

WAIOT Newsletter

The Archive



The WAIOT Newsletter Archive

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WAIOT Newsletter #10

WAIOT in the world

Good news from Russia and Egypt !

WAIOT Symposium at the outstanding **Vreden's Readings Congress in Saint Petersburg, Russia** was attended by hundreds of interested Colleagues on September 26, 2019 !



WAIOT thanks **Prof. Svetlana Bohzkova** and **Prof. Rashid Tikhilov** for the excellent hospitality and perfect organization !

WAIOT Symposium at the exciting **5th Annual Combined Meeting in Limb Reconstructive Surgery (LRS) and Correction of Deformity & Orthoplastic Skills in Adult and Pediatrics**, held in **Cairo, Egypt** on September 12, 2019 !



A special thank to **Prof. Mohamed Fadel and his excellent team** for giving WAIOT the chance to participate in this key event for all those interested in orthoplastic and reconstructive procedures applied to bone and joint infections and not only !

Don't Miss the

WAIOT Events at the 40th SICOT World Congress in Muscat, Oman. 4-7 December 2019



WAIOT-Resorba Symposium - Thursday, Dec. 5, 2019 - Time: 13:00 - 14:00 - Grand Ballroom Hall A2

WAIOT General Assembly - Friday, Dec. 6, 2019 - Time: 10:30 - 12:30 - Room M5

WAIOT SICOT Partner Symposium - Saturday, Dec. 7, 2019 - Time: 08:00 - 12:00 - Grand Ballroom Hall C2

Dear WAIOT Members,

*You are all kindly invited to attend the **3rd WAIOT General Assembly**, that will be held **in Muscat, Oman**, during the SICOT Congress on **December 6, 2019 - Time 10:30 - 12:30 - Room M5***

[preliminary Agenda]

We look forward to seeing you all there !



Read for you by WAIOT



The Read for You by WAIOT this month focuses on three important papers, co-authored by WAIOT Members:

- Are articulated spacers better than static ones? (Preobrazhensky PM, Bozhkova SA, Kazemirsky AV, Tikhilov RM, Kulaba TA, Kornilov NN. [Functional outcome of two-stage reimplantation in patients with periprosthetic joint infection after primary total knee arthroplasty](#). Orthop. 2019 Jan 16. doi: 10.1007/s00264-019-04296-z)
- Linezolid, PJIs and coagulase-negative staphylococci. (Eriksson HK, Ahadpour D, Hailer NP, Lazarinis S, Järhult JD. [Linezolid in the treatment of periprosthetic joint infection caused by coagulase-negative staphylococci](#). Infect Dis (Lond). 2019 Sep;51(9):683-690. doi: 10.1080/23744235.2019.1642510. Epub 2019 Aug 7.)
- Hand infections: all you need to know. (Fleivas DA, Syngouna S, Fandridis E, Tsiodras S, Mavrogenis AF. [Infections of the hand: an overview](#). EFORT Open Rev. 2019 May 10;4(5):183-193. doi: 10.1302/2058-5241.4.180082. eCollection 2019 May.)



Multidrug Resistance Bugs in Orthopaedics: Myth or Reality?

In the past few years we witnessed a growing incidence of infections caused by multidrug-resistant microorganisms. From all over the world, an increasing worry about the effectiveness of many antibiotics is continuously reported, especially when they are used for long periods, and mostly inappropriately. Luckily, many Antibiotics Susceptibility Surveillances Systems, according to WHO directives, are experienced around the world, where each Country reports the incidence of alert or these warning microorganisms. Regarding the orthopaedic infections, the controversies related to the prolonged antibiotic therapies are well known. If, on one hand, the duration of this therapy could ensure an appropriate eradication of the microorganisms, on the other it may also increase the spreading of the antibiotic resistance. Unfortunately, in many Countries we do not clearly know the real impact of the resistance profiles for microorganisms causing musculoskeletal infections. Therefore, it could be very hard to choose the most suitable antibiotics, based on the local/geographic antibiotic susceptibility profile, in case of prolonged therapy for orthopaedic infections.

I am pleased to note some scientific initiatives coming from Russia, where some colleagues are doing their utmost to collect and analyze dynamics data of the spectrum and antibiotic resistance of the leading pathogens for orthopaedic infections. In particular, the study of [Bozhkova SA et al.](#) retrospectively highlighted results from 2774 patients with periprosthetic infections and chronic osteomyelitis.

They found that the 73.5% of cases were due to *S. aureus*, *S. epidermidis*, *E. faecalis*, *E. faecium*, *P. aeruginosa*, and *Acinetobacter* spp. Interestingly, they observed a dynamic switch of *S. aureus* proportion, which were replaced overtime by *S. epidermidis*. In addition, the percentage of Methicillin resistance in *S. aureus* and *S. epidermidis* does not seem so worrying as in some European countries or in the USA.

Looking at the gram-negatives incidence, the data revealed a good containment of *Acinetobacter* spp and *P. aeruginosa* (meaning that the antibiotic therapies are well managed for these microorganisms), but an increase of the Enterobacteriaceae, especially *K. pneumoniae* and *E. coli* as well as their resistance to third-generation cephalosporins and mostly to fluoroquinolones.

