

CAVIAR- A new approach to teaching Anatomy

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Introduction

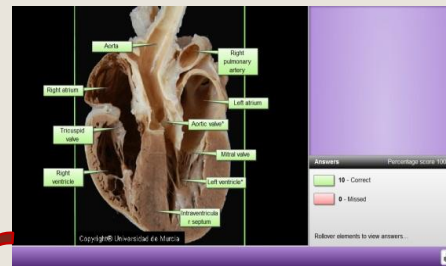
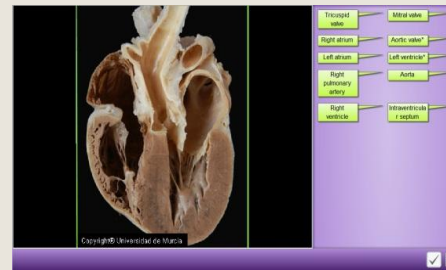
A computer assisted veterinary interactive anatomy resource (CAVIAR) was developed at the Royal Veterinary College (RVC) to support the teaching and learning of anatomy. CAVIAR was developed using Dragster® Webducate™ to provide high quality 2D anatomical images. The CAVIAR has three main enabled features:
 1. Identification of anatomical structure through 'drag and drop' labels, 2. provision of immediate feedback for correct and wrong answers and 3. links to a Wiki for further learning resources. The CAVIAR was trialed with the first year undergraduate students of veterinary medicine. The results show that CAVIAR improves recall and enhances the learning of topographic anatomy.

Methods

44 students at the RVC participated in the evaluation of CAVIAR. The students were randomly assigned to control and study groups in a two-phase study. In both phase I and II of the study, the students sat a pre- and a post-test consisting of 30 questions, each question testing three main aspects: 1. the identification of an organ or structure; 2. Explanation of the function of the organ or structure and 3. integration of the knowledge of the structure and function. In phase I the control group did not access the CAVIAR throughout the trial period while the study group accessed the CAVIAR after the pre-test. In phase II both the control and study groups accessed CAVIAR after the pre-test but the control group did not have links to WikiVet®, an online Wiki.

Results

- Students who had access to CAVIAR in addition to routinely available learning materials performed significantly ($p < 0.05$) higher in the post-test than those who only used textbooks and routinely provided learning materials.
- Interactivity, 'Drag and Drop' functionality and the availability of a feedback response were listed as key factors that made learning using CAVIAR interesting.
- The CAVIAR learning activities supported student's understanding of topographic anatomy during dissection.
- Access to WikiVet® motivated students to study anatomy further.
- The CAVIAR activities were considered to be very useful for exam revision.



Conclusion

CAVIAR is an innovative tool and when used as an adjunct to other learning resources improves recall and learning of topographic anatomy.