Educating Veterinary Students in an Intensive Care Unit about Transfusion Reactions: Development and Impact of a Formal Learning Module

Haines, J.M.¹, Wardrop, K.J.¹, Lindberg, C.², Ngwenyama, T.¹, Martin, L.¹

¹ Veterinary Clinical Sciences, College of Veterinary Medicine, Washington State University, Pullman, WA
² Dean’s Office, College of Veterinary Medicine, Washington State University, Pullman, WA

Objectives: To develop and test the instructional efficacy of an online learning module on transfusion reactions in small animals and to evaluate participants’ satisfaction of the module.

Study Design: Randomized controlled trial

Methods: Content for the module was developed by veterinary specialists in the areas of internal medicine, critical care, and clinical pathology and designed by an instructional design coordinator. The interactive module covered recognition, treatment, prevention, case examples, and self-assessment questions for 6 common transfusion reactions. Fourth year veterinary students in a critical care rotation were randomly selected to either receive the instructional module (treatment group) or only receive standard rotation instruction on transfusion reactions (control group). Two tests covering the same concepts were developed and students randomly received 1 as a pretest at the start of rotation and the other as a posttest at the end of the 2 week rotation. Immediately following the pretest, the treatment group received the module and module survey. All students were to receive a retention test 1 month later.

Preliminary Results: Early results show an increase in post-module test scores over pre-module test scores, pretest median (range) 7 (6-9) and posttest 8 (7-10). Sufficient data is not yet available for retention tests or control scores. Initial survey results showed strong satisfaction with the module.

Conclusions: A transfusion reaction instructional module can be delivered successfully to veterinary students on clinical rotation and is generally considered beneficial by the students. Preliminary data suggests an improvement in transfusion reaction knowledge following completion of the module.