Results for the Study: Prophylactic Nasal CPAP in the Post-Anaesthesia Care Unit Following Elective Laparotomy for Bowel Surgery (Bio 13-192)

Introduction
This was a study to see if Nasal nCPAP (nasal Continuous Positive Airway Pressure) applied in the Recovery Room would result in better ventilation and oxygenation than the conventional oxygen mask. We chose bowel surgery patients because the surgical pain makes it hard for them to fully expand their lungs for good ventilation – they “splint” their breaths to minimize the pain. CPAP is a way to provide some continuous pressure in the lungs and expand them a bit more. It has been used for some years to help hold the airways to the lungs open in patients with snoring and sleep apnea, using a mask that goes over the mouth and nose. The newer device employs a mask that goes more comfortably only over the nose, allowing the patient to speak to the Recovery room nurses.

Methods
We randomized consenting patients having bowel surgery to receive either nCPAP or conventional oxygen mask following surgery, and measured the oxygen in the arterial blood after one hour.

Results
We found that the oxygenation was significantly better in the nCPAP group than in the face-mask group despite supplying lower concentrations of oxygen.

Conclusions
nCPAP may become an important tool in Recovery and later on the surgical ward, especially for patients having bowel surgery.

If you have any questions, please feel free to contact me.
Sincerely,

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