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# **PROGRAM**

## **Forty Second Annual Meeting of the Surgical Infection Society**



**Westlake Village, CA  
April 11-14, 2023**

## **CONTINUING MEDICAL EDUCATION CREDIT INFORMATION**

### **Accreditation**

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of American College of Surgeons and Surgical Infection Society. The American College of Surgeons is accredited by the ACCME to provide continuing medical education for physicians.

### **AMA PRA Category 1 Credits™**

The American College of Surgeons designates this live activity for a maximum of **12.5 AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Of the *AMA PRA Category 1 Credits™* listed above, a maximum of **12.5** meet the requirements for Self-Assessment.



AMERICAN COLLEGE OF SURGEONS  
DIVISION OF EDUCATION

**Learning Objective(s)**-- This activity is designed for **Physicians, Pharmacists and Nurses**. Upon completion of this course, participants will be able to

1. Describe the appropriated diagnostic measures for the diagnosis of Surgical Site Infection
2. Apply the correct treatment paradigm for the treatment of appendicitis
3. Summarize results on the latest research relevant to the diagnosis and treatment of surgical infections
4. Illustrate the correct use of antimicrobials for empiric treatment of sepsis in surgical patients
5. Examine elements of Quality in Surgery
6. Explain the best technique for bowel prep
7. Recognize the current controversies in the diagnosis and treatment of surgical infections
8. Evaluate the use of antimicrobials for a set course in the treatment of surgical infections
9. Discuss recent developments in the study of cellular and molecular mechanisms in the pathogenesis of surgical infections

**SURGICAL INFECTION SOCIETY FORTY-SECOND ANNUAL MEETING  
Westlake Village, California, April 11-14, 2023**

**Tuesday, April 11, 2023**

<b>12:00-06:00</b>	<b>Registration</b>		<b>Newport</b>
<b>12:00-04:00</b>	<b>Committee Meetings</b>		
<b>12:00-01:00</b>	By-Laws and Special Projects	Julie Valenzuela, MD	<b>Sherwood</b>
<b>12:00-01:00</b>	Informatics	Fredric M. Pieracci, MD	<b>Ventura</b>
<b>04:00-05:00</b>	Scientific Studies	Sebastian D. Schubl, MD / Rondi Gelbard, MD	<b>Sherwood</b>
<b>04:15-05:00</b>	Global Health	Jennifer L. Rickard, MD	<b>Ventura</b>
<b>02:00-04:00</b>	<b>Council Meeting</b>		<b>Boardroom</b>
	<b>Nominating Committee</b>		<b>Phone 2/23</b>
<b>07:00-09:00</b>	<b>President's Dinner (By invitation)</b>		<b>Ballroom A&amp;E</b>

**Wednesday, April 12, 2023**

<b>06:15-07:15</b>	<b>Welcome Breakfast</b>		<b>Ballroom A&amp;E</b>
	<i>Speaker: Vanessa P. Ho, MD and Manuel Lorenzo, MD</i>		
<b>07:15-07:30</b>	<b>Welcome to the Meeting</b>		<b>Ballroom BCD</b>
	<i>Speakers: David P. Blake, MD, MPH, FACS, DMCC and Daithi S. Heffernan, MD, AFRCSI</i>		
<b>07:30-12:30</b>	<b>Surgical Infection Update Symposium I - FSIS</b>		<b>Ballroom BCD</b>
	<i>Moderator: Lillian Kao, MD</i>		
<b>07:30-08:30</b>	<b>"Is Resistance Futile? Review and Updates on Bacterial Resistance" - Philip S. Barie, MD</b>		
<b>08:30-09:15</b>	<b>DEBATE - "Vancomycin is suitable for routine antibiotic prophylaxis"</b>		
	<i>Moderator: Joseph D. Forrester, MD</i>		
	<b>Pro: Patrick McGonagill, MD- Rebuttal - Addison K. May, MD</b>		
	<b>Con: Kristin P. Colling, MD - Rebuttal - John E. Mazuski, MD, PhD</b>		
<b>09:30-11:15</b>	<b>Duration of Antibiotic Therapy</b>		
	<i>Moderator: April Mendoza, MD</i>		
<b>09:30-10:00</b>	<b>"Is Less More? Evidence for Shorter Duration Antibiotic Therapy for Surgical Infections Beyond STOP-IT" - Robert G. Sawyer, MD</b>		
<b>10:00-10:30</b>	<b>"Did We STOP-IT? Variation in Current Antibiotic Duration Prescribing Amongst Surgeons" - Patrick Delaplain, MD</b>		
<b>10:30-11:00</b>	<b>"Mission Impossible? Changing Surgeon Antibiotic Prescribing Practices" - Margaret Lauerman, MD</b>		
<b>11:00-11:15</b>	<b>Q&amp;A</b>		
<b>11:30-12:30</b>	<b>Year in Review - Rondi Gelbard, MD</b>		

