Musculoskeletal Infection Society–North America

Agenda

Friday, August 4, 2017

7:15 a.m. Registration Opens

7:15–7:45 a.m. Continental Breakfast

7:45–7:55 a.m. Welcome, Disclosures – Sandra B. Nelson, MD

Session I Biofilm Basic Science
Moderators:

8:00–8:06 a.m. Antibiotic Loaded Bone Cement Mediated Killing of P. Aeruginosa Biofilms on Implant Materials – Paul Stoodley, PhD

8:07–8:13 a.m. Antimicrobial Susceptibility of Tissues–based Bacterial Biofilms – Alex C. McLaren, MD

8:14–8:20 a.m. In Vitro Formulation of an Antibiotic Eluting Joint Implant for Peri – Prosthetic Infection Treatment – Ebru Oral

8:21–8:26 a.m. In Vivo Efficacy of an Antibiotic Eluting UHMWPE Bearing Surface Against Biofilm an a Lapine Model – Ebru Oral

8:27–8:36 a.m. Discussion

8:37–8:43 a.m. Staphylococcus aureus Genomic Variation Impacts Clinical Severity of Illness Phenotype of Children with Acute Hematogenous Osteomyelitis – Lawson A. Copley, MD

8:44–8:50 a.m. DNase I Inhibits Biofilm –like Aggregates of Clinical and Laboratory Strains of Staphylococcus aureus – Paul Stoodley, PhD

8:51–8:57 a.m. All Staphylococcus is not the Same: Genotype Diversity in S. Aureus Between PJI and Nasal Isolates – Kenneth Urish, MD

8:58–9:04 a.m. Large Clinical Variations in Antibiotic Ability to Remove Staphylococcus aureus Biofilm in Periprosthetic Joint Infection – Kenneth Urish, MD

9:05–9:14 a.m. Discussion

Session II Prosthetic Joint Infection
Moderators:

9:16–9:22 a.m. How to Manage Persistent Draining Wounds after Total Joint Arthroplasty? – Alisina Shahi
9:23–9:29 a.m. Elevated INR in the Acute Postoperative Period After Total Knee Arthroplasty is Associated with Periprosthetic Joint Infections Despite Utilization of a Dedicated Anticoagulation Clinic – Joshua Bingham, MD

9:30–9:36 a.m. Crystal Positive Synovial Fluid: Do Not Dismiss the Likelihood of Infection – Carl Deirmengian, MD

9:37–9:43 a.m. Sonication of Antibiotic Spacers does not Predict Recurrence after 2-stage Revision Arthroplasty for Infection - Adam Olsen, MD

9:44–9:53 a.m. Discussion

9:54–10:00 a.m. Vancomycin Povidone –Iodine Protocol Improves Survivorship of Periprosthetic Joint Infection Treated with Irrigation and Debridement Aldo M. Riesgo, MD

10:01–10:07 a.m. Coating of Cementless Stems with Commercially Pure Antibiotic – Loaded Calcium Sulfate Reduces Infection Rate in Revision THA Matthew V. Dipane

10:08–10:14 a.m. Culturing Periprosthetic Joint Infection: A 15 –year Study and Analysis of Samples, Growth Duration, Outcomes, and Organisms – Timothy Tan

10:15–10:21 a.m. No Optimal Antibiotic–free Period Prior to Reimplantation for Periprosthetic Joint Infection – Timothy Tan

10:22–10:31 a.m. Discussion

10:32–10:52 a.m. Refreshment Break – Visit Exhibitors and ePosters

**Session III** Prosthetic Joint Infection

Moderators:

10:55–11:01 a.m. Assessment of Musculoskeletal Infection Society (MSIS) Diagnostic Criteria as Predictors of Treatment Success in Hip Arthroplasty Infections Treated with Two –Stage Exchange – Andy N. Miller, MD

11:02–11:08 a.m. Are All Periprosthetic Infections Equal? Effect of Major Versus Minor Criteria and Patient Outcomes – Mitchell R. Klement MD

11:09–11:15 a.m. Development and Evaluation of a Preoperative Treatment Success Calculator for Periprosthetic Joint Infection – Timothy Tan

