The History of the European Bone and Joint Infection Society (EBJIS)

Geert H.I.M. Walenkamp

Geert H.I.M. Walenkamp MD, PhD Emeritus Professor Orthopedic Surgery Department of Orthopedic Surgery Maastricht University Medical Centre The Netherlands

correspondence: Sint Lambertuslaan 34 6212 AT Maastricht The Netherlands g.h.walenkamp@home.nl

Abstract

The European Bone and Joint Infection Society (EBJIS) was founded by a French initiative as a Study Group in 1982. The group of 26 founding members increased to around 60 members in 1992, and membership was limited to surgeons from Europe, experienced in orthopedic infections. In 1993, a transformation to a Society was performed with a more open structure for all kind of doctors and scientists. Annual meetings, a Travelling Fellowship, research projects and instructional courses were organized. Professional support and improved publicity has resulted in an increase to more than 400 members, from worldwide. In the last two years, the Society has started its own scientific journal (The Journal of Bone and Joint Infection).

Key words

orthopedic bone and joint infections, society, history, EBJIS

Introduction

The European Bone and Joint Infection Society (EBJIS) is today an important platform for all doctors and scientists interested in infections of the musculoskeletal system, but in the first years of its existence it was not clear that it would develop to this level. In the early nineteen eighties many specialty societies were founded, and some of these rapidly acquired a large number of members, e.g. the societies devoted to hip prostheses or knee arthroscopy. The EBJIS started also in these years, but as a relative small study group. Nowadays there is a decrease of the presence at the meetings of these early members, since they are retired or have passed away. Very few of the current members are aware how much effort was needed, especially in the first years, to create the platform for bone and joint infection that is available now.

Therefore the Board of the EBJIS and the Editorial Board of the JBJI asked me to describe the history of the EBJIS. I was present from the very beginning and had the honour and pleasure to actively participate in its organization for many years. Since this manuscript is also my personal and subjective description of the history, I will often use the I-formulation.

The Preparation of a Study Group

On 30th December 1981, Dr. Jacques Evrard, orthopedic surgeon in Hôpital Cochin in Paris and involved in the treatment of orthopedic infections, wrote a letter to several orthopaedic surgeons in Europe. It was a short letter with the text in French as well as in English:

Dear Colleague,

It has been my belief for the past several years, especially after the SICOT congress, that orthopaedic surgeons interested in osteo-articular infection should be associated. We would thus be able to exchange our ideas more easily, group communications on this subject and discuss them among ourselves.

A more ambitious program could even be envisioned: perform teamwork studies, meet once or twice a year, keep an updated bibliography and even think about a periodical publication.

If this idea interests you, I would appreciate your informing me and, at the same time, sending me the names of your colleagues who would be interested in joining us. Thanking you in advance, I remain.

Sincerely, Dr. Evrard

During a previous international congress he had discussed the start of such a group with some orthopaedic surgeons, e.g. Lars Lindberg from Sweden. Evrard send his invitation to some orthopaedic surgeons and trauma surgeons he considered as involved and interested in orthopedic infections. I think he found their names by publications and congress books about bone and joint infections.

I answered him that I was indeed interested, and on 14th February 1982, he wrote to me that "a certain number of colleagues have already consented, signifying that we may begin organizing the group". A preparatory meeting was organized in Lyon on 19th May 1982. Seven could attend: Evrard, G.Jenny, Livio, Martini, Steen Jensen, Vidal and Walenkamp. Twelve others had also given a positive reaction: Fernandez Sabate, Kemp, Klemm, Letournel, Lidgren, Lindberg, Lortat-Jacob, Mounier-Kuhn, Törholm, Valette, Vecsei and Vasey.

At that time, I had just started as a young orthopedic surgeon in Maastricht, and had finished a PhD study on gentamicin-PMMA beads, a new local antibiotic therapy for orthopedic

infections that was a current hot topic. Several speakers of the congress I had organized in Amsterdam were on the list Evrard used of potential members.

