



NZHPA Education Assistance Grant

Report:

I attended the AdPha Emergency Medicine Masterclass in September which was a live online seminar focussed around 'Toxins, tropes and trauma' with presentations followed by case discussions. This was something I was interested in attending to develop my knowledge around these areas for my current work in surgical and coronary units. Whilst I am not an emergency medicine pharmacist, there was also interesting discussion around the roles and potential scope for pharmacists in the emergency department, which is quite variable across the country, and it is always interesting to hear the value pharmacists are able to bring in improving patient outcomes. I found the talk around trauma particularly engaging- how the reception of a major or shocked trauma differs from a standard trauma and where pharmacists are involved in this- in the Alfred Hospital, they have developed a trauma team to involve the pharmacist as a key member of the resuscitation response, as well as the 'tank, pump, pipes' model to assess causes of shock in trauma. The various shocked states were discussed, with a case discussion of a shocked overdose- the emphasis here was to address the underlying cause of shock and target the mechanism causing the shock. It was interesting to learn more about the role of second line agents here when high dose, first line vasopressors such as noradrenaline are not sufficient. High dose insulin is used as an antidote for beta blocker and calcium channel overdoses and also for its inotropic effects to improve myocardial

contractility, additionally high dose methylene blue and hydroxocobalamin all have roles in decreasing vasopressor requirement, although not routinely used, it was good to develop a better understanding of how these work in this setting. In this way the choice of treatment is rationalised, and pharmacists are able to ensure optimal, timely and appropriate medication are being provided to patients. This is something to reflect on going forwards, particularly with current government targets of reducing length of stay in emergency departments.

Another interesting topic was rapid sequence intubations and where pharmacists may be involved in this, as this is new to me.

Thank you to NZHPA for providing the financial assistance to enable me to attend this seminar, I have found it very valuable in my current work, as well as looking ahead to where the pharmacy workforce may develop and where my practice may take me and appreciate the support in professional development and continued learning.