11:16–11:22 a.m. Outcomes of Articulating Spacers with Autoclaved Femoral Components in Total Knee Arthroplasty Infection – Daniel E. Goltz

11:23–11:32 a.m. Discussion
11:35 a.m.–12:35 p.m. Symposium: **Musculoskeletal Infections in Persons who Inject Drugs**
Moderator: Sandra B. Nelson, MD

*Eric Smith, MD*
*Boston Medical Center*

*Alysse Wurcel, MD*
*Tufts Medical Center*

12:35–1:40 p.m. Luncheon – Pre–function Area of Ballroom

**Session IV**
**Diagnosis of Periprosthetic Joint Infection**
Moderators:

1:41–1:47 p.m. Utility of Serological Markers for Detecting Persistent Infection in Two – Stage Revision Arthroplasty in Patients with Inflammatory Arthritis
*Alison Klika*

1:48–1:54 p.m. Synovial Fluid Biomarkers for the Diagnosis of Periprosthetic Joint Infection: A Systematic Review and Meta –Analysis
*Antonia F. Chen, MD, MBA*

1:55–2:01 p.m. The Leukocyte Esterase Test Strip is a Poor Rule–out Test for PJI
*Carl Deirmengian, MD*

2:02–2:08 p.m. Can Serum D–Dimer Be the Savior for Diagnosing Periprosthetic Joint Infection in Shoulder Arthroplasties? – *Alisina Shahi*

2:09–2:18 p.m. Discussion

2:19–2:25 p.m. Diagnosing Periprosthetic Joint Infection: The Promise of Next Generation Sequencing – *Javad Parvizi MD, FRCS*

2:26–2:32 p.m. Next–generation Sequencing is a Valid Tool for Detecting Pathogens in Synovial Fluid – *Javad Parvizi MD, FRCS*

*Antonia F. Chen, MD, MBA*

2:40–2:46 p.m. The Rapid Lateral–Flow Test for Alpha–Defensin Matches the Lab Test
*Carl Deirmengian, MD*

2:47–2:53 p.m. Clinical Evaluation of the Alpha Defensin Test in Diagnosing Prosthetic Joint Infections – *Hernan A. Prieto*

2:54–3:04 p.m. Discussion
3:05–4:00 p.m. Symposium: **Bacterial Persistence**  
Moderator:  
*James J. Collins*  
Termeer Professor of Medical Engineering & Science  
Professor, Department of Biological Engineering  
Massachusetts Institute of Technology  
Broad Institute of MIT and Harvard  
Wyss Institute for Biologically Inspired Engineering, Harvard University

4:01–4:20 p.m. Refreshment Break – Visit Exhibitors and ePosters  

**Session V**  
**Epidemiology, Risk Factors and Prevention**  
Moderators:

4:22–4:28 p.m. Weighing in On Periprosthetic Joint Infection: the Risk for Infection Rises Steadily with Increased Body Mass Index – *Noam Shohat*

4:29–4:35 p.m. Diabetes and Total Joint Arthroplasty: Infection Risk May Not Be Predictable by Markers of Glycemic Control *Thorsten Seyler, MD, PhD*

4:36–4:42 p.m. Patients with Psychosis are at Increased Risk of Septic and Aseptic Complications after Total Joint Arthroplasty – *Timothy Tan*

4:43–4:49 p.m. Preoperative Doxycycline does not Decolonize Propionibacterium Acnes from the Skin of the Shoulder: A Randomized Controlled Trial *Surena Namdari*

4:50–4:59 p.m. Discussion

5:00–5:06 p.m. A Decade of Practice Developments for SSI Prevention: Betadine Irrigation Prevails – *Matthew Austin, MD*

5:07–5:13 p.m. HEPA Filters Do Not Affect Infection Rates following Primary Total Joint Arthroplasty with Forced Air Warmers – *Alison Klika*

5:14–5:20 p.m. Association between Hospital Volume of Infected Surgeries and Risk of Periprosthetic Joint Infection – *Alison Klika*

5:21–5:27 p.m. Risk Adjustment is Necessary in Value–Based Outcomes Models for Infected Total Knee Arthroplasty – *P. Maxwell Courtney, MD*

