

CPAP con scafandro : disconfort da rumore



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General Intensive Care Unit

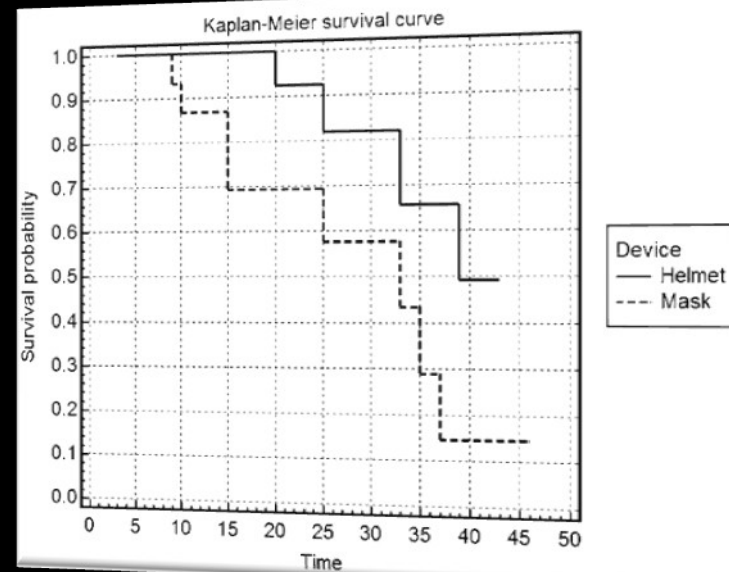


San Gerardo Hospital – Monza, Italy

Milan Bicocca University – Director : Prof. A. Presenti

Tiziana Principi
Simona Pantanetti
Francesca Catani
Daniele Elisei
Vincenzo Gabbanelli
Paolo Pelaia
Pietro Leoni

Noninvasive continuous positive airway pressure delivered by helmet in hematological malignancy patients with hypoxemic acute respiratory failure



Helmet group :

28,44 h (± 0.20)

Mask group :

7,5 h (± 0.45)

Helmet CPAP e Rumore

Intensive Care Med (2004) 30:1755–1760
DOI 10.1007/s00134-004-2347-9

ORIGINAL

Franco Cavaliere
Giorgio Conti
Roberta Costa
Rodolfo Proietti
Antonino Sciuto
Simonetta Masieri

Noise exposure during noninvasive ventilation
with a helmet, a nasal mask, and a facial mask

