical classification systems support decision-making concerning instability.
- b. The transverse ligament serves as the most crucial element in determining the stability of atlanto-occipital dislocation.
- c. The transverse ligament serves as the most crucial element in determining the stability of occipital condyle fractures and atlas fractures.
- d. The integrity of anterior longitudinal ligament, disc, and facet joint attributes to the stability of atlanto-occipital dislocation.
- e. The atlanto-axial distance is a reliable indicator of instability when it is less than 3 mm.

2. Regarding occipital condyle fractures (OCF):

- a. Levine classification is useful in operative planning.
- b. Type III OCFs, according to Anderson and Montesano are considered stable fractures.
- c. OCF are often detected on plain X-ray.
- d. Normal 3 views cervical spine plain radiograph exclude OCF.
- e. Normal CT Scan does exclude instability.

3. The following classification is used to classify occipital condyle fractures (OCF):

- a. Jefferson 1920
- b. Gehweiler 1976
- c. Levine 1986
- d. Dickman 1996
- e. Tasdemiroglu 2002

4. Regarding atlanto-axial instability (AAI):

- a. The transverse ligament of the atlas is a crucial stabiliser.
- b. Traynelis 1986 classified AAI into three types based on the displacement (Type I anterior, Type II longitudinal and Type III posterior).
- c. Traynelis 1986 Type I is stable and does not require surgical intervention.
- d. The normal anterior atlanto-dental interval (ADI) is less than 12 mm.
- e. The TAL injury results in instability, irrespective of disruption site or whether failure results from fractures involving insertion site.

5. Which of the followings are recognised criteria of Odontoid peg fracture instability? You may select more than one.

- a. Displacement greater than 2 mm.
- b. Angulation of more than 11°.
- c. The dynamic sagittal displacement of more than 2 mm on lateral extension-flexion X-ray.
- d. Any fracture comminution.
- e. Type III fractures (Anderson and D'Alonzo classification).

Answers

1. c

The transverse ligament of the atlas is a thick and strong ligament, which arches across the ring of the atlas, and retains the odontoid process in contact with the anterior arch and serves as the most crucial element in determining the stability of occipital condyle fractures and atlas fractures. There is no clinical classification for cervical spine injuries and all are radiological with or without element components. Atlanto-occipital stability is determined by the tectorial membrane and alar ligaments and not by the transverse ligament, longitudinal ligament, disc, or facet joint. AAD is a reliable indicator when it is above normal but not when it is within normal because it could have been unstable but in a reduced position.

2. c

Levine classification is used for atlas (not occipital) fractures. Type III OCFs, according to Anderson and Montesano are considered unstable fractures. CT scan is more sensitive and reliable than plain X-ray but a normal CT scan or normal 3 views X-rays do not exclude instability. Up to 6% of trauma patients with a negative CT imaging of the cervical spine may have unstable cervical spine injuries only detected by MR imaging.

3. e

Tasdemiroglu 2002 (Figure 1) classified OCFs into:

Type I: impacted condyle fracture with comminution occurring as a result of axial loading (E1)

Type II: basilar skull fracture with extension into the condyle (E2)

Type III: avulsion fracture at the attachment sites of alar ligaments (E3)

Type IV: bilateral Type I OCFs (E4)

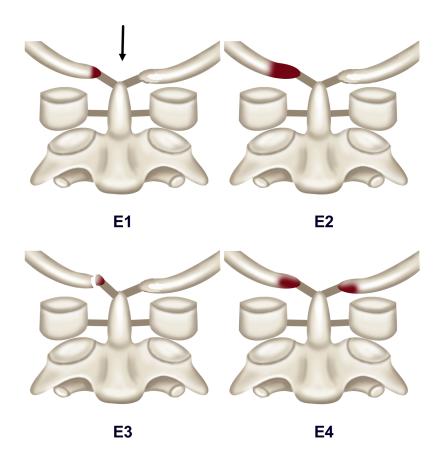


Figure 1: Tasdemiroglu classification of occipital condyle fracture

All other classifications are used to classify atlas fractures. Jefferson and Gehweiler classified four and five different types of atlas fractures based on the fracture morphology but their classification did not answer the question whether the fracture is unstable or not.

