Neonatal and Paediatric Respiratory Failure Management: from non-invasive mechanical ventilation to ECMO

An EuroELSO & ESPNIC (Respiratory and Cardiac ICU & MCS Section) initiative
10-11 April 2019

Course Directors: M. Di Nardo (Italy), P. Tissieres (France) & D. De Luca (France)

10TH APRIL 2019

Opening: 8:00-8:15

Neonatal Respiratory Failure session D. De Luca & M. Di Nardo & A. Hoskote

08:30-10:00

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>8:30-8:45</td>
<td>Neonatal respiratory failure and ARDS</td>
<td>D. De Luca (France)</td>
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<td>8:50-9:15</td>
<td>Congenital Diaphragmatic Hernia</td>
<td>M. Di Nardo (Italy)</td>
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<td>9:20-9:35</td>
<td>Non-invasive Management: my way</td>
<td>D. De Luca (France)</td>
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<td>9:40-9:55</td>
<td>Mechanical Ventilation Management: My favourite Approach</td>
<td>P. Rimensberger (Switzerland)</td>
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Coffee break 10:00-10:20

Pediatric Respiratory Failure session P. Rimensberger & P. Tissieres

10:30-14:00

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<th>Time</th>
<th>Topic</th>
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<tbody>
<tr>
<td>10:30-10:50</td>
<td>Paediatric acute respiratory failure pathophysiology definition and outcome</td>
<td>M. Kneyber (Netherlands)</td>
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<td>10:55-11:15</td>
<td>Non-invasive Management: my way</td>
<td>M. Pons (Spain)</td>
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<td>11:20-11:40</td>
<td>Management of pARDS: my first ventilator settings</td>
<td>P. Rimensberger (Switzerland)</td>
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<td>12:45-13:05</td>
<td>How do I set HFOV for pARDS</td>
<td>M. Kneyber (Netherlands)</td>
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<td>13:10-13:30</td>
<td>When do I use surfactant in pARDS</td>
<td>D. De Luca (France)</td>
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<td>13:35-13:50</td>
<td>iNO and prone positioning</td>
<td>M. Kneyber (Netherlands)</td>
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Lunch 14:00-14:30
The Role of ECMO to manage neonatal and paediatric respiratory failure  

P. Tissieres & M. Di Nardo

14:30-16:15

14:35-15:00 Physiology of gas exchange during ECMO

P. Pokorna (Czech Republic)

15:05-15:20 How to regulate flow in VA and VV ECMO?

M. Mendonka (Switzerland)

15:25-15:45 Neonatal and paediatric indication to ECMO

P. Tissieres (France)

15:50-16:15 Cannulation for neonatal and paediatric respiratory ECMO

C. Davis (UK)

Coffee break 16:20-16:50

17:00-17:20 Congenital Diaphragmatic Hernia in ECMO: when and how?

C. Davis (UK)

17:25-17:40 Management of Mechanical Ventilation during ECMO: my way

M. Di Nardo (Italy)

17:45-18:05 Alternative approach to manage pARDS while on ECMO

A. Moscatelli (Italy)


J. Balcells Ramirez (Spain)

18:30-18:50 Frequent complications during respiratory ECMO: how to prevent and manage

T. Brogan (USA)

11TH APRIL 2019

“Hands on” during mechanical ventilation and ECMO

08:30-12:30 (15 minute sessions each)

<table>
<thead>
<tr>
<th>Neonatal Respiratory Failure: Mechanical Ventilation and ECMO</th>
<th>Conventional Mechanical Ventilation and HFOV during pARDS</th>
<th>Pediatric ECMO</th>
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<tbody>
<tr>
<td>M. Cveticovic (UK), G. Cavallaro (Italy) and D. De Luca (France)</td>
<td>M. Kneyber (Netherlands) and P. Rimensberger (Switzerland)</td>
<td>S. Segura (Spain) and M. Di Nardo</td>
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<td>A. Moscatelli (Italy) and J. Balcells Ramirez (Spain)</td>
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Course description

This EuroELSO & ESPNIC accredited educational symposium will provide the candidates (anesthetists, pediatric intensivists, nurses, physiotherapists, perfusionists, pediatric cardiac surgeons and general surgeons) the basic knowledge relative to the management of acute respiratory failure in the critically ill neonate and children. Starting from non invasive/invasive ventilation and proceeding to extracorporeal membrane oxygenation. This will be achieved by a combination of interactive lectures, by renowned experts in both the fields of neonatal and pediatric mechanical ventilation and ECMO, with use of interactive hands on sessions.

Course Objectives

> Understanding the pathophysiology of acute respiratory failure in neonate and children
> Conventional support using non invasive and invasive mechanical ventilation
> The role of ECMO in the management of neonatal and pediatric respiratory failure
> Understanding the Basic Physiology of Gas Exchange in VA & VV ECMO
> Management of the native lung in ECMO
> Basic management of coagulation at bedside
> Preventing ECMO complications

Pre-registration for this course is recommended at https://www.euroelso-congress.com/registration-hotel/online-registration, seats are limited. The course will take place at the congress venue.