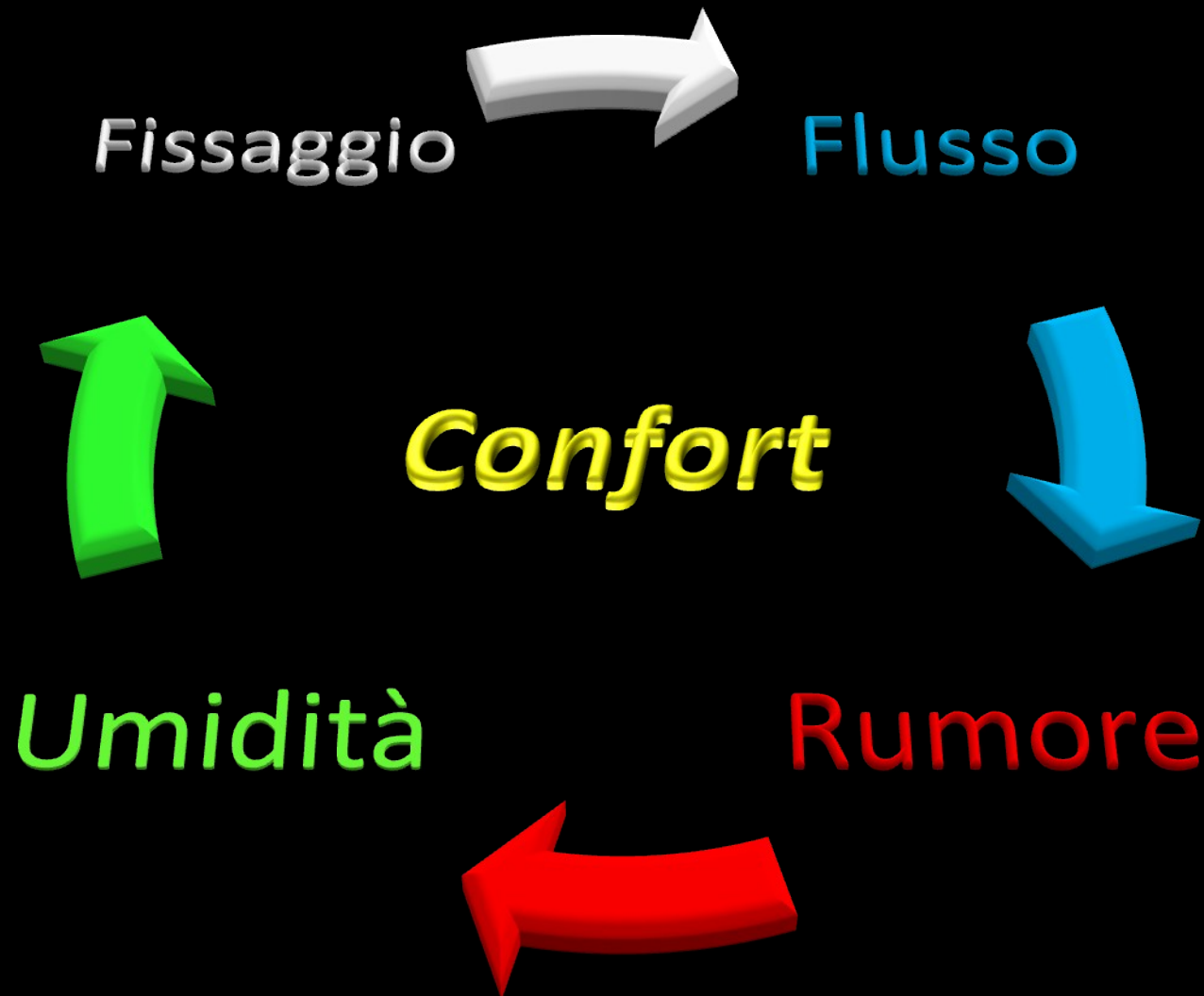
PS/PEEP (cmH ₂ O)	10/5
Helmet, no HME filters	105±6
Facial mask	64±3
Nasal mask	62±1

Results:

***Inside the helmet
noise exceeded 100 dB.***



The Helmet Bundle



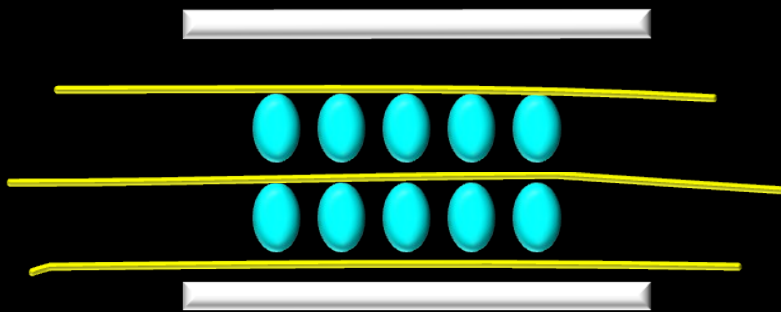
"The helmet bundle : infermieristica della persona in CPAP con scafandro"

Lucchini A., Bond H., Elli S. - Submitted

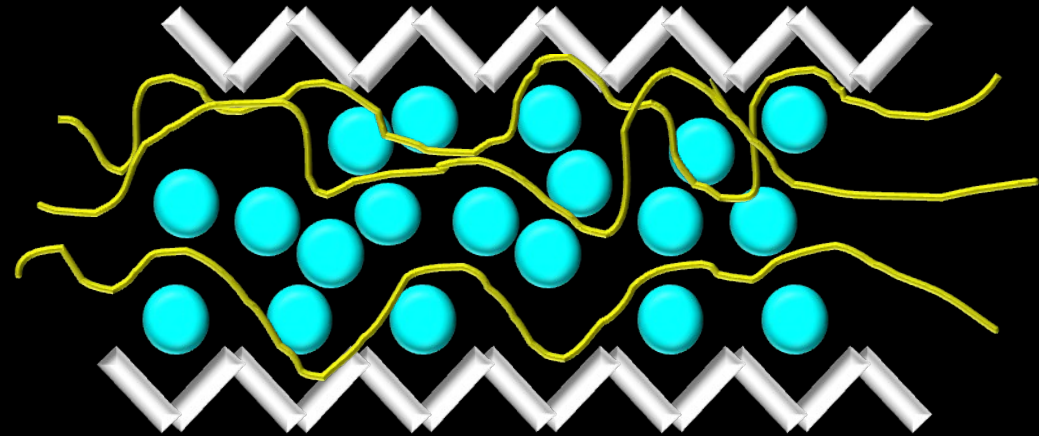
*Gas Flow > 30 L/m in
m a a volte non basta !!*