In Lyon, the foundation, organisation and potential members of a Study Group were discussed by the seven attending surgeons. The Study Group should be a more or less informal group. Later, a more official character would be developed. The foundation meeting of the Study Group was planned in Paris in November 1982 at the Palais de Congres, after the SOFCOT meeting. Evrard send an invitation in English and French for this meeting.

Study Group on Bone and Joint Infections On the 12th November 1982, 26 members founded the "Study Group on Bone and Joint Infection" or "Groupe d'Etude de l'Infection Osseuse articulaire".

The founding members were the 19 orthopaedic surgeons as mentioned above, as well as the following seven: Acar, Bascoulergue, Boda, Hedström, Lob, Marotte, and Papineau (table 1). During this founding meeting the name and organisation of the Study Group were further discussed. E.g the English version of the name evaluated from "Study Group on the Problem of Infection in Orthopaedic Surgery" via "Study Group on Orthopaedic Infections" to "Study Group on Bone and Joint Infections". Membership was limited to doctors, with a high reputation in treatment and research into infections of the musculoskeletal system. The maximum number of members was limited to 60 doctors, of which 70% had to be surgeons and 90% European. Membership should be acquired in two phases via an associated membership, after presentation of scientific work on the field of orthopedic infections. Members of the first Board were elected: Jacques Evrard (President), Lars Lindberg (Vice President), Emile Letournel (Secretary), Harold Vasey (Treasurer), Michel Martini (Archivist), and Vilmos Vecsei (member). Since the origin of the Study Group was French, and as 14 of the 26 members were French speaking, French became the official language. However for the German and English speaking members German and English had to become an official language as well, resulting in three official languages. The challenge of writing the messages and minutes in these three languages was perfectly realized by the new secretary Guy Jenny from Straßbourg.

During the first scientific meeting that followed that day, seven papers were presented by Lindberg (infection prophylaxis), Vidal (scarification), Lidgren (osteoblastic haematogenous osteomyelitis), Fernandez-Sabaté (osteomyelitis treatment), Hedström (teamwork with infectious disease specialist), Jenny and Klemm (Gentamicin PMMA-beads), and Martini (pseudarthrosis after haematogenous osteomyelitis).

Since its start in 1982 the number of members of the Study Group gradually increased up to the maximum of 60 members in 1991 (figure 1). New members passed a short period of candidature to prove their commitment via presentation of a paper and their presence at the annual meetings. Most of them were orthopaedic surgeons or trauma surgeons, but a few were bacteriologists. Consecutive meetings were annually organised in the home towns of the members (table 3a).

The Study Group was successful in creating the platform for those who were actively involved in Europe in orthopaedic infections. During the annual Congress, members were able to meet well known, highly experienced colleagues, and to discuss topics with them. Trauma and orthopedic surgeons who were authors of leading publications in the field of orthopedic infections became members, e.g. Klaus Klemm, Reginald Elson, Alain Lortat Jacob, David Hamblen, a known Scandinavian group (Lars Lindberg, Lars Lidgren, Åke Carlsson, Carsten Törholm, Sven-Åke Hedström). We could visit the few specialized

departments in Europe, e.g. the osteomyelitis BG clinic of Klaus Klemm in Frankfurt, the septic department of Guy Jenny in Straßbourg, and Lars Lidgren in Lund. Some early members who were less interested in the subject, did not often attend the meetings and gradually left the Society.

However the restrictions for membership of the Study Group as defined in the bylaws became gradually more an obstacle, than a guarantee for high quality. The system of co-option and the friendly relationship between the relatively small and constant number of members did not invite enough new colleagues. Also the inspiration and introduction of new ideas gradually decreased. The feeling increased that a more open structure was needed to attract more and younger colleagues. After 11 years this change was performed in 1993.

Transformation to a Society

On 20th April 1993, the Study Group was transformed to the "European Bone and Joint Infection Society". In this Society, the number of members was no longer limited, nor the type of professional applying to join. Membership was open for all physicians and scientists, interested in Musculoskeletal infections from a scientific or clinical point of view. Co-option and the period of candidature was abolished. The general assembly of members was allowed to vote for the acceptance of new members, and the only prerequisite to stay a member was to pay the annual fee.

