Semi upright position
Early mobilization

Retrospective study
Supine (<10 °) versus 45 ° position
N = 60
Multi ICU
Variables: SpO₂ and ETCO₂

Results
Results

- Significant increase of ventilation and oxygenation
- 1st step in early mobilization
- Effective for weaning procedures
- Convenient position / psychological impact
- Easy and effective application

Supine position and mechanical ventilation

- ↓↓ Abdominal pressure
- Recruitment dorsal lungparts
- Improvement $Va/Q$ ratio

ABCDE bundle—Awakening and Breathing Coordination, Delirium monitoring, and Exercise/early mobility

- Daily: Awakening and breathing trial
- Daily: Daily schedule & mobilization
- Daily: VAP bundle & delirium
- Daily: Consultation bedside IC team

Study semi upright, EZ

1. Artificial ventilation in the semi-recumbent position improves oxygenation and gas exchange: Ben Speelberg, MD; Frits van Beers, Ventilation Practitioner, Chest, 124, 4, oktober 2003 supplement
2. Effect of body positioning in ventilated obese patients, F. v Beers, abstract 18th annual congres ESICM, Amsterdam
3. The effect of semi-recumbency in ventilated morbid obese patients, F. v Beers, abstract 19th annual congres ESICM, Barcelona

Early mobility

Introduction

- Pieter Vaes, RN, CCRN, Woundcare specialist
- Mark Verhagen, RN, CCRN, BA, Chairman mobilize group
- St. Elisabeth Hospital, Tilburg, The Netherlands
Program

• Introduction Patient Mobility
• Special groups

Early Mobilisation Program on the ICU

2009: Patient Data Management System (PDMS)
2009: 12 hours/day physiotherapist available only for ICU
2012: Establish mobilise working group on ICU
2012: Build in a custom made Program: Patiënt Mobility Frame (PMF)
2012: Enlarge wheelchairs and Lift systems
2012: 3 x bed bike, developed with our physiotherapist and nurses

Determine Fase PMF

MET score: score one time
Load Level: daily
Cooperation Level: daily
combined report

Special groups

- Obese
- Children
- ABCDE bundle

Critical Care St. Elisabeth

<table>
<thead>
<tr>
<th>BMI Category</th>
<th>2010 (n=1730)</th>
<th>2011 (n=1819)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI &lt; 25</td>
<td>709 (42%)</td>
<td>711 (39%)</td>
</tr>
<tr>
<td>BMI 25-30</td>
<td>667 (38%)</td>
<td>728 (40%)</td>
</tr>
<tr>
<td>BMI 30-40</td>
<td>316 (18%)</td>
<td>333 (18%)</td>
</tr>
<tr>
<td>BMI &gt; 40</td>
<td>35 (2%)</td>
<td>46 (3%)</td>
</tr>
</tbody>
</table>

The Netherlands

1.9 million people BMI > 30

CBS
Study St. Elisabeth Hospital 2013-2014

- Prospective analysis of the incidence and severity of post operative wound infections and the development of pressure ulcers in case of obesity.

- Olffen, Vos, Vaes & Gestel, 2013-2014

Thank you for your attention

Questions?

p.vaes@elisabeth.nl
m.verhagen@elisabeth.nl
f.v.beers@elisabeth.nl