Perché sono da preferire i tubi a superficie interna liscia ?



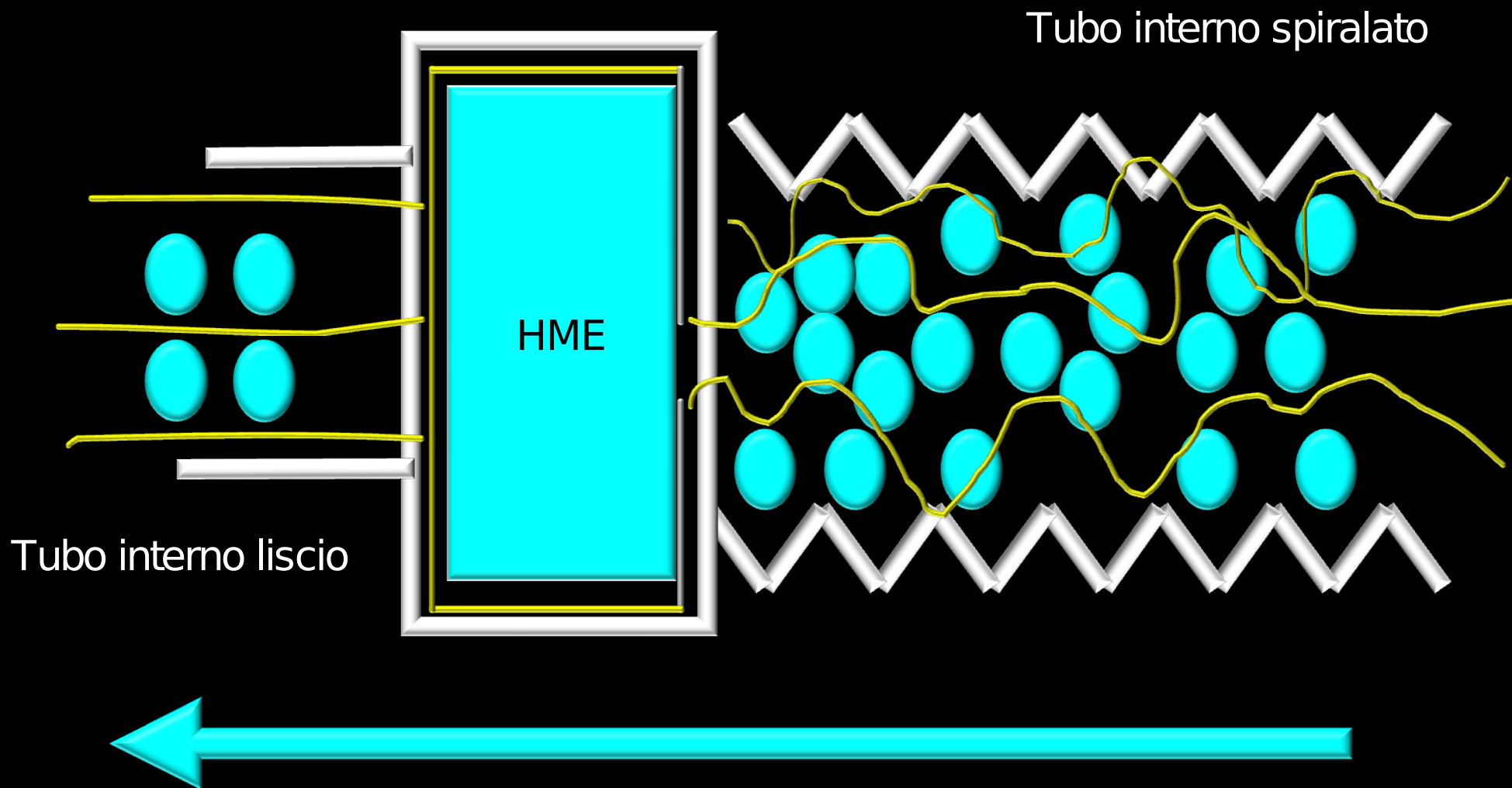
Tubo interno liscio



Tubo interno spiralato

