MAYO CLINIC

MECHANICAL VENTILATION

Conference

Coming March 5, 2021

COVID-19:

The Final Take

CE.MAYO.EDU/MECHANICALVENTILATIONONLINE

Description

The Mayo Clinic Mechanical Ventilation Conference COVID-19: The Final Take is designed to provide high quality education and detailed instruction in mechanical ventilation management of patients with COVID-19 infection, and to bring together the health care providers who are essential to providing respiratory care on a daily basis during the 2020 pandemic.

Course Learning Objectives

Upon conclusion of this program, participants should be able to

1. Outline the physiologic principles and cardiopulmonary interactions underlying the risks, benefits, and applications of ventilator support for respiratory failure secondary to COVID-19 infection.
2. Describe in detail the use of different modes of ventilator support, invasive and non-invasive, for patients with respiratory failure secondary to COVID-19 infection.
3. Describe appropriate use of mechanical ventilation equipment following bio-safety rules and infection prevention measures.
4. Integrate pulmonary mechanics at the bedside into a personalized approach to mechanical ventilation for patients with respiratory failure secondary to COVID-19 infection.

Intended Audience

Mayo Clinic Mechanical Ventilation Conference – COVID-19 The Final Take is designed for critical care providers, respiratory therapists, physicians, physician assistants, nurses and nurse practitioners.

Credit

JOINT ACCREDITATION™
INTERPROFESSIONAL CONTINUING EDUCATION

In support of improving patient care, Mayo Clinic College of Medicine and Science is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC) to provide continuing education for the healthcare team.

Mayo Clinic College of Medicine and Science designates this enduring material for a maximum of 3.75 *AMA PRA Category 1 Credits*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The American Association for Respiratory Care approves a maximum of 3.75 contact hours *continuing Respiratory Care Education (CRCE) credit* for this activity.

Faculty

Conference Directors

Gustavo A. Cortes Puentes, M.D.
John J. Marini, M.D.
Todd J. Meyer, R.R.T., L.R.T.
Richard A. Oeckler, M.D., Ph.D

★ **Laurent J. Brochard, M.D.,** Chair, Interdepartmental Division of Critical Care Medicine, University of Toronto; Staff Physician, Critical Care Department, St. Michael's Hospital. Keenan Chair in Critical Care and Respiratory Medicine, St. Michael's Hospital and University of Toronto. Toronto, *Canada*

★ **Luigi Camporota, M.D., Ph.D.,** Consultant, Intensive Care Medicine, Guy's and St. Thomas' NHS Foundation Trust, London, *England*

June Mee Chae, M.D., Instructor in Medicine, Division of Pulmonary and Critical Care Medicine, Mayo Clinic, La Crosse, WI; *United States*

Gustavo A. Cortes Puentes, M.D., Assistant Professor of Medicine, Division of Pulmonary and Critical Care Medicine, Mayo Clinic, Rochester, MN; *United States*

Bhargavi Gali, M.D., Associate Professor of Anesthesiology, Department of Anesthesiology and Perioperative Medicine, Mayo Clinic, Rochester, MN; *United States*

★ **Luciano Gattinoni, M.D.,** Former Chairman, Department of Anesthesiology and Intensive Care, University of Milan; *Italy*, Gastprofessor at the University of Göttingen; *Germany*

Steven R. Holets, R.R.T., L.R.T., Assistant Professor of Anesthesiology, Department of Anesthesiology and Perioperative Medicine, Respiratory Care, Mayo Clinic, Rochester, MN; *United States*

★ **John J. Marini, M.D.,** Department of Pulmonary, Critical Care and Sleep Medicine, HealthPartners Medical Group & Clinics, Regions Hospital, St. Paul; Professor of Medicine, University of Minnesota Medical School, Minneapolis, *United States*

Richard A. Oeckler, M.D., Ph.D., Assistant Professor of Medicine and Physiology, Division of Pulmonary and Critical Care Medicine, Mayo Clinic, Rochester, MN; *United States*

★ **Lise Piquilloud, M.D.** Deputy physician, Intensive Care Medicine, Lausanne University Hospital (CHUV); Deputy Chair, Acute Respiratory Failure (ARF) Section of the European Society of Intensive Care Medicine (ESICM). *Lausanne, Switzerland*

★ Guest Faculty

Schedule

Round Table 1:

"COVID-19 associated ARDS [i.e. 'CARDS']: What's New and What's True?"

1. **COVID-19 Associated ARDS Phenotypes: Leading or Misleading?**
   Luciano Gattinoni, M.D. (15-20 minutes)

2. **Happy Hypoxemia in COVID-19 Infection: True or False?**
   Richard A. Oeckler, M.D., Ph.D. (15-20 minutes)

3. **Excessive Respiratory Drive in COVID-19: How to monitor and treat?**
   Luigi Camporota, MD, PhD (15-20 minutes)

Discussion: *Moderators: June Mee Chae, M.D., Gustavo A. Cortes Puentes, M.D. (15 minutes)*

Round Table 2:

"Non-invasive Mechanical Ventilatory Support and Timing of Intubation in the era of COVID-19"

1. **Infection Mitigation Strategies in the Use of Ventilatory Support During COVID-19 Pandemic**
   Steven R. Holets, R.R.T., L.R.T. (15-20 minutes)

2. **Non-invasive Ventilatory Support for Patients with Respiratory Failure Secondary to COVID-19 Infection**
   Gustavo A. Cortes Puentes, M.D. (15-20 minutes)

3. **Patient Self-Inflicted Lung Injury (PSILI): Timing of Intubation**
   Laurent J. Brochard, M.D. (15-20 minutes)

Discussion: *Moderators: Bhargavi Gali, M.D., Richard A. Oeckler, M.D., Ph.D. (15 minutes)*

Round Table 3:

"Dealing with CARDS: Invasive Mechanical Ventilation and Extracorporeal Life Support"

1. **COVID-19 Associated ARDS: Is a Different Mechanical Ventilation Approach Necessary?**
   John J. Marini, MD (15-20 minutes)

2. **A Pragmatic Approach to Lung Recruitability in COVID-19-associated ARDS**
   Lise Piquilloud, M.D. (15-20 minutes)

3. **Extracorporeal Membrane Oxygenation Support in COVID-19: Allocation and Nuances in Management**
   Bhargavi Gali, M.D. (15-20 minutes)

Discussion: *Moderators: June Mee Chae, M.D., Steven R. Holets, R.R.T., L.R.T. (15 minutes)*