5:28–5:37 p.m. Discussion

5:40–6:10 p.m. MSIS Business Meeting – *MSIS Members Only*

6:30–8:30 p.m. President's Reception – UMass Club  
Third Annual Induction – The MSIS Hall of Fame
Saturday, August 5, 2017

7:00 a.m.  Registration Opens, Continental Breakfast Open

Session VI  Basic Science
Moderators:

8:30–8:36 a.m. Coating Orthopaedic Wires with Monolaurin to Eliminate Staphylococcal Pin Site Infections – Dmitry Gil

8:37–8:43 a.m. Efficacy and Dose Response of Vancomycin Powder within a Mouse Model of Spinal Implant Infection – Howard Park

8:44–8:50 a.m. Fluorescence Image–guided Surgery with Staphylococcus aureus Specific Probes within an In–vivo Mouse Model of Spine Implant Infection Howard Park

8:51–8:57 a.m. Novel In Vivo Mouse Model of Shoulder Implant Infection and Osteomyelitis – Nicholas M. Bernthal, MD

8:58–9:07 a.m. Discussion

9:08–9:14 a.m. Novel Immuno–based Microbial ID Assays for Organism Detection in Synovial Fluid – Carl Deirmengian, MD


9:22–9:28 a.m. PNDJ Hydrogel Provides High, Sustained Antimicrobial Levels by Local Delivery – Alex C. McLaren, MD

9:29–9:35 a.m. A Novel Mouse Model of Bulk Allograft Infection Demonstrates a Biphasic Peak in Infection Intensity – Nicholas M. Bernthal, MD

9:36–9:42 a.m. Bulk Allograft is More Susceptible to Infection than is Stainless Steel or Cancellous Allograft using a Novel Mouse Model of Infection Nicholas M. Bernthal, MD

9:43–9:53 a.m. Discussion

9:55–10:25 a.m. Symposium: Oral Versus Intravenous Antibiotics for Bone and Joint Infection
Moderator: Matthew Scarborough
Oxford University Hospitals NHS FT

10:26–10:45 a.m. Refreshment Break – Visit Exhibitors and ePosters
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<tr>
<th>Time</th>
<th>Session VII Musculoskeletal Infections Clinical Science</th>
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<tr>
<td>10:46–10:52 a.m.</td>
<td>Development of a Predictive Algorithm for 90–day Mortality in Patients with Spinal Epidural Abscess – <em>Paul T. Ogink</em></td>
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<td>11:00–11:06 a.m.</td>
<td>Fungal Spinal Epidural Abscess: Characteristics of FSEA and the Differences between FSEA and BSEA – <em>Huilang Yang</em></td>
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<td>11:07–11:13 a.m.</td>
<td>Antibiotic Impregnated Calcium Phosphate does not Help Prevent Post–Operative Infections when used as Bone Void Filler <em>Ammar Qureshi</em></td>
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<td>11:14–11:23 a.m.</td>
<td>Discussion</td>
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<td>11:24–11:30 a.m.</td>
<td>Septic Olecranon Bursitis caused by Non–tuberculous Mycobacteria, the Mayo Clinic Experience – <em>Anil Jagtiani</em></td>
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<td>11:31–11:37 a.m.</td>
<td>Septic Olecranon Bursitis Treated with Surgical Debridement, the Mayo Clinic Experience – <em>Anil Jagtiani</em></td>
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<td>11:38–11:44 a.m.</td>
<td>Early Diagnosis of Septic Arthritis in Immunocompromised Patients <em>Daniel D. Li</em></td>
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<td>11:45–11:51 a.m.</td>
<td>Hepatitis C Viral Load and Total Joint Arthroplasty <em>Marcus DiLallo</em></td>
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<td>11:52–11:58 a.m.</td>
<td>Preoperative Serum Fructosamine: A Simple and Inexpensive Test for Predicting Periprosthetic Joint Infection – <em>Noam Shohat</em></td>
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<td>11:59 a.m.–12:09 p.m.</td>
<td>Discussion</td>
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<td>12:15–12:35 p.m.</td>
<td>Introduction of Incoming President: Antonia F. Chen, MD, MBA <em>Sandra B. Nelson, MD</em></td>
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<td>12:36–12:50 p.m.</td>
<td>Closing Remarks, Adjourn</td>
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