Spence conducted a cadaveric study and demonstrated the stability of the atlanto-axial junction was maintained by the integrity of transverse ligament of the atlas (TAL). C1 lateral mass displacement of more than 6.9 mm predicts TAL rupture. Levine as well as Landells proposed their own classification systems based on Spence's work. With the continuing use of MR imaging for investigating ligamentous damage, Dickman et al. demonstrated that Type I transverse ligament of atlas (TAL) injuries were accompanied with instability and early operative intervention was imperative. Meanwhile, Type II TAL injuries are considered unstable even though the success union rate is 74% for conservative treatment.

4. a

The transverse ligament of the atlas (TAL) is a crucial stabiliser of the atlantoaxial joint and it serves to keep the atlanto-dental interval (ADI) less than 3 mm. In children, the distance may be more but it should not exceed more than 4 mm. Dickman utilised MRI to detect the TAL damage and note that disruption of substance of the TAL results in instability, irrespective of disruption site in mid portion or at periosteal insertion. In contrast, if the TAL failure results from fractures involving insertion site of the TAL, the atlanto-axial joint still preserves partial stability.

Traynelis 1986 classified atlanto-occipital instability and not atlanto-axial instability.

5. b, c

Anderson and D'Alonzo 1974 classified odontoid fractures into three types:

Type I: injuries at the tip of the odontoid (C1)
Type II: injuries at the base of the odontoid (C2)
Type III: injuries extend into the C2 body (C3)

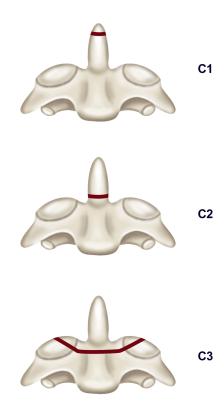


Figure 2: Anderson and D'Alonzo classification of odontoid fractures

The classification is far away from perfect due to the lack of the criteria for instability and the ambiguity of distinction between Types II and III. The widely accepted criteria for instability are:

- 1. The dens displacement greater than 5 mm (not 2 mm)
- 2. Angulation more than 11° on a CT scan
- 3. The dynamic sagittal displacement of more than 2 mm on lateral extension-flexion X-ray is stressed as a determinant for instability as well
- 4. Certain types (not all types) of comminution also impact the stability of C2

Type III odontoid fractures have been always considered to be stable. However, this has been criticised as oblique Type III fractures may remain unstable, irrespective of the amount of displacement. Moreover, if Type III injuries are with a vertical distraction of more than 2.6 mm or with a ligamentous injury, then the instability is present and the early operative therapy is recommended. However, there is no consensus about what exact amount of distraction results in an instability. Kirkpatrick reported similar cases and concluded that Type III odontoid fractures with vertical distraction of more than 5 mm were unstable.

Reference:

ILiao S, Jung MK, Hörnig L, Grützner PA, Kreinest M (2020). Injuries of the upper cervical spine—how can instability be identified? Int Orthop. 44:1239-1253.

SICOT REVIEW



SATTAR ALSHRYDA (UNITED ARAB EMIRATES)SICOT Newsletter Editorial Board Member

Reference Management Software

The 'SICOT Review' is a newly introduced section in which we critically review various things that are important to our readers and members. These things might be jobs, fellowships, memberships, books, websites, medical gadgets or equipment. In the first review we highlighted the many benefits of SICOT membership and in this review we will explore reference management software.

Writing scientific papers, chapters and even ordinary essays requires acknowledging the sources of information to give credibility to the written work and to credit the quoted sources. Handling references can be a very tedious and daunting task. Thankfully reference management software have made this an extremely smooth process. Many reference management tools have been developed to help writers in a variety of ways, as outlined below.

- 1. Creating a personal references library. This library can be synced and accessed online from home or office. It can be shared with colleagues anywhere in the world.
- 2. Built-in search engines for most medical databases for references as well as full articles.
- 3. Adding or importing references to a personal library with 'references non-touch technique'.
- 4. Generating citations in multiple different citation styles from various mediums.
- 5. Saving time and effort.
- 6. Enhanced features such as plagiarism detection, grammar check, and in-depth writing experts support.

Having used the Endnote reference management software for over 15 years, I recently changed to Medeley. During this change, I realised the importance of keeping up-to-date with new and emerging technologies and being ready to adopt them because this saves time, effort and money. I was pleasantly surprised with the rising amount of reference management software that has been introduced to the market. In this review, I have highlighted the most common ones along with their main advantages and disadvantages. The links provided contain helpful resources on how to use the software. View list here.