As Secretary I created the logo by some homework in powerpoint (figure 2).

Goal and Structure of the Society

The object of the Society is to promote the knowledge of all infections affecting the Musculoskeletal system (bone and joint infections), and to promote the prevention and treatment of these infections. This goal is reached by the organisation of the annual meetings, specialty sessions in other congresses, organisation of consensus meetings and instructional courses. The mutual contact of members of the Society has resulted in many scientific projects of groups of members.

The Society is a non-profit organisation. The annual fee at this moment is 110 euro. Members who do not pay the fee for 2 years are removed from the membership list. There is no direct benefit of commercial parties. Each year in the annual Congress, the best papers are selected and industry-sponsored prizes are given for the best clinical paper, the best scientific paper and the best poster. Yearly, a Travelling Fellowship is organised and sponsored by the Society: 3 young members travel to 4 European centres specialised in orthopedic bone and joint infections, and they report their experience during the general assembly. The Board consists of a President, assisted by a Vice-President (who becomes the next President) and a Past-President, all in that function for 2 years. A continuity of 6 years in the Board is guaranteed by this overlap. They are assisted by a General Secretary, a Treasurer (table 3), and two ordinary members of the Board. There may also be one or two co-opted advisors to the Board to assist with specific projects. The General Secretary and Treasurer can be re-elected and they form an important central, and more permanent factor. When Michel Martini became Vice-President in 1998, his function as archivist was not retained.

The Board (or Executive Committee) now meets four times per year. In the first years all administrative work had to be done by the Board members themselves (or their secretaries), but since 2015 a professional office in Rolle (near Geneva, Switzerland) supports the Board.

For each country an EBJIS Country Delegate may be chosen. These country delegates are encouraged to stimulate membership and activities of the EBJIS in their country. They act as a link between the Board and the EBJIS members in that country. During the annual meetings they have a consultation meeting with the Board.

Annual Meetings

Every year a 3 day scientific meeting is organised somewhere in Europe. The location moves from North to South and East to West to attract as many potential attendees and new members as possible (table 3b). During the meeting, instructional courses are organised, with round tables and invited and free paper sessions. For every meeting several topics are chosen. During the meeting a General Assembly is held, where full members are informed about the Society by the Board, and vote if decisions have to be made. The annual meetings were initially held in May, but since 2006, in September. The scientific programme starts on Thursday and ends at Saturday noon, with a Welcome Party (Thursday) and Gala Dinner (Friday).

The Society preferred not to combine its own annual meeting with other large international meetings e.g. the annual EFORT meetings. Such a combination of meetings appeared to decrease the internal contact of the Society too much and was less attractive. Yet beside our own annual meeting, the Society participates often in combined meetings during the Specialty day of the EFORT: e.g. with the European Hip Society and the European Foot and Ankle Society. Members of the EBJIS are often involved in courses throughout Europe, sometimes individually, often as a group on behalf of the Society.

Members

Since the transformation to a Society in 1993, the number of members increased slowly to about 150 members in 2012. Since 2013 however an explosive three-fold increase of the number of members was seen in a few years up to 417 in 2017 (figure 3). The explanation for that was probably the increased publicity and advertising by an improved website (https://ebjis.org), as well a financial advantage, since a membership of the EBJIS is combined with a reduced registration fee for the meetings. An important factor, without doubt, is the increased interest in orthopedic infections all over the world. When members are retired they may become emeritus members, without the right to vote during the general assembly.

When Guy Jenny left the Board in 1995, after 14 years (being Secretary and President) he was honoured as the first Distinguished Member. The same honour was conferred to me (Geert Walenkamp) in 2006 for my 11 years period as Secretary and President, and in 2014 to Jos Stuyck for his work as Secretary during 18 years, as well as to Volkmar Heppert for his contributions as President of the Society.

