

Scientific symposium

Patient-controlled mechanical ventilation in the ICU: Self-protection of the lungs and diaphragm?

On the occasion of the inauguration of Dr Leo Heunks

Date June 2nd, 2017

Venue VU University Medical Center,
O2 Building (entrance opposite of hospital main entrance)
De Boelelaan 1108
1081 HZ Amsterdam

Program introduction

Mechanical ventilation is a life-saving intervention in patients with acute respiratory failure. The main goals of mechanical ventilation are to improve oxygenation and reduce work of breathing by the patient. Today, it is recognized that mechanical ventilation is associated with adverse events, in particular the development of respiratory muscle weakness, which in turn is associated with difficult weaning from the ventilator and increased mortality. Research conducted in the last decade has demonstrated that both ventilator under-assist and over-assist may induce weakness and injury of the respiratory muscles in ICU patients.

In this symposium we will discuss ventilator strategies that aim to deliver lung-protective and diaphragm protective mechanical ventilation in patients with acute respiratory failure. We are honored that national and international experts are willing to present their opinions at this symposium. We are looking forward to a lively discussion with the audience.

On behalf of the faculty,

Leo Heunks, Coen Ottenheijm and Armand Girbes

Program

08.30 – 08.55	Registration, coffee
08.55 – 9.05	Welcome Armand Girbes, Amsterdam
09.05 – 9.30	Pathophysiology of ICU acquired diaphragm weakness Coen Ottenheijm, Amsterdam
09.30 – 09.55	Clinical impact of ICU acquired diaphragm weakness Alexandre Demoule. Paris
09.55-10.20:	Expiratory muscle dysfunction and difficult weaning Annemijn Jonkman. Amsterdam
10.20-10.35	Discussion
10.35 – 11.05	Coffee
11.05-11.30	Early use of assisted modes in ARDS: patient-SILI or diaphragm protective Laurent Brochard. Toronto
11.30-11.55:	Patient controlled mechanical ventilation: future perspectives Christer Sinderby. Toronto
11.55-12.20:	Interaction between mechanical ventilation and transfusion on the occurrence of lung injury Nicole Juffermans, Amsterdam
12.20-12.35	Discussion

12.35-13.15	Lunch
13.15-13.40	Patient-ventilator interaction in ARDS Laurent Brochard. Toronto
13.40-14.05	Breathing patterns in ventilated patients: What does it tell us? Alexandre Demoule. Paris
14.05-14.30:	How to improve diaphragm function in difficult to wean patients? Hans van der Hoeven, Nijmegen
14.30-14.45	Discussion
14.45-15.00	Closing remarks Armand Girbes. Amsterdam
15.45	Inaugural speech Leo Heunks (Aula VU)

Faculty

Armand Girbes, MD, PhD

Dr Girbes is a professor of intensive care, head of the department intensive care at VU University medical center Amsterdam. His research focuses on the effects of hypoperfusion and reperfusion, hypothermia and clinical pharmacology. Currently he is the secretary of the European Society of Intensive Care Medicine.

Coen Ottenheijm, PhD

Dr Ottenheijm is a professor of Physiology, VU University medical center, Amsterdam. His research focuses on diaphragm dysfunction in congenital myopathies and ICU patients. He has obtained prestigious funding for research from several organizations including NOW and NIH.

Nicole Juffermans, MD, PhD

Dr Juffermans is a professor of intensive care at the Academic Medical Center Amsterdam. Her research focuses on efficacy and adverse effects of blood transfusion and hyperinflammation during critical illness. She is currently chief editor of the Netherlands Journal of Intensive Care

Alexandre Demoule, MD, PhD

Dr Demoule is a professor of intensive care, head of the department of respiratory ICU at Pitié-Salpêtrière, University Hospital group in Paris. He is an expert in mechanical ventilation and respiratory physiology and has published many state of the art papers in this field.

Annemijn Jonkman, MSc

Annemijn Jonkman is a technical physician and PhD student at the department of intensive care at the VU University medical center Amsterdam. Her research focuses on the effects of critical illness on expiratory muscle function and strategies to improve expiratory muscle function.

Laurent Brochard, MD, PhD

Dr. Brochard is a professor of Medicine and the Interdepartmental Division Director for Critical Care in the Faculty of Medicine, University of Toronto and Saint Michaels Hospital. He is an international expert on weaning and mechanical ventilation, and is leading a European Research Network dedicated to clinical studies in mechanical ventilation and weaning, called REVA. Currently he is deputy editor of the American Journal of Respiratory and Critical Care Medicine.

Christer Sinderby, PhD

Christer Sinderby is a respiratory physiologist who took his MSc at Karolinska Institute, Stockholm, and PhD degree at the University of Gothenburg. He currently holds a position as Staff Scientist in the Keenan Research Centre for Biomedical Science of St. Michael's Hospital. He holds an affiliation Assistant Professor at the

University of Toronto, Department of Medicine. He is a member of the Inter-departmental Division of Critical Care Medicine at University of Toronto, as well as the Institute for Biomedical Engineering and Science Technology (iBEST) at Ryerson University and St-Michael's Hospital.

Hans van der Hoeven, MD, PhD

Dr. van der Hoeven is professor of intensive care, head of the department of intensive care and of the first Dutch weaning centre (NExCOB) at the Radboudumc, Nijmegen. His research focuses on patient safety in the ICU, sepsis, inflammation, delirium and mechanical ventilation.

Practical information

Registration for scientific symposium is required:

www.vumc/afdelingen/ICV/symposium

Costs for symposium: Euro 40,= (including refreshments and lunch)

Accreditation for symposium for NVIC, NVA, NIV and NVALT is pending

Language at scientific symposium is English.

After the symposium inaugural lecture (in Dutch)

Time 15.45 h

Venue: Aula of the VU, De Boelelaan 1105, 1018 HV, Amsterdam

Entrance to inaugural speech is free, reception afterwards