

REDUCING ICU POST-OP ADMISSIONS DELIVERING CPAP THERAPY IN RECOVERY

AquaVENT® FD140i Dual Therapy Gas Flow Driver

BACKGROUND

Dr Jubil Thomas and the team at Our Lady of Lourdes Hospital in Drogheda are finding the number of patients undergoing ENT surgeries with significant comorbidities is increasing. They are operating on more patients classed as clinically obese with increased likelihood of obstructed airways and complications both during surgery and recovery.

PROBLEM OR CHALLENGE

In this case, the patient, 50 years old, BMI>30, smoker with COPD and Obstructive Sleep Apnoea (OSA) – Nocturnal CPAP proved to have difficult airways and a higher chance of postoperative complications. The procedure in terms surgical plan was Septoplasty with placement nasal splints with pack. The anaesthetic plan was to preoxygenate by High Flow Oxygen Therapy (HFOT) using AquaVENT® FD140i and post-op extubate onto Continuous Positive Airway Pressure (CPAP) with face mask on the same circuitry. Preoperatively the patients baseline oxygen saturation was 93% on room air.

Intraoperatively, after intubation the patient’s oxygen requirements were significantly high (FiO2 75%, peep 12, SaO2 88% – 92% and PO2 7.8 KPa on ABG). The plan was therefore to attempt extubating on to CPAP via face mask.

SOLUTION

Postoperatively the patient was extubated on to CPAP via face mask with 60% oxygen which was weaned down over the next hour. The patient was transferred to HDU for overnight observation where they continued to improve and deemed stable to be discharged later that night.

BENEFITS AND OUTCOMES

While this patient was transferred to the HDU for aftercare, such was their improvement that they were discharged without the requirement for a costly overnight stay, ensuring a HDU bed was available for the next patient.

Dr Jubil Thomas, demonstrated the ability of HFOT and CPAP using the AquaVENT® FD140i to adequately oxygenate patients both pre and postoperatively, with the potential to improve throughput within the theatres and reduce postoperative ICU admissions.

Having a device that facilitates weaning and escalation between HFOT and CPAP therapy like AquaVENT® FD140i can:

1. Help with the recovery of complex, high BMI patients
2. Avoid recovery delays
3. Avoid ICU escalations
4. Reduce HDU admissions and lessen time spent in HDU if admission is required.



PROFILE

OUR LADY OF LOURDES HOSPITAL, DROGHEDA

Dr Jubil Thomas
Consultant Anaesthetist
THEATRES

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Early intervention postoperatively using CPAP played a part in the faster recovery of the patient and the subsequent freeing up of the HDU bedspace.
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