This interesting study should help Infectious Diseases Specialists, Orthopaedic Surgeons and Clinical Microbiologists to better improve the outcome of the patients with PJI and osteomyelitis, but also to pay much more attention in case of gram-negatives infections.

Prof. Lorenzo Drago
Chair of Clinical Microbiology
Department of Biomedical Sciences for Health
University of Milan, Italy

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WAIOT is a [not-for-profit organization](#), free, open and inclusive, that was registered in Vienna, Austria in 2017.

WAIOT is grateful to its diamond sponsor [Resorba GmbH](#) for their continuing support.



Newsletter edited by:

Dr. Ilaria Morelli and Prof. Lorenzo Drago (WAIOT Scientific Chairman)

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Our mailing address is:
waiot@waiot.world



WAIOT Newsletter #9

Dear Colleagues,

welcome back from your Summer holidays!

Let's focus on another hot topic concerning periprosthetic joint infections.

What are the golden rules for a correct microbiological diagnosis for PJI and implant-related infections?

The WAIOT golden rules

10

WAIOT GOLDEN RULES

Microbiology best practice for the diagnosis of peri-prosthetic joint infections and implant-related infections in ortho-trauma



WAIOT is proud to show you its first official recommendation document focusing on the microbiological diagnosis of implant-related infections! It has been conceived as a ready-to-use tool for Microbiologists and Orthopaedic Surgeons, resuming the most important suggestions and the errors to be avoided in this field.

Enjoy the open-access reading!

Drago L, Clerici P, Morelli I, Ashok J, Benzakour T, Bozhkova S, Alizadeh C, Del Sel H, Sharma HK, Peel T, Mattina R, Romanò CL. [The World Association against Infection in Orthopaedics and Trauma \(WAIOT\) procedures for Microbiological Sampling and Processing for Periprosthetic Joint Infections \(PJIs\) and other Implant-Related Infections](#). *J Clin Med*. 2019 Jun 28;8(7). pii: E933. doi: 10.3390/jcm8070933.

Australia and USA for WAIOT!

Two valued WAIOT Members and leading experts in the field have been interviewed.



Dr Trisha Peel (TP), Infectious Diseases specialists at The Alfred Hospital and Monash University Melbourne, Victoria, Australia

&

Dr Eric Gomez-Urena (EGU), Infectious Diseases specialists at Mayo Clinic, Rochester, Minnesota, USA



Question 1: What do you think about the above-mentioned paper published by WAIOT?

WAIOT in the world

WAIOT in India for the first time at the
TraumaCon 2019, Mumbai: a Great Success !

After this successful meeting, WAIOT is waiting for you at the:

- 5th Annual Combined Meeting in Limb Reconstructive Surgery and Correction of Deformity

LRS Cad Lab

September 11th 2019, NTI, Nasr City, Cairo, Egypt

&

LRS Course & Orthoplastic Skills in Adult and Pediatrics

September 12th & 13th, 2019, Concord El Salam Hotel, Cairo, Egypt

- Vreden's Readings 2019, September 26-28, 2019, Saint Petersburg, Russia.

Scientific-Practical Conference

Vreden's Readings

September 26 - 28, 2019 Saint Petersburg, Russia vredenreadings.org

LRS Cadaver Orthoplastic Skills Dissection Lab

at NTI, Nasr City, Cairo, Egypt, Wednesday, 11 Sept. 2019

American Microsurgical Orthoplastic Society, AMOS, US Faculty
LRS.PD, LRS ASAMI Arab Association (LRS.AAA), ASAMI Egypt, ESSHM, COPS,FACC, CLESE, CLESS

LRS 5th Course & Orthoplastic Skills

at Concord El Salam Hotel Cairo, Egypt Thur. and Fri. Sept. 12th & 13th, 2019



WORLD ASSOCIATION AGAINST
INFECTION IN ORTHOPAEDICS &
TRAUMA

LRS.PD Program Director: Mohamed Fadel



CHAIRMAN
SUHAIL MASADEH



MODERATORS:
HANY FAHEM



PEDRO
RODRIGUEZ



HANY BADAIDAH



VICTOR H
DELGADILLO

Stay always updated with the next WAIOT symposia at our [Meetings & Venues](#) page!

WAIOT is particularly grateful to its diamond sponsor [Resorba GmbH](#) for their continuing support.



Newsletter edited by:

Dr. Ilaria Morelli and Prof. Lorenzo Drago (WAIOT Scientific Chairman)

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WAIOT Newsletter #8

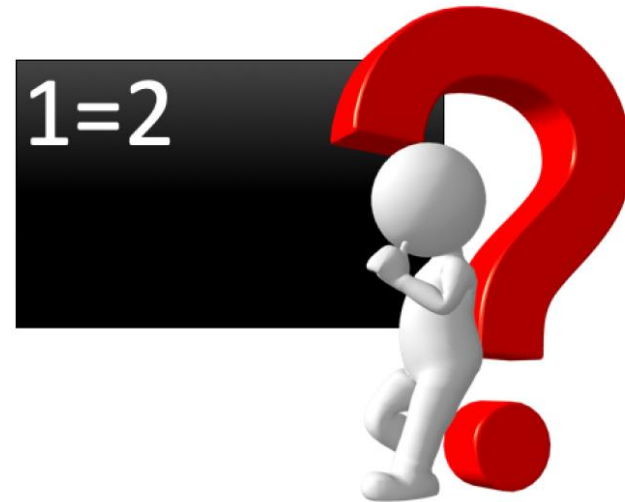
Dear Colleagues,

Welcome again to WAIOT Newsletter!