The number of members of each of the individual European countries showed striking fluctuations in the consecutive years. When a meeting was held in a country, often an increase was seen in members of that particular country, with a decrease in the following years. The number of members of a specific country was also influenced by the interest and the existence of research groups for orthopedic infections in that country.

The relatively large number of French members in the first years of Study Group and Society decreased when after 2001 several French members decided to leave the Society. They were pessimistic about the future of the EBJIS, preferring their own French study group for orthopedic infections. Fortunately there is again a large group of 23 French members in 2017, and many French surgeons and physicians attended the 2017 annual meeting in Nantes. Comparatively, there has been a temporary decrease in members from e.g. the UK, Portugal,

and Scandinavia, followed by a renewed interest and increase of membership from these countries (table 4, figure 4). More and more members from outside Europe have since the beginning visited the meetings, and some have become members: from Taiwan, India, Russia, South America and the USA.

During the 36 years of meetings, the quality of the presentations has hugely increased. As in other medical specialties there are less case reports, and more results of better designed patient and experimental studies. There are more and better reports of relevant basic research. The participation in the meetings of other medical specialists has increased: bacteriologists, infectious disease specialists, and also of non-medical laboratory researchers.

Many countries have their own groups or sub societies devoted to bone and joint infections: Italy, Norway, France, the Netherlands. Well known is the Musculoskeletal Infection Society (MSIS) in the US, that has had much impact through publications in the Clinical Orthopaedics and Related Research (CORR) journal. MSIS members that visited often the EBJIS were e.g. Patzakis, Costerton, Holtom, Parvizi and George Cierny. Cierny has often presented with his inimitable didactic quality, his experience and clinical results. He was for many years present in the meetings and was an important link between the EBJIS and the MSIS. He passed away much too early in 2013.

Publications

Since it seemed valuable to distribute the presentations of the meetings to the members, I collected and distributed the collected papers for the first 9 years. From 2007, the proceedings would be published as a supplement in the British Volume of The Journal of Bone and Joint Surgery (JBJS-Br), often with the help and editing of Reginald Elson; in that time an active member. Since 2015, the EBJIS has adopted the Bone and Joint Journal (formerly JBJS-Br) as its official Journal.

From the earliest years of the Study Group, there was a wish to have a journal of the group dedictated to publications on bone and joint infections. A possibility to realize that was offered in 1994 by the European Journal of Orthopaedic Surgery and Traumatology, by Editor Pierre Kehr from Straßbourg. The EBJIS could join two other Specialty Societies (GECO, SOTEST), both French. On behalf of the EBJIS Günther Lob was a member of a managing committee of 12 surgeons, together with Guy and Jean-Yves Jenny. I became a co-Editor, and 4 EBJIS members participated in the scientific committee of 65 members (Jos Stuyck, Paul Norman, Göran Josefsson, Alain Lortat-Jacob). After some years however it appeared that scarcely any manuscripts were sent by EBJIS members, due to the mainly French orientation of the journal and to the absence of a relevant citation index or Pubmed indexation. The cost of the journal subscription was equivalent to 90% of the fee of the EBJIS members, and the Society was not able to get industrial sponsorship for these costs. Therefore, the EBJIS decided, in November 1998, to finish the participation in this Journal. The Editor of the journal, Pierre Kehr was upset and not amused, but the decision of the EBJIS general assembly was taken after years of much effort without any progress.

Finally, in 2016 the goal of a dedicated journal was realized when the first issue of the Journal of Bone and Joint Infection (JBJI) was published (www.jbji.net, ISSN: 2206-3552). The open access journal is published by Ivyspring International Publisher. The initiator and Editor in chief is Heinz Winkler, and 12 members of the EBJIS are editorial members. Since the journal uses open access publication without advertising, authors pay for their publication, but EBJIS members have a 30% discount. In its short life the JBJI has shown already interesting and important publications by renowned authors and centres. Most important for a successful role in the future is that all publications in JBJI can now be found via Pubmed (https://www.ncbi.nlm.nih.gov/pubmed/), the search engine for medical research.