**MO28.** Incidence of Bloodstream Infection with the Use of Parental Nutrition. Alexandra Wiegand presenting. UK HealthCare.

**MO29.** Anemia Recovery After Lung Contusion, Hemorrhagic Shock and Chronic Stress is Sex-Specific. Gwendolyn Gillies presenting. (Sawyer Award, New Member Award) University of Florida.

**MO30.** Use of VV-ECMO in Patients with ARDS due to fungal pneumonia. Bridget Dillon presenting. University of Minnesota Medical School.

**04:30-05:30 Mini Oral Session IV**

**Ventura**

*Moderators: Mark Hoofnagle, MD, PhD and Manuel Lorenzo, MD*

**MO31.** Modified Frailty Index 5 (mFI-5) Score as a Predictive Tool for Post-traumatic Empyema in Geriatric Trauma Patients. Ricardo Fonseca presenting. Washington University in St. Louis.

**MO32.** Considerable variations exists in SSI incidence by WHO geographic regions. June Kim presenting. (Resident Award) Valley Health Systems, Nevada.

**MO33.** Changes in Serum Bicarbonate Level as a Predictor of Mortality in Surgical Intensive Care Patients. Andrew Tran presenting. (Resident Award) MetroHealth Medical Center.

**MO34.** Use of Antibiotics in Reconstruction with Sternal Rigid Plate Fixation. Alexandra Blake presenting. (New Member Award) Dominion Plastic Surgery.

**MO35.** Spinal Epidural Abscess Patient Follow-Up: Another Critical Treatment Plan Consideration. Rhett MacNeille presenting. Loma Linda University.

~~**MO36.** Photo-crosslinking double modified silk fibroin-gelatin hydrogel for open abdominal wound healing. Ye Liu presenting. Nanjing General Hospital of Nanjing.~~

**MO37.** Alternation in acyl proteome after burn injury. Marc Jeschke presenting. Hamilton Health Sciences Centre.

**MO38.** Prolonged intraarterial catheter therapy for diabetic gangrene of the lower limb. Alisher Okhunov presenting. Tashkent Medical Academy.

**MO39.** Prediction and prevention of sepsis in patients with necrotizing fasciitis on the background of diabetes mellitus. Alisher Okhunov presenting. Tashkent Medical Academy.

**MO40.** Decrease Wound Dehiscence with Closed-Suction Drains: A Single Facilities Experience in An Overweight Patient Population. Chandler Hinson presenting. University of South Alabama.

**06:30-08:30 Awards Banquet**

**Ballroom A&E**

**08:30 Adjournment**

**MO38. Prolonged intraarterial catheter therapy for diabetic gangrene of the lower limb**

Alisher Okhunov; Fayzrakhmon Abduralhmanov

**Background:** Diabetic gangrene of the lower extremities is one of the most common causes of death in intensive care units. Although understanding of its pathogenesis has improved, this has not affected the management of these patients.

**Hypothesis:** To improve the results of treatment of patients with diabetic gangrene of the lower extremities by developing a pathogen-based regimen of long-term intra-arterial catheter therapy (PIACT).

