



# Pediatric Intensive Care Unit (PICU)

Faculty Hospital Ostrava, Czech Republic



Nemocnice akreditovaná  
Joint Commission International

[www.fno.cz](http://www.fno.cz)

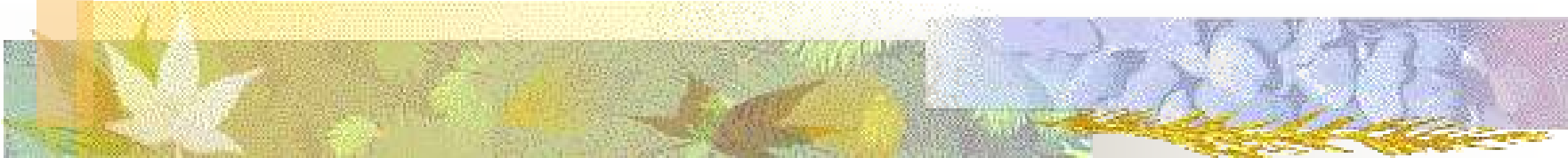
tel/fax.:00420 59 737 3560/3563

[ivona30@hotmail.co.uk](mailto:ivona30@hotmail.co.uk)





# Home care ventilation: a retrospective evaluation of our experience based on the current national practice



Ivona Mikulenkova

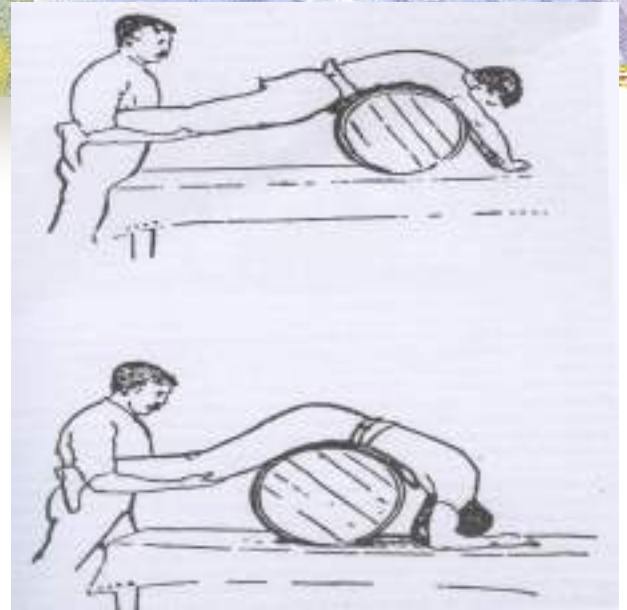
Alena Kurasova

MUDr. Iveta Larysova

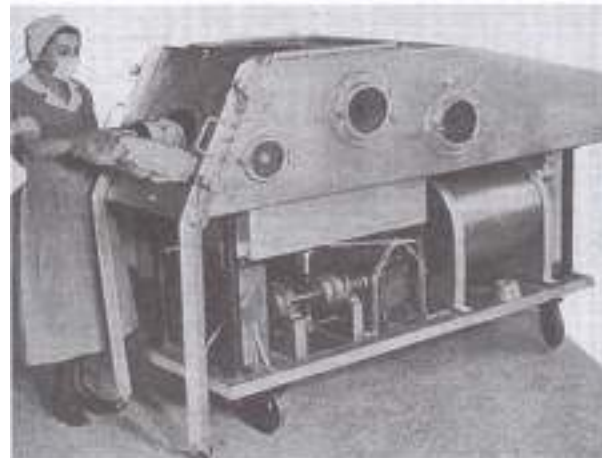
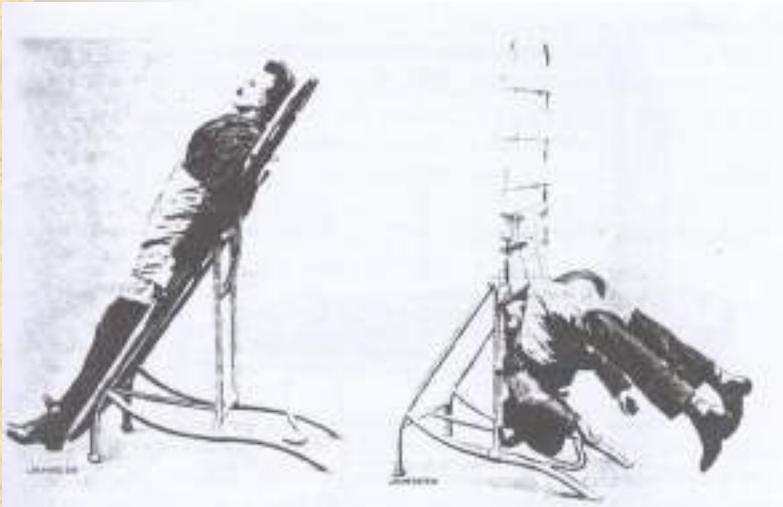
MUDr. Marketa Nowakova