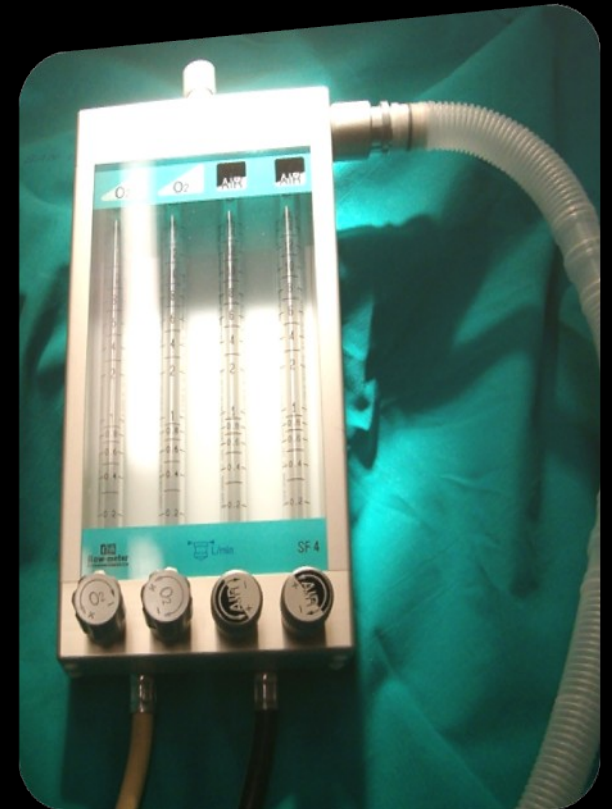
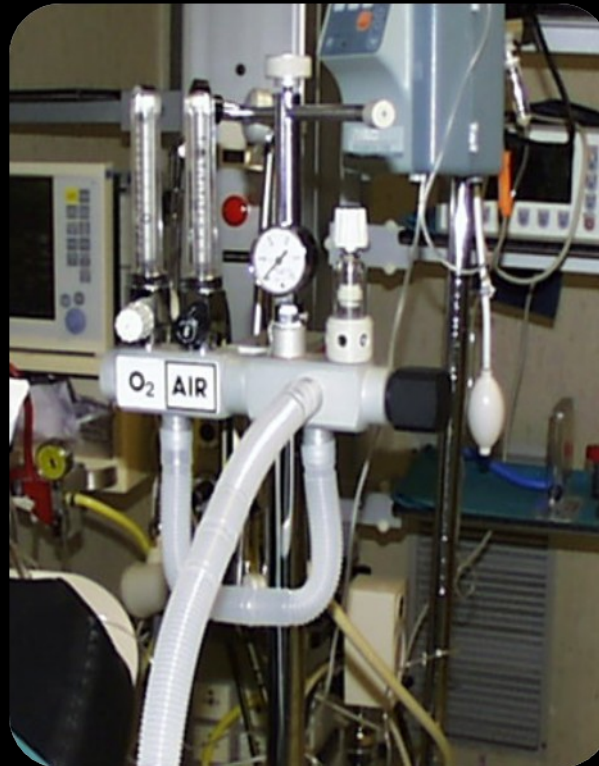


Perché sono da preferire i tubi a superficie interna liscia ?