**Methods:** The results of treatment and examination of 267 patients with diabetic gangrene of the lower extremities were analyzed. All patients underwent early surgical intervention with the use of vacuum therapy in the postoperative period, and complex drug therapy was prescribed. After the operation, the catheter was placed into the arterial bed of the affected limb using PIACT. The composition of the administered infusion in patients of group I (control - 126 patients) included drugs whose action was aimed at relieving spasm and intoxication, improving the rheological properties of blood and microcirculation, as well as broad-spectrum antibiotics. Patients of group II (basic - 141 patients) were added glucocorticoids in doses of 60-180 mg/day and albumin, 100-200 ml of 10% solution.

**Results:** Persistence in group I of a high proportion of complications associated with sepsis (22.3%) and mortality (4%) indicates the need to revise the traditional PIACT regimens, taking into account the phases of the course of inflammation. The proposed pathogenically substantiated PIACT regimen with the jet administration of antibiotics and albumin at the early stages of treatment (24–48 hours) and the addition of a prednisolone solution to the infusion composition for 2–5 days makes it possible to regulate the course of the inflammatory process with the relief of exudation and tissue edema in the affected area.

**Conclusions:** The inclusion of the improved PIACT scheme in the complex of therapeutic measures in the treatment of severe pyoinflammatory diseases made it possible to reduce the incidence of complications to 2.8%, mortality to 1.45% and reduce the duration of treatment from  $30.1 \pm 0.6$  days to  $11.8 \pm 0,6$  days.

### MO39. Prediction and prevention of sepsis in patients with necrotizing fasciitis on the background of diabetes mellitus

Alisher Okhunov

**Background:** Diagnosis and treatment of surgical infections remains one of the urgent problems of modern surgery. Evidence of this is the high mortality rate in severe forms of purulent-inflammatory diseases of soft tissues, which ranges from 28–56%, and with the development of sepsis - over 90%. Purulent-inflammatory diseases of soft tissues against the background of diabetes mellitus proceed atypically and rather aggressively. Those norms that are inherent in acute soft tissue infections without diabetes mellitus can have a contradictory effect on the fate of patients with concomitant diabetes mellitus.

**Hypothesis:** To improve the results of treatment of patients with severe forms of purulent-inflammatory diseases of soft tissues against the background of diabetes mellitus by developing a prognosis and prevention of the generalization of the process.

**Methods:** The results of treatment of 182 patients with necrotizing fasciitis associated with diabetes mellitus (93 patients in the control group, 89 patients in the main group) were analyzed. The mean age of the patients was  $52.9 \pm 11.7$  years. To predict the likelihood of sepsis (high, moderate, low), the following indicators were determined: pro-inflammatory cytokines (IL-1b, IL-6 and TNF- $\alpha$ ), the presence of signs of SIRS, the area of prevalence of the purulent-inflammatory process, the level of microbial contamination of the wound with procalcitonin.

**Results:** Based on the results of predicting the likelihood of developing sepsis, we developed an algorithm using a drug based on granulocyte colony-stimulating factor (Filgrastim). With a high likelihood of developing sepsis, Filgrastim was used by subcutaneous injection at a dose of 5  $\mu\text{g}/\text{kg}$  of body weight for at least 5 days. With a moderate probability - Filgrastim was administered at a dose of 5  $\mu\text{g} / \text{kg}$  of body weight for another 2 days. The drug was not used with a low probability.

**Conclusions:** The use of Filgrastim on the basis of the diagnostic and treatment algorithm developed by us contributed to a decrease in the number of patients with sepsis on the 5th day of treatment compared with the control group of patients by 18.3 times. The effectiveness of the use of Filgrastim was also proven by the fact that among the patients of the main group on the 7th day of treatment there were no cases with a septic course of necrotizing fasciitis on the background of diabetes mellitus. The proportion of positive results in the main group of patients was higher by 11.3%, and mortality decreased by 4.5%