

RCoA Research, Education & Travel Grants 2017

Award: Belfast Fund

Applicant: Dr Seung Cheol (Paul) Kim

Project Title: *Airway Management for Neck Breathers*

Project Description:

As a junior doctor working in the emergency department, medical and surgical receiving unit we get startled when patients known as the “neck breathers” present to the front door with respiratory distress. Suddenly we struggle to initiate the very basic Airway component of the ABCD algorithm rigorously taught from day 1 in medical school.

With the support of anaesthetists and Advanced Nurse Practitioners (ANP), I initiated a small pilot study on “Airway management for Neck breathers” aimed towards junior doctors and nursing staff at the Beatson Oncology centre and Queen Elizabeth University Hospital, Glasgow. A short presentation to highlight the difference between a tracheostomy and laryngectomy, and the algorithm for emergency airway management in arrest situation published by the National Tracheostomy Safety Project (NTSP) was delivered at the start of the session. A DIY tracheostomy mannequin was crafted to facilitate high-fidelity simulation. Average score comparing the pre- and post- teaching questionnaire improved after a 45 minute session by 33% in two separate teaching sessions (n = 10). Ward doctors, ANPs and nursing staff found the session very informative and gained more confident managing tracheostomy and laryngectomy patients. A regular 4 monthly teaching when the junior doctors rotate was requested by the consultants during a departmental quality improvement presentation, which I look forward to launching this year.

The educational grant will be utilised to attend the Management of Tracheostomy Emergency course held in Manchester to support my training and promote the study on “Basic Airway Management for Neck Breathers” throughout the West of Scotland hospitals, including Dumfries and Galloway Royal Infirmary. This teaching will not only improve my skills, knowledge and competencies as a primary responder, but also improve the quality of the study.

Once completing the ALSG course in March 2018, a teaching session will be launched and advertised using the online registration system, TuBS (Tutorial Booking System). Attendees will complete a pre-teaching questionnaire based on the NTSP guidelines and e-LFH, which the score will be compared to the questionnaire completed after the teaching. Teaching material and content will be identical in every session and will be delivered by a senior anaesthetic trainee or a trainee who has successfully completed the ALSG Emergency Tracheostomy course. Data collected from the West of Scotland hospitals over a 5 months period will be collated and analysed to be presented at a national conference.

This study will promote the safe management of tracheostomies and laryngectomies, increase awareness and familiarise healthcare providers with the NTSP emergency algorithm, and most importantly improve the standard of care delivered by junior doctors and nurses at the forefront of patient care.