Once upon a time...

Galenos



Beginning of the 19th century





# Home care ventilators

- Low weight
- High reliability
- Easy to use
- Effective alarm
- Oxygen connection
- Standby generator



# History of HCV/Czech Republic/

- Long-term ventilation
- necessary permanent stay within ICU in past



- Individual cases at home /15 years ago/
  - family initiative
  - No legal support
  - No community support
- National committee for realization of home care ventilation /since January 2003/
- 2004 first home care ventilators released

# Case study /July 2009/



- 2,5- year- old boy  
admitted to PICU
- 3- day history of fever, **no seizures**, nausea and vomiting
  - Clinical presentation

# PICU stay /22.7.- 24.12. 2009/

- Critical condition  
/pulmonary oedema,  
heart failure, sepsis,  
cerebral oedema,  
myelitis, coma vigile/
- Swine flu?  
Antivirotics
- Hantaviral infection





# No sedation

- Stable condition
- Ventilation /SIMV/
  - does not cough, swallow, does not obey commands
- Conscious but eye contact disputable
- Motor fidgetiness
- Unable to open mouth /central etiology/





# Nursing care

- Complex nursing care
- Family- centred care
- Use of basal stimulation



# Family- centred care



# Richard's hospital room





# Intensive rehabilitation



# Family- centred care



# Discharge on X-mas Eve



- Conventional ventilation
- PEG
- Toilet trained
- Recognises familiar faces
- Uses his own sign language



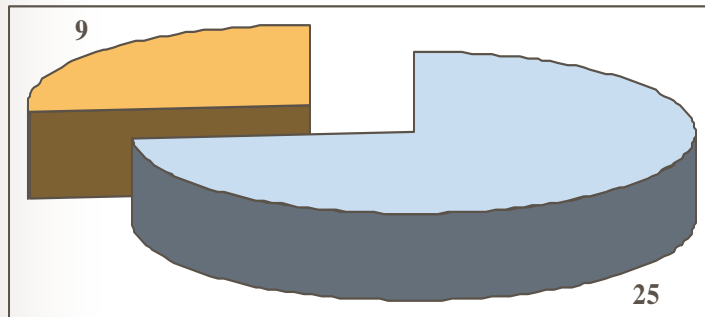


# Process of realization HCV

- HCV is indicated by PICU doctor
- Application for HCV
- Committee agreement (home care ventilator available within 28 days)
- Technical equipment

# Children on HCV in CZ

- 34 children discharged on HCV
- 9 of them from FNO
- 5 children died



■ other hospitals ■ FNO



# Pros & Cons

- Parents' proximity
- Family / familiar environment
- Low cost versus higher expenses of a child's hospitalisation
- Social – economic family status
- Limited financial support for carers / 3 hrs per day /
- limited number of home care agencies
- lack of methodical instructions for Health Insurance Companies about financial support





# Richard at home