Il problema della sorgente gas



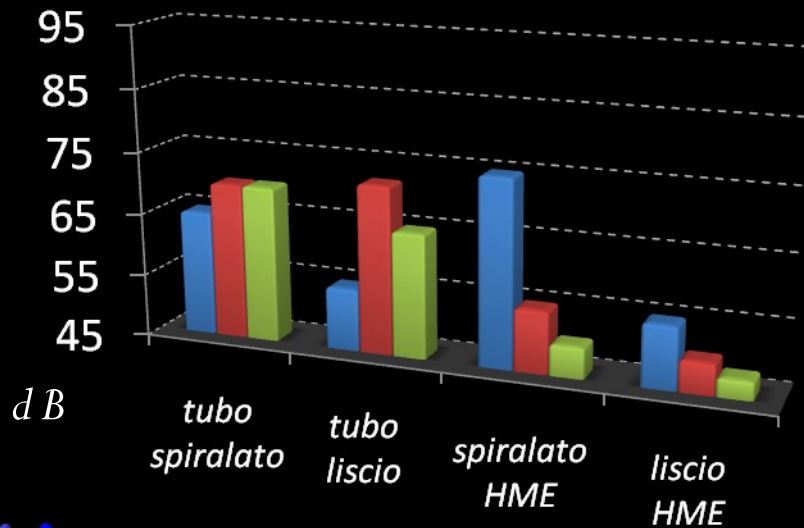
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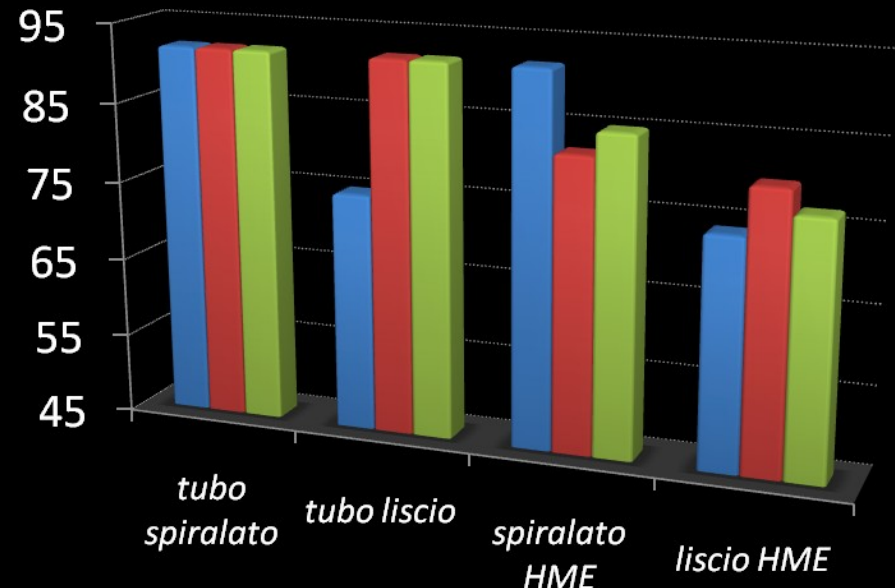
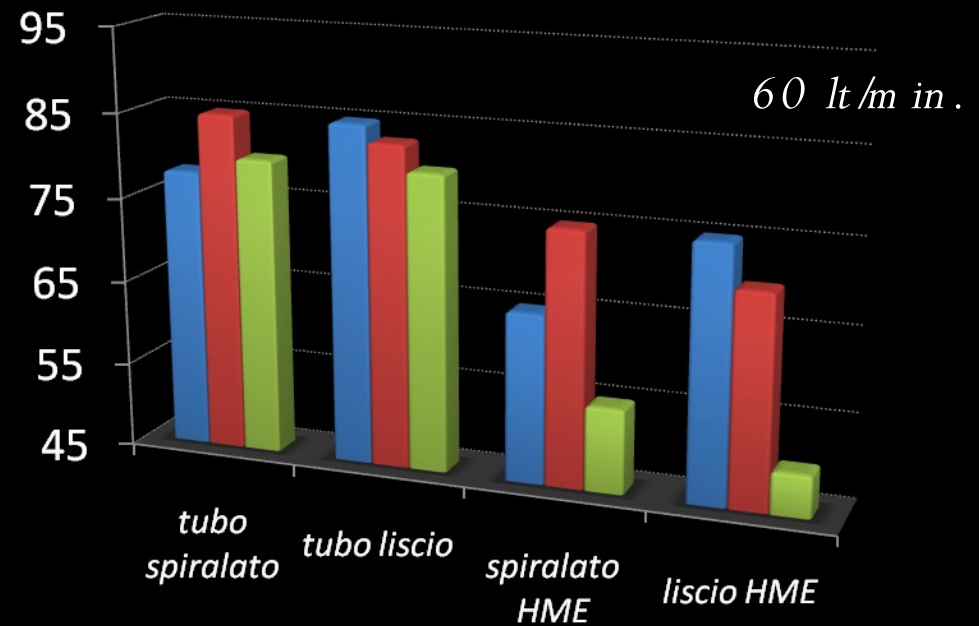
Risultati

