Nasal High Flow Oxygen Therapy: Is it a bridging gap in management of respiratory failure?

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Introduction

High flow nasal cannula (HFNC) oxygen therapy:
• Delivers oxygen at 15-40 L/Min
• Reduces respiratory rate
• Improves oxygenation

We have been using HFNC in our ICU for 18 months.

Aim

• Evaluating effectiveness of nasal high flow (NHF) oxygen therapy
• Evaluate patient compliance of HFNC in respiratory failure

Methods

• Prospective pilot observational study
• Data was collected from March to June 2013 in an Adult General ICU

Results

• 14 patients identified
• 6 patients had a full data set
• 13 patients were comfortable and compliant
• In 4 patients NHF was used post extubation as a step down therapy
• 2/6 were on NHF for palliation.
• For one patient it was used as the ceiling of treatment
• 4/6 showed improvement in respiratory rate, SpO₂ & FiO₂
• PaO₂/FiO₂ improved in 5/6 patients
• None needed intubation

Conclusion

• NHF is effective in respiratory failure
• It is well tolerated by patients
• Easy to manage and titrate for the nursing staff
• It might be used in a high dependency setting as an intervention to avoid intensive care admission
• Well-designed larger studies need to be performed to prove its effectiveness.

References:
1. Ward JJ. High flow oxygen administration by nasal cannula for adult and perinatal patients. Respir Care. 2013 Jan; 58(1):98-122