In this issue we deal with a “hot topic”: exchange arthroplasty for periprosthetic joint infections.

How many surgical procedures are required to maximize infection control?

New mathematics in Ortho&Trauma: when 1=2!



Historically, periprosthetic joint infections had been treated with a two-stage revision approach, thought to be the gold standard. Nevertheless, a different trend is coming up in the most recent literature, pointing out the non-inferiority of one-stage exchange. A meta-analysis published by Thakrar et al. now confirms that one-stage exchange arthroplasty is an acceptable option to treat PJIs in selected patients, with a recurrence rate comparable to two-stage revisions especially in non-immunocompromised patients without soft tissue defects that may prevent primary wound closure.

Thakrar RR, Horriat S, Kayani B, Haddad FS. [Indications for a single-stage exchange arthroplasty for chronic prosthetic joint infection: a systematic review](#). Bone Joint J. 2019 Jan;101-B(1_Supple_A):19-24. doi: 10.1302/0301-620X.101B1.BJJ-2018-0374.R1.

What is the truth?

WAIOT interview

June, 30 2019

IS REALLY $1 = 2$?

...THIS IS WHAT WE ASKED TO TWO VALUED WAIOT CO-FOUNDERS AND MEMBERS



Dr. Carlo L. Romano



Dr. Heinz Winkler

Question 1. Do you think one-stage joint revision after infection is a good option to treat PJI ?

CR: In the past decades we have been managing PJI preferentially with a two-stage approach, but in the last years our philosophy has progressively changed and **one-stage approach has gradually become the first option to be proposed to many of our patients**. This is the result of the most recent systematic reviews and meta-analysis, including [ours](#), that failed to demonstrate a

clear superiority of two-stage compared to one-stage revision. The current knowledge of the pathogenesis of implant-related infections clearly points out that, **whenever you are able to obtain a complete removal of infected biomaterials and of devitalized contaminated tissues, the chance of success is equivalent for one- or two-stage revision.**

HW: I strongly believe **one stage revision is the best option for treating an infected joint replacement**. As the Consensus meeting in Philadelphia confirmed with an 89% consensus “*The potential advantages of a one-stage exchange arthroplasty are multiple, including a decrease in surgical morbidity and mortality, earlier functional return, decrease in healthcare and global economic costs as well as an increase in health-related quality adjusted life years.*” “A meta-analysis performed by [Nagra et al. in 2016](#) on five cohort studies compared one-stage and two-stage exchange arthroplasty in 231 patients. • No significant differences in risk of reinfection following one- or two stage exchange arthroplasty (OR -0.06, 95 % confidence interval -0.13, 0.01). • In studies published since 2000, one-stage procedures have significantly lower reinfection rate. • Conclusion: One-stage exchange arthroplasty can lead to better clinical and functional outcomes, but patient selection criteria need to be defined.”

Question 2. What are the main requirements to be successful?

CR: Even if, on average, the results of one- and two-stage are comparable, according to the most recent literature, we must keep in mind that....

[To read more](#)

WAIOT is growing to 1200 !

In the last couple of months WAIOT hit more that [1,150 Registered Members from 90 Countries](#).

This achievement has been greatly facilitated by the **tireless effort of** some **Members**, that have spread the knowledge of WAIOT in their Country and invited many Colleagues to [join us](#).

Among the **most active WAIOT Members** in this regard, we would like to mention and warmly thank our Friends and dear Colleagues:

Hernán del Sel, Buenos Aires, Argentina

Pedro Ivo de Carvalho, Rio de Janeiro, Brazil

Rogério Fuchs, Curitiba, Brazil

Sacha Bittleman, Santiago, Chile

Julio César Palacio Villegas, Cali, Colombia

José Gomez Irrazabal, Guayaquil, Ecuador

Khaled Emara, Cairo, Egypt

Efrain Diaz-Borjon, Huixquilucan, Mexico



WAIOT in the world

Meetings & Venues

Upcoming Events

WAIOT next Scientific Symposia:

- **Mumbai, India**, at the [TraumaCon 2019](#)
- **Saint Petersburg, Russia** at the [Vreden's Readings 2019](#)
- **Berlin, Germany**, (with Resorba GmbH) at the [DKOU 2019](#)
- **Muscat, Oman**, at the [SICOT 2019](#)
- **Marrakech, Morocco**, at the [SMACOT 2020](#)

Stay always updated with the next WAIOT symposia at our [Meetings & Venues](#) page!

Contact us at waiot@waiot.world for further details!

If you like to send us a comment, to make a proposal or a suggestion, please [send us a message](#)!

Read for you by WAIOT



WAIOT proudly presents the new "[Read for you](#)" section, containing links to the most recent papers on bone and joint infections!