Basale dentro il casco NO flusso ~ 45 a
PEEP 10 cm H₂O

■ venturimetro
■ rotametro harol vecchio tipo
■ scatola rotametrica Flow meter



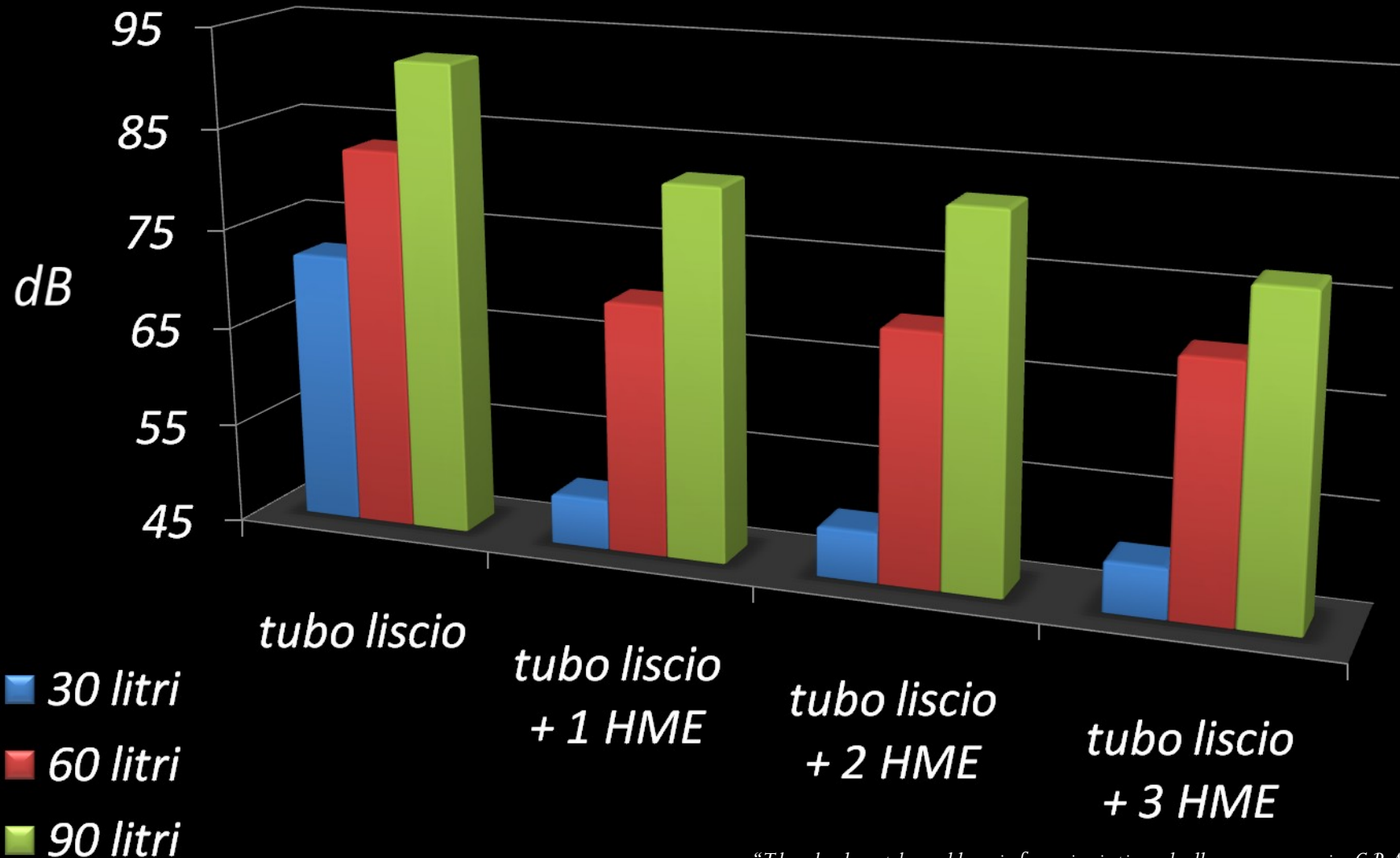
30 lt/m in.



