



Twentieth Postgraduate Refresher Course
Cardiovascular and Respiratory Physiology
Applied to Intensive Care Medicine
Brussels, November 24-26 2014

Monday, November 24, 2014

08.00	Registration <i>Welcome coffee</i>
08.30	Introduction J.L. Vincent (Brussels, Belgium) & M.R. Pinsky (Pittsburgh, United States)
08.40	Static lung and chest wall mechanics R. Naeije (Brussels, Belgium)
09.20	Pressure-volume curves - Esophageal pressure measurement A. Pesenti (Milan, Italy)
10.00	<i>Discussion</i>
10.15	<i>Coffee break</i>
10.45	Fundamentals of gas exchange evaluation in the critically ill A. Pesenti (Milan, Italy)
11.25	Lung edema R. Naeije (Brussels, Belgium)
12.05	<i>Discussion</i>
12.20	<i>Lunch</i>
13.20	Evaluation of lung and gas volume A. Pesenti (Milan, Italy)
14.00	Gas exchange and cardiovascular physiology in ECMO D. De Backer (Brussels, Belgium)
14.35	Acute pulmonary hypertension & right ventricular dysfunction R. Naeije (Brussels, Belgium)
15.15	<i>Discussion</i>
15.30	<i>Coffee break</i>
16.00	Physiological relevance of spontaneous breathing in the critically ill A. Pesenti (Milan, Italy)
16.30	Ventilator-induced lung injury (VILI) M.R. Pinsky (Pittsburgh, United States)
17.00	<i>Discussion</i>
17.15	Clinical cases Hypoxemia - J.L. Vincent (Brussels, Belgium) Lung mechanics - A. Pesenti (Milan, Italy) Severe COPD - M.R. Pinsky (Pittsburgh, United States)

Tuesday, November 26, 2014

08.30	Lung protective strategies: A practical approach L. Brochard (Toronto, Canada)
09.10	Lung practical aspects of mechanics L. Brochard (Toronto, Canada) & A. Pesenti (Milan, Italy)
09.45	<i>Discussion</i>
10.00	<i>Coffee break</i>
10.30	Ventricular pump function: P/V loops M.R. Pinsky (Pittsburgh, United States)
11.10	The determinants of cardiac output J.L. Vincent (Brussels, Belgium)
11.50	<i>Discussion</i>
12.05	<i>Lunch</i>
13.00	Systemic blood pressure: Ventriculo-arterial coupling M.R. Pinsky (Pittsburgh, United States)
13.40	Venous return and effective circulating blood volume M.R. Pinsky (Pittsburgh, United States)
14.20	<i>Discussion</i>
14.35	<i>Coffee break</i>
15.00	Cardiovascular alterations in sepsis J.L. Vincent (Brussels, Belgium)
15.35	Heart-lung interactions M.R. Pinsky (Pittsburgh, United States)
16.10	Fluid responsiveness D. De Backer (Brussels, Belgium)
16.45	Fluid challenge J.L. Vincent (Brussels, Belgium)
17.15	<i>Discussion</i>
17.30	Clinical cases – Volume responsiveness (J.L. Vincent, D. De Backer, M.R. Pinsky)

Wednesday, November 26, 2014

08.30	Blood flow distribution M.R. Pinsky (Pittsburgh, United States)
09.10	PaO₂ /FiO₂ in clinical practice L. Brochard (Toronto, Canada)
10.00	<i>Discussion</i>
10.15	<i>Coffee break</i>
10.45	Oxygen delivery and consumption: SvO₂ & ScvO₂ J.L. Vincent (Brussels, Belgium)
11.15	Circulatory shock J.L. Vincent (Brussels, Belgium)
11.45	Vasoactive agents J.L. Vincent (Brussels, Belgium)
12.25	<i>Discussion</i>
12.40	<i>Lunch</i>
13.30	Hepatosplanchnic hemodynamics D. De Backer (Brussels, Belgium)
14.00	Assessment of tissue perfusion J. Creteur (Brussels, Belgium)
14.30	Microcirculatory studies in humans D. De Backer (Brussels, Belgium)
15.00	Type of IV fluid J.L. Vincent (Brussels, Belgium)
15.30	<i>Discussion</i>
15.45	Clinical cases Hemodynamic management (J.L. Vincent, J. Creteur, D. De Backer)
16.15	Remaining questions