Conclusions

Working in such subspecialised healthcare as orthopedic infections, it is very difficult to find colleagues to share professional experiences, ideas and problems. A specialty Society like the EBJIS is particularly able to fulfil the need for such a helpful resource and network. With the usual geographical fluctuations the EBJIS has a growing number of members in almost all European countries (figure 4) and many from outside Europe. The number of participants of the annual meetings increases considerably, making parallel sessions necessary. The scientific level of the presentations has gradually improved, also due to the increased input from non-surgical disciplines, basic scientists and the introduction of more evidence based research.

The EBJIS originates from a small study group of enthusiastic medical specialists, fascinated by the problem of the infected musculoskeletal system. Thirty-six years ago it was one of the first European Specialty Societies, and is now adult, healthy and well organized. The goals that were formulated in 1982 by Evrard and the other founders have almost all been realized, with the effort and enthusiasm of many members.

Table 1: 26 founding members of the Study Group in 1982

Acar J.	France	
Bascoulergue G.	France	
Boda A.	Hungary	
Evrard J.	France	
Fernandez Sabate A.	Spain	
Hedström Sv-A	Sweden	
Jenny G.	France	
Kemp H.B.	UK	
Klemm K.	Germany	
Letournel E.	France	
Lidgren L.	Sweden	
Lindberg L.	Sweden	
Livio J.J.	Switzerland	
Lob G.	Germany	
Lortat-Jacob A.	France	
Marotte J.	France	
Martini M.	Algeria	
Mounier-Kuhn A.	France	
Papineau L-J.	Canada	
Steen Jensen S.J.	Denmark	
Torholm C.	Sweden	
Valette C.	France	
Vasey H.	Switzerland	
Vecsei V.	Austria	
Vidal J.	France	
Walenkamp G.	Netherlands	

Table 2: Presidents, Secretaries, and Treasurers of the Study Group and Society. Jenny was President of the Studygroup (1992) and subsequently also of the Society (1993).

Presidents		
1982	Jacques Evrard	
1984	Lars Lindberg	
1986	Klaus Klemm	
1988	Harold Vasey	
1990	Michel Martini	
1992	Guy Jenny	
1993	Guy Jenny	
1995	Geert Walenkamp	
1997	Günther Lob	
1999	Alain Lortat Jacob	
2001	Volkmar Heppert	
2003	Enzo Meani	
2005	Kostas Malizos	
2007	Eivind Witsø	
2009	Christof Wagner	
2011	Carlo Romano	
2013	Heinz Winkler	
2015	Klaus Kirketerp-Möller	
2017	Martin McNally	
Secretary		
1982 - 1990	Guy Jenny (F)	
1990 - 1994	Geert Walenkamp (NL)	
1994 - 2011	Jos Stuyck (B)	
2011 - today	Charles Vogely (NL)	
Treasurer		
1982 - 1986	Harold Vasey	
1986 - 2007	Claude Henri Blanc	
2007 - 2017	Olivier Borens	

Table 3: Annual meetings of the Study Group and Society

A. as Studygroup:			
1982	Paris		
1983	Wien		
1984	Straßbourg		
1985	Kristianstad		
1986	Geneva		
1987	Frankfurt		
1988	Budapest		
1989	Barcelona		
1990	Maastricht		
1991	Bologna		
1992	Sheffield		
1993	München		

B. as Society				
1994	Leuven			
1995	Copenhagen			
1996	Nice			
1997	Lausanne			
1998	Coimbra			
1999	Cort. d'Ampezzo			
2000	Berlin			
2001	Paris			
2002	Athens			
2003	Trondheim			
2004	Milano			
2005	Ljubljana			
2006	Budapest			
2007	Corfu			
2008	Barcelona			
2009	Vienna			
2010	Heidelberg			
2011	Copenhagen			
2012	Montreux			
2013	Prague			
2014	Utrecht			
2015	Estoril			
2016	Oxford			
2017	Nantes			

