

Effective Incorporation of Three-Dimensional Digital Animations in to Cadaver Dissections at the Department of Anatomy, University of Sri Jayewardenepura.

Edirisinghe EAST¹, L.A Indunil¹, Niluka D.H.M¹, Madushika P.K.K¹, Deegodagamage Y.S¹, Wijesundara W.M.C.S¹, Dissanayake PH¹, Yasawardene SG¹

Department of Anatomy, Faculty of Medical Sciences (FMS), University of Sri Jayewardenepura (USJP)¹

Background

Anatomy remains an essential component of medical knowledge. Cadaver dissections play a key role in learning three-dimensional(3D) structures in the human body. Developments in computer capabilities and digital technology is used more in medical education.

Methods

Four networked 55inch LED panels with 3D facility were installed in the dissection halls. We started using commercially available recommended software and Anatomy videos incorporating with cadaver dissections.

Dissection schedules given in advance and students are expected to come prepared. Initial 15minutes of the dissection time used to give an overview of the area to be covered utilizing the 3D software in LED panels and students' questions discussed.

Last 15minutes, the summary of the dissection and a system generated quiz will be given.

Results

During dissections if there is a variation or proper/clean dissections, are transmitted live through all LED panels. The difficult areas of dissection will be explained directly using the 3D software.

Students compare the side-by-side radiological images on the LED-panels with same gross specimen during radiological demonstrations.

This has helped the students to understand and recall the specific dissections.

Preliminary study of this method has been tested with pre-interns and it is found to be effective.

Conclusions

We are the first Sri Lankan Medical Faculty to incorporate 3D teaching technology in to cadaver dissections.

This incorporation of new technology with cadaver dissection will generate enthusiasm to learn.

Outcome of this incorporation of three-dimensional digital animations in to cadaver dissections is to be continued with the new intake.