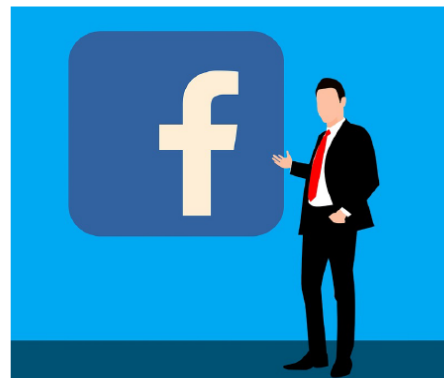
Look at the papers from our Scientific Committee Members:

Elie Berbari, USA: When pseudogout mimics PJI !

Trisha N. Peel, Australia: Searching ways to fight biofilms...

Luigi Zagra, Italy: Can we improve two-stage PJI revision ?

WAIOT goes social!



Have you already subscribed to our social channels?

WAIOT is now on [LinkedIn](#) and [Facebook](#)! Join us!

WAIOT® is a registered trademark of W.A.I.O.T., the World Association against Infection in Orthopaedics and Trauma.

WAIOT is a [not-for-profit organization](#), free, open and inclusive, that was registered in Vienna, Austria in 2017. Expenses are kept to a minimum thanks to the voluntary and free support from many Members around the world and by the wise use of the available electronic technologies.

WAIOT welcomes sponsors and donations, that are entirely devolved to accomplish its mission. WAIOT is particularly grateful to its diamond sponsor [Resorba GmbH](#) for their continuing support.



WAIOT Newsletter # 7



WAIOT Newsletter

Dear Colleagues,

Let's start with a question...Is this an infection?



*Clinical aspect of a painful hip revision prosthesis, at the time of re-revision.
(Courtesy of Prof. Carlo L. Romanò - Milan - Italy)*

Why is it sometimes so difficult to diagnose a PJI or an implant-related infection and how can we move a step forward?

WAIOT collaborative effort targeting low-grade peri-prosthetic joint infections.

Regarding the **definition of peri-prosthetic joint infection (PJI)**, in the last decade, at least five different definitions have been proposed, each one with intrinsic limitations.

In order to move a step forward, the World Association against Infection in Orthopedics and Trauma has studied a possible alternative solution.

A very practical approach, based on three parameters:

- a. the clinical presentation;
- b. the relative ability of each diagnostic test or procedure to Rule OUT and/or to Rule IN a PJI;
- c. the distinction between pre/intra-operative findings and post-operative confirmation.

That's new!

With a simple algorithm and calculating the relative scores, we can finally identify five different conditions: **High-Grade PJI** (score ≥ 1), **Low-Grade PJI** (≥ 0), **Biofilm-related implant malfunction**, **Contamination** and **No infection** (all scoring < 0).

Does it mean that based on that I can choose the right test and procedure ? YES!!

This WAIOT definition is the result of an international and multidisciplinary effort.

You can share the obtained results with the entire world and the [WAIOT Scientific Group](#) !

Enjoy [reading the article](#) (and do not forget to apply it in your clinical practice and to let us know):

For the next step WAIOT is working on a large-scale international clinical trial.

So, WAIOT Community, come inside and [let us know what do you think](#) and how the thing is working in your hands !

You can find the WAIOT definition of PJI in PubMed:

Romanò CL, Khawashki HA, Benzakour T, Bozhkova S, Del Sel H, Hafez M, Johari A, Lob G, Sharma HK, Tsuchiya H, Drago L; World Association against Infection in Orthopedics and Trauma (W.A.I.O.T.) Study Group on Bone and Joint Infection Definitions.
[The W.A.I.O.T. Definition of High-Grade and Low-Grade Peri-Prosthetic Joint Infection.](#) *J Clin Med.* 2019 May 10;8(5). pii: E650. doi: 10.3390/jcm8050650.

WAIOT welcomes South America !!!

In the last weeks nearly 100 new Members from South America have registered to WAIOT!

You are All very welcome!

South America currently accounts for approximately [18% of WAIOT Members](#) and we thank all those who registered and that continue to support our mission.

WAIOT is a young association, but is [growing rapidly](#) and, with [more than 700 Members from 85 Countries](#), it is the first and the largest interdisciplinary scientific Association only focused on fighting against musculoskeletal and implant-related infections worldwide.

Our next important target is to reach 1,000 Members !

So, please [continue to invite your Colleagues everywhere in the world to join in](#) !

WAIOT in the world

Very soon WAIOT will be in

- **Mumbai, India**, in August 15, 2019, kindly hosted in a long Symposium during the [TraumaCon 2019](#), an outstanding event in Asia with more than 3,500 attendees expected.



Venue : Renaissance Mumbai Convention Centre

The event is organized and chaired by our President, Prof. Dr. Ashok Johari, with the local Chairmen Prof. Dr. Sunil Kulkarni (President TSI), Dr Sushrut Babhulkar (President Elect TSI), Dr Amit Ajgaonkar (Secretary TSI).

- **Saint Petersburg, Russia**, in September 26-28, 2019, at one of the most important scientific orthopaedic venues in Europe at the [Vreden's Readings 2019](#).

Scientific-Practical Conference

Vreden's Readings

September 26 - 28, 2019 Saint Petersburg, Russia vredenreadings.org

This outstanding event is organized and hosted by Prof. Svetlana Bozhkova, estimated member of the WAIOT Scientific Committee.