90 lt/m in.



1. 2 o 3 HME ??

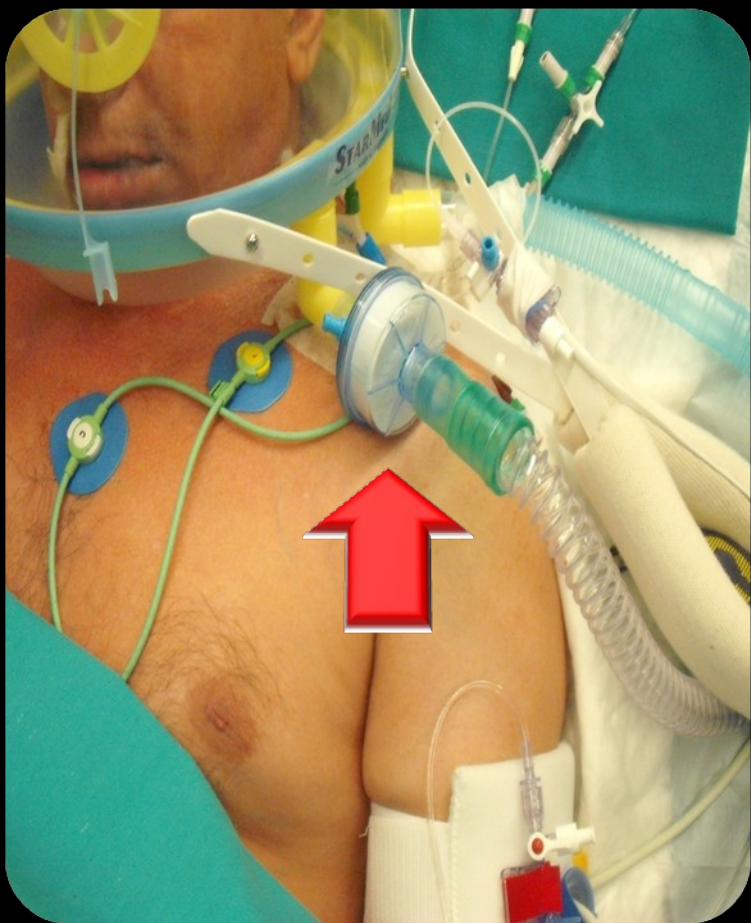


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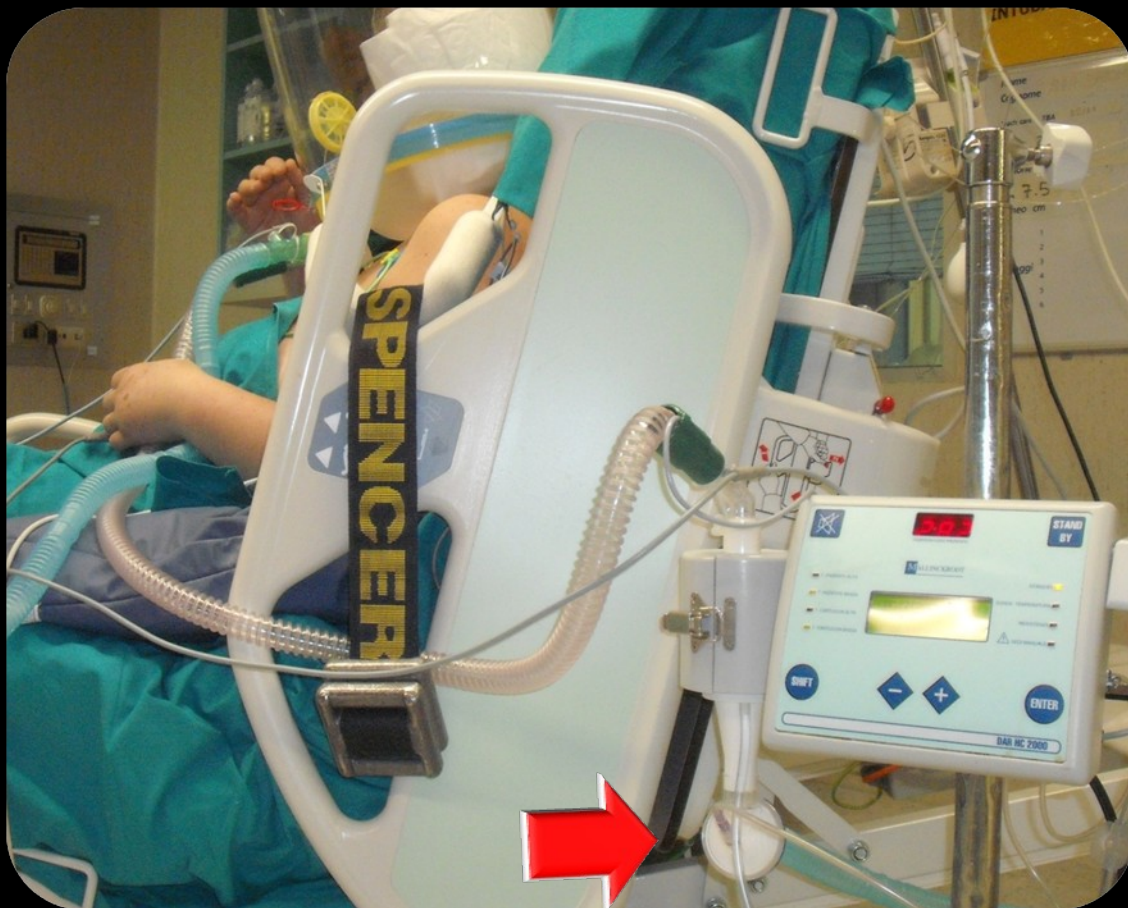


Dove posizionare l'HME?

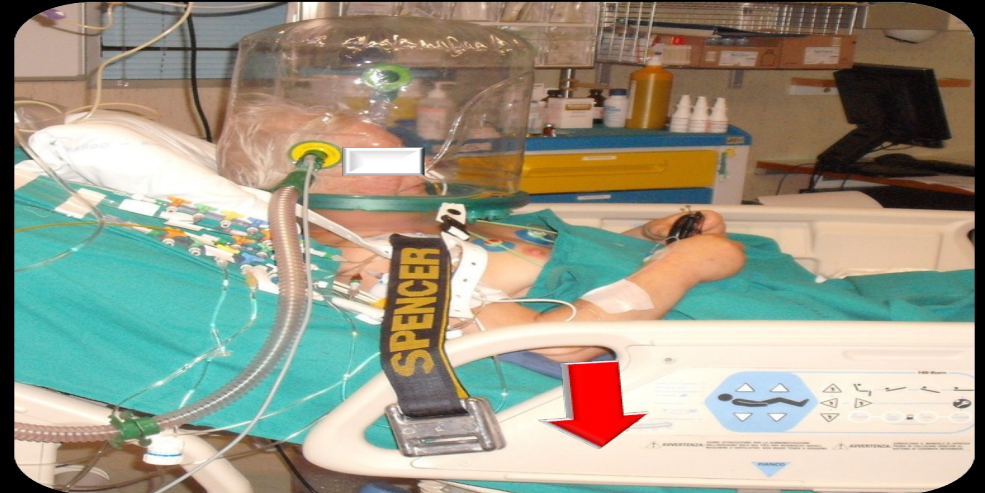


Senza umificazione

Con sistema di umificazione



Il fis saggio incide sul flusso da erogare(Matteo Manicidocet!)



Conclusioni

- *Tappi per le orecchie*
- *Utilizza il monitoraggio PEEP*
- *Scegli il giusto gas flow*
- *Utilizza gli HME come armitta*
- *Se Umidificazione : HME prima dello scafandro*
- *Flussi alti : prova con 2 o più HME*
- *Ottimizza il fissaggio*



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