An interactive, equine neurology case simulator to improve problem-solving skills

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The challenges presented by the COVID-19 pandemic have illuminated the need and potential for online learning tools for a variety of settings to improve the learning capabilities of students. The development and use of online clinical case simulators in veterinary medicine would allow for connections to be made between concepts presented in traditional courses and real-life patient interactions, in a low-stress/low-risk environment. Consequently, there is a need for engaging, accessible, and realistic simulators for use in veterinary medicine. The objectives of this project are two-fold: 1) to develop an engaging, accessible and realistic online means of presenting equine clinical neurology case material to veterinary students in the pre-clinical portion of their education, and 2) to determine the impact of this approach on the students' subjective scores of their level of confidence about their diagnostic skills and ability to problem-solve as they enter clinical rotations. The effectiveness of this approach will be assessed using a pre-test/post-test model, in which students' perceived level of self-confidence and problem-solving skills will be evaluated before and after use. It is our hope that incorporating case simulators, such as this one, into the pre-clinical veterinary curriculum will positively impact the students' confidence and problem-solving skills thereby reducing their level of concern about entering their clinical rotations. Ideally, improving these skills will optimize patient care, ultimately improve their welfare, and increase client satisfaction.