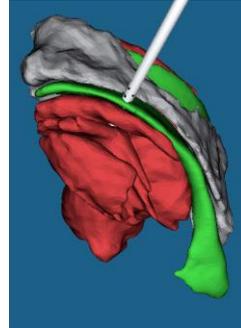
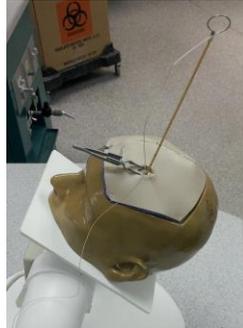


Mixed Simulator of Ventriculostomy Fact Sheet

University of Florida Center for Safety, Simulation & Advanced Learning Technologies



This robust, turnkey mixed reality simulator simulates part of an anatomically correct head and skull for practicing, learning, teaching and debriefing a ventriculostomy (aka external ventricular drain, EVD) procedure. Designed for austere environments, it does not require wireless or internet access or wet fluids; accepts 110/220V, 50/60Hz. It can be unpacked/set up/be operational in 5-7 minutes by an unfamiliar person. The portable simulator ships inside a military-spec padded case with inbuilt wheels and telescoping pull-handle that meets airline checked luggage size limits (L+W+H=60"); weight < 70 lbs. A video can be viewed at: http://simulation.health.ufl.edu/research/ventric_sim.wmv

Procedures:

Ventriculostomy (EVD)

Components:

- CT Scan-based 3D-printed physical head and skull
- Virtual model of the anatomy of the brainstem, scalp, brain and ventricles
- Tracked instruments: needle, catheter loaded onto stylet and virtual camera
- Common modular stand for use with other DoD modular anatomies
- Automated scoring algorithm and replay system
- Instructional materials teach how to perform procedure on the simulator

Technology:

- Anatomically correct, based on medical imaging scans of a real human
- Precise sub-millimeter tracking of all events
- Skin-like replaceable insert with scalp, skull w/ inner, outer tables and dura

Features:

- Adjustable view modes for realism and AARs
- Cognitive aids for catheter orientation
- Tactile feedback of bone and brain matter
- Debriefing with replay of past procedures