Please visit our www.waiot.world for further details or contact us at waiot@waiot.world !

If you like to send us a comment, to make a proposal or a suggestion, please [send us a message](#) !

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WAIOT Newsletter #6

WAIOT Newsletter

Dear Colleagues,

Welcome to the latest update on the world of O&T infections!

Let's read together the new #ChosenbyWAIOT...

Thank you for...quitting smoke!

Surgeons should have fear of 12 risk factors... If they want to control infections!

This year Alamanda and Springer have highlighted the 12 modifiable risk factors to prevent prosthetic infections: glycaemic control, obesity, malnutrition, vitamin D levels, preoperative Staphylococcus aureus screening, the management of anti-rheumatic medication, peri-operative antibiotic prophylaxis, pre-surgical skin preparation, the operating room environment, irrigation options, anticoagulation and... of course smoking!

Does smoking cessation really reduce the infection risk before TJA?

Controversial results coming from the literature. Last year a prospective hospital registry-based cohort study by Gonzales et al. demonstrated that smoking increased the infection risk about 1.8 times after primary hip or knee TJA in both current and former smokers. So, no difference between former and current smokers...

This year a recent metanalysis by Bedard et al. has shown that former tobacco users have a significantly lower risk of wound complications and PJI compared to current tobacco users, suggesting that cessation of tobacco use before TJA can help to mitigate these observed risks.

What's the truth? And especially: when should anyone have to quit smoking to be out of this risk? Someone says empirically one year at least...but are we sure of that?



Smoking and its costs.

Here some additional and recent data about smoking in the US. Cigarettes are smoked by 16.8% of all the US people and may be very expensive... not only for their buyers. The authors of this study (Debbi et al.) from the Cedars-Sinai Medical Center of Los Angeles have analyzed data from a national database in order to compare differences in costs and complications between smokers and non-smokers undergoing total hip arthroplasty. The (not surprising) results evidenced that smokers undergoing THA are younger than non-smokers and show a significantly higher rate of all complications (myocardial infarction, pulmonary embolism and DVT, cardiac arrest, cerebrovascular accidents, acute renal failure, death and of course infections as pneumonia, urinary tract infections, surgical site infections and sepsis). Moreover smokers stay in hospital for longer time and they cost on average 1271\$ more than not smokers.

Just some more reasons to quit smoking, for hips sake!

You can find these papers at:

Alamanda VK, Springer BD [The prevention of infection: 12 modifiable risk factors.](#) Bone Joint J. 2019 Jan;101-B(1_Supple_A):3-9. doi: 10.1302/0301-620X.101B1.BJJ-2018-0233.R1.

Gonzalez AI, Luime JJ, Uçkay I, Hannouche D, Hoffmeyer P, Lübbeke A. [Is There an Association Between Smoking Status and Prosthetic Joint Infection After Primary Total Joint Arthroplasty?](#) J Arthroplasty. 2018 Jul;33(7):2218-2224. doi: 10.1016/j.arth.2018.02.069.

Bedard NA, DeMik DE, Owens JM, Glass NA, DeBerg J, Callaghan JJ. [Tobacco Use and Risk of Wound Complications and Periprosthetic Joint Infection: A Systematic Review and Meta-Analysis of Primary Total Joint Arthroplasty Procedures.](#) J Arthroplasty. 2019 Feb;34(2):385-396.e4. doi: 10.1016/j.arth.2018.09.089.

Debbi EM, Rajaei SS, Spitzer AI, Paiement GD, [Smoking and Total Hip Arthroplasty: Increased Inpatient Complications, Costs, and Length of Stay.](#) J Arthroplasty. 2019 Mar 31. pii: S0883-5403(19)30315-8. doi: 10.1016/j.arth.2019.03.059.

Newsletter edited by:

Dr. Ilaria Morelli and Prof. Lorenzo Drago (WAIOT Scientific Chairman)

<https://www.waiot.world/activities>

WAIOT Newsletter #5

*Dear Colleagues,
Happy 2019 from WAIOT!*

The WAIOT community has now reached [601 Members in 82 Countries](#) and is growing !

Please invite any Colleague you think interested in reducing the burden of bone and joint infections to [register](#). No membership fees are required at any time.

Should you have any suggestion or if you wish to actively cooperate with WAIOT, please [contact us](#) and we will be happy to answer !

We are proud to present the first #ChosenbyWAIOT of the new year:

Antibiotic resistance is a chess game: who will make the next move?

This worldwide problem will be also addressed by [WAIOT Committees](#)

There is a dramatic increase in the emergence of antibiotic-resistant bacterial strains, which make antibiotic choices for infection control increasingly limited and more expensive. Most clinical cases of orthopedic surgeries show that patients infected with antibiotic-resistant bacteria, such as methicillin-resistant *S. aureus* (MRSA) or ESBL *E.coli* and *Klebsiella*, are associated with increased morbidity and mortality. Infections (SSI) in orthopaedics are a major source of postoperative morbidity and are still high in numbers, due to the increasing use of osteosynthesis material and implants. For both, the right choice of the antibiotics used, the mode of application (only systemic or systemic & local), the timing, dosage and the duration of antibiotics are of extremely high importance. Their inappropriate use does not only lead to failures in prevention or treatment of infections, but may also promote microbial resistance development and may cause serious side effects for the patients. **In addition, if we consider certain host comorbidities such as diabetes mellitus, it will be very easy to lose the game of chess!**

Among its complications, foot ulcerations affect the 25% of diabetic patients, often show polymicrobial infections and are the most common cause of amputation.

