Clinical Education & Surgical Planning With Anatomage Table In Simulation Labs

Advanced Medical Simulation Technology For Education & Research

The Parkview Mirro Center for Research and Innovation provides advanced medical simulation technology for clinical education and research. The Advanced Medical Simulation Lab at the center features 3 modes of clinical training: high-fidelity simulation manikins, task trainers, and virtual dissection. The Anatomage Table was adopted as a resource for surgical planning as well as provider and patient education. Parkview plans to expand the use of the Table with the establishment of the Parkview Cancer Institute in 2017.

Provider Education With 3D Images

Having the Table available allows for a focus on procedural education. This applied to endovascular procedures as well as surgical planning. Physicians used the Table to model 3D images to fully understand the spatial region of the area they were preparing to operate. For example, they have the option of comparing 2D images from a CT scan to the 3D image created by the Table's software. If the Table was being used to plan for surgical oncology, the findings could then be discussed during a tumor board review where multiple specialists review and discuss the patient's specific condition. Medical professionals from the physical and occupational therapy department also utilized the Table for general anatomy review.

Medical Knowledge Barrier & Real Patient Scans

Having the Table available in the simulation lab encourages clinicians and medical staff to promote patient-centered care. The Table allows for patients to visualize their course of treatment on an intuitive interface. Integrating real patient data into the treatment process gave medical staff the opportunity to bridge the gap between doctor and patient understanding.

The use of the Table for patient education initially began with a focus on oncology patients. The Table was used to outline surgical procedures and plans of action for surgical oncology. Clinicians can load their own DICOM scans onto the Table and use its features to dissect and visualize the specific condition they are treating. By having patients view their anatomy and physiology in 3D via the Table, clinicians can optimally explain information regarding a patient's treatment.

References

Lozo, J. (2016). A Different View into Patient Education [PowerPoint Presentation].

Anatomage