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Abstract

Human Anatomy is a hallmark subject of medical school and often presents a significant challenge for student learning. Classic anatomical instruction relies on significant time completing cadaveric dissection, supplemented by anatomical atlas study. However, atlases are often criticized for being too simplistic in their illustration of human form, and inadvertent destruction of anatomical structures is a common and unfortunate byproduct of dissection. Instructional cadaveric videos can overcome these limitations by providing clear depictions of the anatomy on well-dissected cadavers in one-on-one instruction that can be played back repeatedly to improve student comprehension. Unfortunately, many videos currently available on the internet are either too low of quality to visualize the structures or lack the detail to understand more minute or complicated features. Further, these videos rarely include relevant clinical information, which is critical for medical students applying these concepts later in their training. We sought to develop a portfolio of high-quality and detailed clinically-integrated anatomy videos that offer students a comprehensive resource to reinforce the most difficult anatomical concepts. Cadaveric videos were recorded using an iPhone 7+ and edited with included iMovie software for cost effectiveness and simplicity. The iPhone was mounted on a Manfrotto Compact Action Tripod with an ALZO Horizontal Camera Mount with subsequent JOBY Grip Tight PRO Mount for ideal camera stability and angle. Three-way lighting was achieved by using a Fovitec 3× 20"×28" Softbox Lighting Kit. Audio enhancement was achieved by using a PowerDeWise Lavalier Microphone. We identified structures of interest using the required course structure lists; clinical integrations were added to these recordings using *Moore's Clinical Integrated Anatomy* textbook as well as *Olinger's Human Gross Anatomy*, as reference. The videos are provided to the students via a course management system. Current first year students were first provided access to our videos prior to laboratory sessions for their Cardiopulmonary course. Qualitative student feedback has been overwhelmingly positive. It has been unrealistic to provide a comprehensive tool for the current first year students, due to timing of the dissections versus recording of specific anatomical content for the project. Additionally, it has been challenging to acquire clinical integrations. Thus, the focus has shifted to the long-term goal of a completed portfolio, rather than hastening to get selected videos released. We advocate for the increased use of anatomical instruction videos and suggest this inexpensive use of video technology can improve the quality of education offered in both undergraduate and graduate level medical education settings.