WAIOT Ladies/Gents, please get a look at these articles*:

Lipsky BA, Kuss M, Edmonds M, Reyzelman A, Sigal F. [Topical application of a gentamicin-collagen sponge combined with systemic antibiotic therapy for the treatment of diabetic foot infections of moderate severity: a randomized, controlled, multicenter clinical trial.](#) J Am Podiatr Med Assoc. 2012 May-Jun;102(3):223-32.

Varga M, Sixta B, Bem R, Matia I, Jirkovska A, Adamec M. [Application of gentamicin-collagen sponge shortened wound healing time after minor amputations in diabetic patients - a prospective, randomised trial.](#) Arch Med Sci. 2014 May 12;10(2):283-7. doi: 10.5114/aoms.2014.42580. Epub 2014 May 13.

* Kindly highlighted by [RESORBA GmbH, WAIOT Platinum Sponsor 2019.](#)

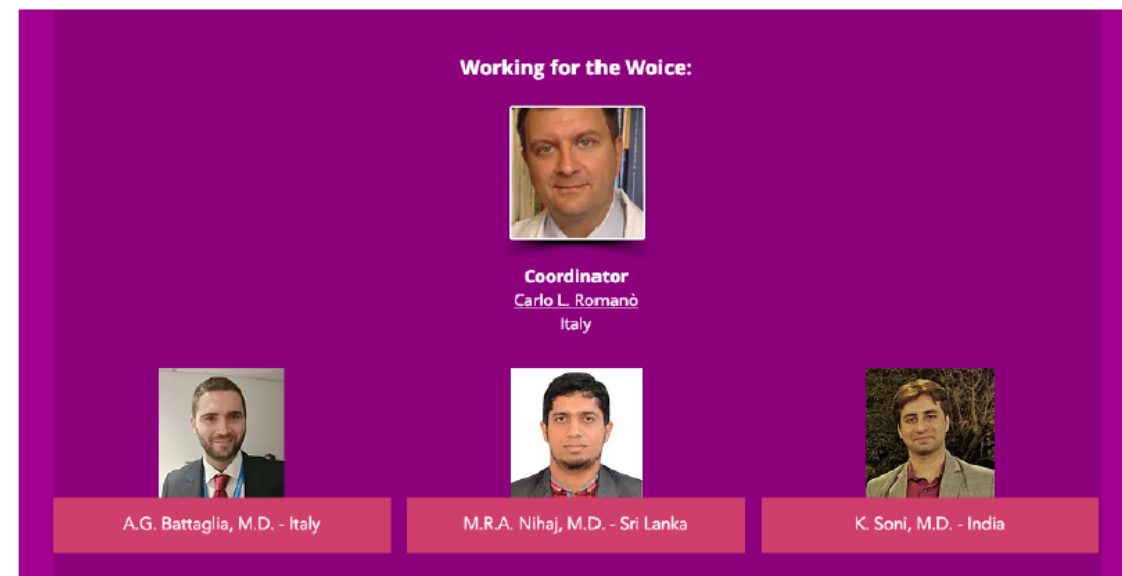


WAIOT is glad to present: The WOICE

[The WOICE](#) is the latest initiative from WAIOT, and will provide you interviews, videos and stories from our Members and invited personalities from all over the world.

Through The Woice, all members will have an insight into the reality of bone and joint infection management in all the continents.

Your videos, stories and pictures of your daily activity
are very [welcome](#) !



Thanks to Professor Carlo L. Romanò, project coordinator,
and to A.G. Battaglia, M.D., N.R.A. Nihaj, M.D., and K. Soni, M.D.,
for working at The WOICE!

[Newsletter](#) edited by:

Dr. Ilaria Morelli and Prof. Lorenzo Drago (WAIOT Scientific Chairman)



WAIOT Newsletter #4

Dear Colleagues,

welcome back to the WAIOT Newsletter.

This issue will be quite different: we are going to explore together a big public health concern (hint: infections of course contribute to it...)

Curious to discover this #ChosenbyWAIOT?

Africa Campaign for WAIOT Membership !

Africa currently accounts for approximately 10% of all [WAIOT Members](#).

It is important that WAIOT is geographically well balanced and that our Members bring their knowledge and experience from all over the world.

We would greatly appreciate if **all Members from Africa would invite at least 2 or 3 Colleagues to join WAIOT**, by registering at <https://www.waiot.world/registration>

Please help WAIOT to grow bigger:

this is the only way we can raise awareness and spread the knowledge about bone and joint infections and ultimately change the history of this challenging condition !

The ASOS Study: What if Mufasa died of trauma surgery postoperative complications?



As we know, in the 90s iconic Disney cartoon The Lion King, which made a generation fall in love with Africa, the old sovereign Mufasa dies falling off a cliff. In my childhood fantasies, a trauma surgeon could have saved him...but are we still so sure of it?

