RCoA Research, Education & Travel Grants 2018

Award: Belfast Fund

Applicant: Dr Yohinee Karuna Rajendran

Project Title: *Setting up an Obstructive Sleep Apnoea Database; the first of its kind in the UK*

Project Description:

I have just completed my year long Airway Fellowship at the University College Hospital London (UCHL) and the Royal National Throat Nose and Ear Hospital London (RNTNE). I set up an obstructive sleep apnoea (OSA) database; the first of its kind in the UK. The RNTNE has the largest case load of sleep apnoea patients in the UK. The work that I would like to present and develop is novel, it looks at several factors but primarily ease of bag mask ventilation, ease of intubation and use of opioids in OSA patients. Over time, with the potential distribution of our database, we have the potential to change practice in the UK with regard to OSA patients, reduce hospital/unnecessary HDU stays, optimise bed stays post operatively and optimise medication regimens post op (which in turn will prevent GP and ED attendances).

There are currently no UK or European Sleep Apnoea Anaesthetic conferences. I have had three abstracts accepted to present at the 'Society of Anaesthesia and Sleep Medicine' in San Francisco in October 2018. I am aware the funding request is tight but the conference itself will be hugely beneficial to the development of my Airway interest and potential for project collaboration. I would like to develop our database and widen our data collection trustwide and then potentially nationwide; this process will require funding.

Abstract

Background:

There is an increasing number of patients with OSA requiring anaesthesia for surgery. Cautiousness with intra-operative opioids has been noted in the literature as has difficult bag mask ventilate and difficult laryngoscopy (DL). The RNTNE is the biggest sleep apnoea centre in England; giving rise to a high volume, high turnover patient cohort for evaluation.

Aims:

- Demonstrate opioid use in OSA patients does not cause adverse effects or delayed discharge.
- To assess ease of bag mask ventilation and intubation grade in patients with OSA.
- To devise a post-operative take home medication protocol and leaflet.

Methods:

Adult patients (>18 years old), ASA I-III, undergoing elective OSA and snoring surgery were included in this prospective audit. The survey consisted of two airway related questions: ease of bag mask ventilation, Cormack and Lehane grade of laryngoscopy. Analgesic related questions required: fentanyl usage and dose; morphine usage and dose; ketamine usage and dose. The data collection form also looked at whether the surgery was a day case procedure or not. The survey consisted of 7 day follow up pain scores and analgesic requirements.

Results/Discussion:

All patients received a short acting opiate and the majority received a long acting opiate intra-operatively. There were no reported adverse respiratory or sedative effects in the post-operative period. Three quarters of the cohort group were day case procedures.

Our data set suggests that OSA alone does not significantly contribute to difficult bag mask ventilation or difficult laryngoscopy.

Results showed almost all patients had ongoing pain at day 7 post-surgery. We offered phone advice to optimise symptoms and incorporated this information into our take home medication protocol and medication leaflet.