Table 4: origin of all members of EBJIS in 2017

ountry	full members	emeritus/dead	total
Germany	37	5	42
Italy	31	3	34
UK	32	1	33
Netherlands	29	1	30
Spain	26	2	28
Greece	25		25
France	19	4	23
Switzerland	19	3	22
Austria	14	1	15
Denmark	13		13
USA	12	4	12
Sweden Russia	6 9	4	10 9
Belgium	6	2	8
Egypt	8	2	8
Poland	8		8
Czech Republic	6	1	7
India	7		7
Norway	5	1	6
Portugal	6		6
Argentina	5		5
Brasil	5		5
South Africa	5		5
Slovenia	3	1	4
Australia	3		3
Belarus	3		3
Finland	3		3
Hungary	2	1	3
Latvia	3		3
Turkey Canada	3		3
Indonesia	2		2
Lithuania	2		2
Romania	2		2
Taiwan	2		2
Ukraine	2		2
Abu Dhabi	1		1
Azerbaijan	1		1
Banglandesh	1		1
Chili	1		1
China	1		1
Costa Ricca	1		1
Croatia	1		1
Cyprus	1		1
Equador	1		1
Iceland	1		1
Iran Iraq	1		1
Ireland	1		1
Macedonia	1		1
Montenegro	1		1
Nepal	1		1
Philippines	1		1
Saudi Arabia	1		1
Serbia	1		1
?	3		3
total	387	30	417

Figure 1: number of (full and candidate) members of the Study Group

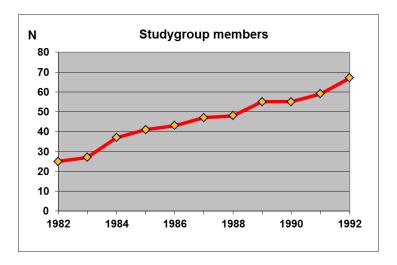


Figure 2: logo of EBJIS, as created by the author in 1993



Figure 3: all members of Study Group and Society: increase after the start of the Society in 1993, and after 2013.

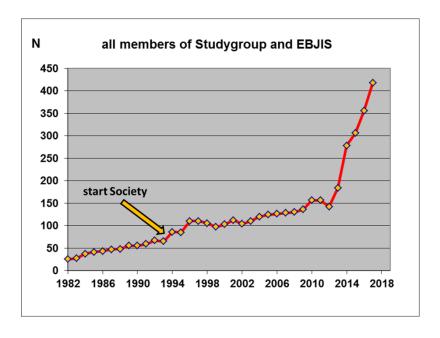


Figure 4: origin of members of EBJIS in 2017

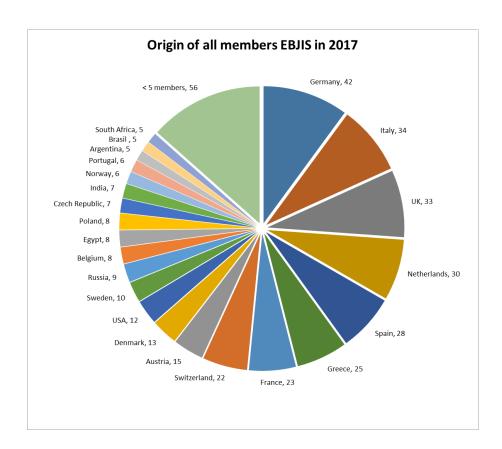


Figure 5: first President and Secretary: Jacques Evrard and Guy Jenny.



Figure 6: Reginald Elson, Jos Stuyck, Michel Martini during a Board meeting.



Figure 7: Study Group meeting (Maastricht 1990): still small group and an informal setting.



Figure 8: Copenhagen 1995: Scandinavian members Lars Lindberg, Lars Lidgren, Carsten Törholm.



Figure 9: EBJIS meeting 2007 in Corfu: MSIS members from the US: George Cierny, Michael Patzakis, Bill Costerton



Figure 10: EBJIS meeting 2017 in Nantes: parallel session