The African Surgical Outcomes Study (ASOS), a 7-day prospective observational cohort study, collected the surgical outcomes from 247 hospitals all over the continent, for a total of 11422 patients. The astonishing result is that African people are twice as likely to die after surgery, despite patients have a younger age, lower ASA scores on average and undergo mostly minor surgeries, comparing the study outcomes with other similar international studies.

The reason is the high rate of postoperative complications (18.2%), which

raises at 42% for emergency surgery patients (with a 47% death rate). The situation is a little bit better, but still challenging for orthopaedic surgery patients, who represented the 15.5% of overall study patients (second only after obstetrics), the 14.8% of patients with complications and the 11.3% of dead patients. No mystery: for all surgical specialties, infections were the most frequent postoperative complication and surgeries for infections and trauma the most at risk of death.

These worrying data have been attributed to a delay in diagnosing and treating postoperative complications, in countries with very few facilities and a very low number of specialists, hospitals and critical-care bed resources.

A situation that would not be changed so easily, without the needed resources. For now, continent-wide quality improvement programs and emergency training seem to be the immediate solutions to prevent at least a part of these deaths.

We all hope that these improvements could be realized as soon as possible... and that the “trauma patient” Mufasa could recover soon!

You can find this paper at:

Biccard BM et al, [*Perioperative patient outcomes in the African Surgical Outcomes Study: a 7-day prospective observational cohort study. Lancet.*](#) 2018 Apr 21;391(10130):1589-1598. doi: 10.1016/S0140-6736(18)30001-1.

You can comment at: news@waiot.world or on [WAIOT Facebook page](#).

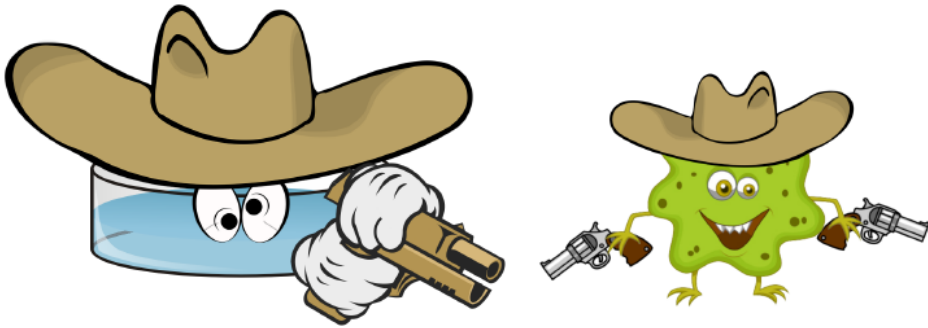
WAIOT Newsletter #3

Dear Colleagues,

We are glad to inform you that the scientific Newsletter by WAIOT is back!

Which paper will be the #ChosenByWAIOT of this month?

Once upon a time in the lab: have we really reached the gold standard in culturing PJIs?



How many samples are needed to obtain a positive culture from a PJI? How long should they be cultured? Are slow-growing organisms, like *P. acnes*, worth of longer incubation time?

Answers to these questions can be found in this article. Through a retrospective study, Kheir et al. take stock of PJI culture results in their center: the authors conclude that a mean of 5 samples incubated for at least 8 days (better 14) are needed to maximize culture sensitivity (95% positive cultures) when the pathogen is unknown. This because variant PJI pathogens like *P. acnes* and *E.*

Coli usually need more samples and longer incubation period than the classical bacteria, i.e. *S. aureus*.

But how much could these results change using antibiofilm culturing techniques? What about polymicrobial infections, acid-fast bacilli and fungi, not analyzed in this study? Does a 14 days-incubation have enough sensitivity to detect most of slow-growing bacteria? And how should we manage the relevant percentage of culture-negative patients? The gold standard in diagnosing PJIs still seems far away.

The eternal fight between good and evil in PJIs culturing is again in the spotlights in this paper:

Kheir MM, Tan TL, Ackerman CT, Modi R, Foltz C, Parvizi J, [Culturing Periprosthetic Joint Infection: Number of Samples, Growth Duration, and Organisms](#). *J Arthroplasty*. 2018 Nov;33(11):3531-3536.e1. doi: 10.1016/j.arth.2018.06.018.

What about culture results in your center? Do you use antibiofilm techniques?

You can share your experience at: news@waiot.world or comment on [WAIOT Facebook page](#).

Don't miss next WAIOT meetings!

Newsletter edited by:

Dr. Ilaria Morelli and Prof. Lorenzo Drago (WAIOT Scientific Chairman)

<https://www.waiot.world/activities>



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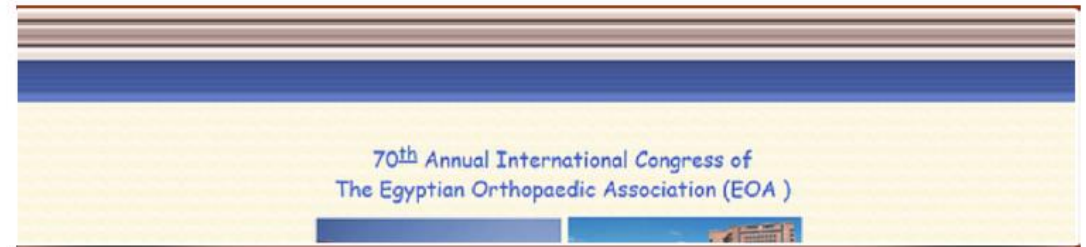


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Next WAIOT meetings will be held during:



"Curso de Infecciones", 55° Congreso Argentino de Ortopedia y Traumatología 2018 (AAOT) in Rosario, Argentina, on December 1st 2018.