Use of reference management software is strongly recommended for all the aforementioned reasons; however, it is prudent to choose the right software for your personal needs and affordability. Although free versions appear more appealing, the hidden cost may be higher. Some hospitals and most universities usually have a deal or a discount agreement with providers. We hope that this review encourages you to use one if you never have before and to explore other software if you are using one already.

IN MEMORIAM



JACINTO MONTEIRO

Professor Jacinto Monteiro graduated in Medicine from the School of Medicine of Lisbon and had a brilliant career in his area of orthopaedics and traumatology. He reached all of the top positions, both in academic terms, as Professor at *Clínica Universitária de Ortopedia*, and in the hospital, as Director of the Orthopaedics Service of Hospital Santa Maria and the Medical School at the University of Lisbon.

He performed in numerous important positions throughout his life, as Professor of Science of Biomaterials at IST (Biomedical Engineering), President of the Portuguese Society of Orthopaedics and Traumatology, President of the Portuguese Society of Osteoporosis and Metabolic Bone Diseases (SPODOM), President of the Society of Orthopaedics and Traumatology of Portuguese Spoken Language (SOLP), AO Trustee of the AO Foundation, Chair of many AO courses, Chair of the SICOT Shoulder and Elbow Subspecialty Committee, an area where he has become a reference at the national and international level, a prominent member of the National Legal Medical Council, and in among many other distinctions.

We will always remember the immense calm and wise way in which he always participated in the life of the Academy of Medicine School and as a member of some of its governing bodies. His commitment and sense of institutional duty left a mark on all those who had the privilege of living and working with the Professor. His example will certainly last for generations to come. He was a great husband, father and grandfather with two grandsons.

Jacinto was a great personal friend of mine, and we had many special trips around the world; Brazil, Portugal, Madeira, the Azores, Angola, Mozambique and Cape Verde being amongst the best of them.

In my heart, we are still travelling...

José Sérgio Franco SICOT First Vice-President



ANTHONY HALL

Tony Hall sadly passed away in February of this year after a battle with cancer. SICOT and the International Orthopaedics journal have lost a great champion and tireless supporter.

Tony trained at University College Hospital, London, qualifying in 1962. He completed his orthopaedic training via the Royal National Orthopaedic Hospital before taking up a consultant post at Charing Cross Hospital in 1973. He remained at Charing Cross taking the post of Post Graduate sub-dean in 1978. He was a consultant at Chelsea and Westminster Hospital from 1990 to 2001. During his working life he was a Member of the Court of Examiners of the Royal College of Surgeons and Member of Council of the British Orthopaedic Association. He was Chairman of the organising committee of the BOA Meeting at Wembley in 1992. In regard to SICOT he was a member of the organising committee of the SICOT Congress London 1984, he was National Delegate between 1990 and 1993 and Secretary General between 1993 and 2002. Finally, he was the chief examiner for SICOT from 2002 until recently. In regard to International Orthopaedics he was Deputy Editor from 1987 until 2013 serving on the Editorial Board during that time.

It is often said that we stand on the shoulders of giants. The best-known use of this phrase was by Isaac Newton in a letter to his rival Robert Hooke, in 1676: "What Descartes did was a good step. You have added much several ways, and especially in taking the colours of thin plates into philosophical consideration. If I have seen a little further it is by standing on the shoulders of Giants". Tony is that Giant to us that remain. He was a true son of Yorkshire in that he was uncomplicated, straight talking, true and honest. These are wonderful attributes which made him a great mentor, colleague, companion and friend. With Tony you knew he always 'had your back'. Winston Churchill is quoted as saying "we make a living by what we get, but we make a life by what we give". This again describes Tony. He gave so much of himself to other people and other causes. He was a great supporter of charitable organisations being always selfless, generous and kind. He looked for the best in people. Mr Churchill also said "courage is what it takes to stand up and speak; courage is also what it takes to sit down and listen". These are attributes of great men in whose number Tony can be counted. He was not afraid of expressing views which may be controversial, but which made an important contribution. He was always honest and selfless, working for the common good. At the same time, he respected the views of others.