70th Annual International Congress of the Egyptian Orthopaedic Association (EOA), in Cairo, Egypt, on December 10th 2018.

Don't miss them!

You can find this and other future and past WAIOT meetings at:

<https://www.waiot.world/meetings>

WAIOT Newsletter #2

Dear Colleagues,

Welcome to the second scientific newsletter by WAIOT.

Are you ready to explore the World of Infections in Ortho&Trauma with the March 2018 WAIOT scientific update?

Let's jump into the #ChosenByWAIOT of this month!

ICS-Files: “alien” suggestions to treat infected osteosynthesis.



The field of infected osteosynthesis may sometimes appear like a western film, where anyone takes the law into their own hands, when the standard of care is missing. Some surgeons prefer a routinely hardware removal, some wait for an unlikely healing, favoring hardware retention, even in case of poor tissue coverage. Well mates, a guide to treat infected osteosynthesis finally arrived from Romanò et al! In their study, published by Injury, they propose the ICS classification to choose how to treat septic osteosynthesis based on three features (presence of Infection, Callus formation, hardware Stability, acronym: ICS). This algorithm is supported by the high success rates of 215 patients (89.3% cases of bone healing, 93.5% without infection recurrence) treated according to it, with a 5-year minimum follow up.

Don't miss this breaking news:

Romanò CL, Morelli I, Romanò D, Meani E, Drago L., [ICS classification system of infected osteosynthesis: Long-term results](#). Injury. 2018 Jan 6. pii: S0020-1383(18)30002-0. doi: 10.1016/j.injury.2018.01.002.

What is your strategy for infected osteosynthesis?

You can share your experience at: news@wajot.world

Big News: WAIOT is looking for new Study Groups!



WAIOT wants you!

Are you an expert on Infections in Ortho&Trauma? Do you want to share your experience with colleagues from all over the world? Don't be shy!

WAIOT promotes members' active participation within the Study Groups. Cooperate with worldwide experts and increase the knowledge on Infections in Ortho& Trauma, joining preexisting groups or proposing a new group on your own research field.

Do you want to join us? Please contact us at: info@waiot.world

You can find the study group page at: www.waiot.world/study-groups

Don't miss next WAIOT meeting!



Next WAIOT meeting will be held during the 19th European Congress of Trauma & Emergency Surgery in Valencia, Spain (May 6-8 2018). Don't miss it!

You can find this and other future and past WAIOT meetings at:

<https://www.waiot.world/meetings>

WAIOT is now on Facebook!



WAIOT goes social and now is on Facebook!

Like us at: www.facebook.com/waiot.world/

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WAIOT Newsletter #1

Dear Colleagues,

Welcome to the first scientific newsletter by WAIOT.

Beginning from February 2018, the Scientific Committee of the World Association against Infections in Orthopaedics and Trauma will provide its members with a periodic update on the most relevant scientific papers in this field.

Let's jump into the first paper #ChosenByWAIOT !

**Can we still make a diagnosis of
periprosthetic joint infections with few
euros?**



PJI diagnosis is a quite critical issue in our field. The hurry to distinguish between a septic or aseptic failure, to choose the best treatment option, is often slowed down by a negative culture specimen. Hence, a lot of PJI synovial markers have been studied, but which is the best one? In their systematic review and meta-analysis, Saleh et al. compare some synovial fluid markers in terms of diagnostic odds ratios, area under ROC curve and heterogeneity among the reported sensitivities and specificities. Well, we don't like spoilers, but none of the most common markers (IL-17, IL-6, IL-1 β , alpha-defensin, C-reactive protein, leukocyte esterase) revealed to have a statistically significant diagnostic superiority. The synovial alpha-defensin test is a quite trendy marker in the current medical literature. With its high diagnostic accuracy, for a while it seemed to be the turning point in PJI diagnosis...unluckily just for Uncle Scrooge and a few rich friends. Is it really worth its cost (more than one hundred times higher than a leukocyte esterase strip)?

*Saleh A, Ramanathan D, Siqueira MBP, Klika AK, Barsoum WK, Rueda CAH.,
[The Diagnostic Utility of Synovial Fluid Markers in Periprosthetic Joint Infection: A Systematic Review and Meta-analysis.](#) J Am Acad Orthop Surg. 2017
Nov;25(11):763-772. Doi: 10.5435/JAAOS-D-16-00548.*

What is your experience in diagnosing PJI ? Which synovial markers do you prefer ?

You can share your experience at: news@waiot.world .

Newsletter edited by:

Dr. Ilaria Morelli and Prof. Lorenzo Drago (WAIOT Scientific Chairman)

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