Tony had the respect and love of SICOT and the Board of International Orthopaedics for whom he did so much valued work. He was responsible for many people joining SICOT including me. His work with the SICOT examination in Orthopaedics was exemplary, setting attainable standards and going about his business with fairness to all. It says something about the man that there have been so many emails from his colleagues expressing warm feeling for him and expressing great sadness at his loss.

Andrew Quaile

Deputy Editor International Orthopaedics



NURLAN D. BATPENOV

Nurlan D. Batpenov was founder and first Head of the Scientific Research Institute of Traumatology and Orthopaedics of the Republic of Kazakhstan, Doctor of Medical Sciences, Professor, Academician of the National Academy of Sciences of Kazakhstan, Chief Trauma-Orthopedist of the Healthcare Ministry of the Republic of Kazakhstan, President of the Kazakhstan Association of Traumatology and Orthopaedics.

He was born on 29 August 1949 in the Aqmola region.

In 1972, after graduating from the Tselinograd Medical University he began his professional career as a trauma-orthopedist at the regional clinical hospital. From 1976, he was involved in scientific research at the Central Institute of Traumatology and Orthopaedics in Moscow, he received his degree of Candidate of Medical Sciences and in 1996 he became a Doctor of Medical Sciences. From 1982 to 2002 he taught at the medical university of his native city, headed the department of Traumatology and Orthopaedics, and was the vice-rector of his *alma mater* - Tselinograd Medical University.

At the initiative of Nurlan Batpenov, in 2001 the Scientific Research Institute of Traumatology and Orthopaedics (SRITO) opened in Astana. Prof N. Batpenov was appointed to be Head of the Institute. For the first time in Kazakhstan under his leadership the following procedures were introduced: arthroplasty and arthroscopy of large and small joints, minimally invasive osteosynthesis technologies for limbs, hip and spine fractures, and biotechnology applications are being researched.

Nurlan Batpenov is the author of over 700 publications, including 19 monographs, 36 methodological recommendations, and teaching aids, more than 100 copyrighted certificates and patents.

For many years, he was Chief Trauma-Orthopedist of the Healthcare Ministry of the Republic of Kazakhstan and the WHO national coordinator for injury prevention and road safety.

Through the efforts of Professor Batpenov in 2012, the Kazakhstan Association of Orthopaedic Traumatologists was created, uniting traumatologists from all over the Republic.

Prof N. Batpenov was held in respect by his colleagues and he was an example to follow for residents and young doctors. He had a high sense of responsibility, conscientiousness, sensitive and attentive attitude to patients, and simplicity. Professor N. Batpenov will always be remembered as a kind and caring person who made a huge contribution to the trauma and orthopaedic service of the country.



ERIC RADIN

Eric Radin sadly passed away on 26 April, victim of COVID-19. He was born in Brooklyn, New York, in 1934.

He graduated from Harvard Medical School in 1960 and he began his career as an orthopaedic surgeon at Harvard and the Boston area hospitals, including the Beth Israel and Mount Auburn.

Beside his clinical work, he developed a fruitful biomechanical research monitoring bone strains *in vivo* and establishing their link with osteoarthrosis.

He was Chairman of the Orthopaedic Surgery Department at West Virginia University and Director of the Bone and Joint Centre at the Henry Ford Hospital in Detroit, ending his career as adjunct professor of orthopaedic surgery at Tufts Medical School.

He published many articles and books, among others on "Practical Biomechanics for Orthopaedic Surgeons". His work, internationally renowned, led him many times to be invited to be a lecturer abroad, where he was very proud to present in French with his unforgettable accent.

He participated actively in SIROT as the Treasurer in 2006 and remained member at large in the Executive Committee until recently.

He was also Chair of the SICOT Orthopaedic Research Subspecialty Committee.

He will be remembered as a world renowned orthopaedic surgeon and as a warm friend and great communicator with a wonderful sense of humour.

Maurice Hinsenkamp SICOT Past President

SI-QUOTE



"Success is never final; failure is never fatal!"

"Success seems to be connected to action. Successful people keep moving. They make mistakes, but they don't quit."

Conrad HiltonAmerican hotelier and the founder of the Hilton Hotels chain

"Continuous effort - not strength or intelligence - is the key to unlocking our potential."

"Success is stumbling from failure to failure with no loss of enthusiasm."





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