VIST®

Cardiac Rhythm Management 8

Procedural Training Module

The growing prevalence of heart disease and arrhythmia disorders contributing to sudden cardiac arrest has fostered technology advancements for treatment of these conditions. Mentice Cardiac Rhythm Management (CRM) training module is designed for training the knowledge and skills required for selection and placement of CRM devices for a variety of clinical conditions.

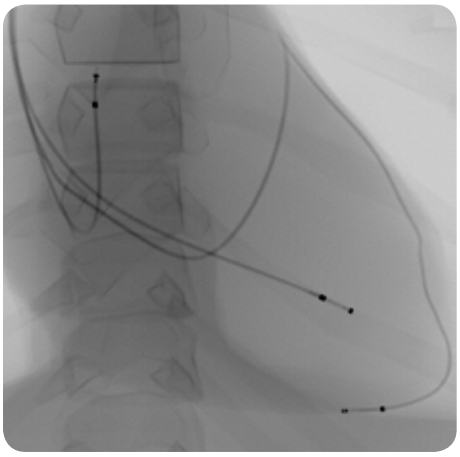
Educational Context and Skills

The CRM Module requires assessment of the patient scenario for appropriate device selection. The different procedural steps include: manipulation, placement and testing of the associated leads. The module offers a variarity of cases with different anatomies and patient specific conditions providing challenges for learners at various levels. The entire procedure is completed in a learner focused and risk-free environment.

- Procedure planning based on patient scenarios
- Select lead positioning based on patients medical conditions
- Gain experience with devices used in CRM procedures
- Practicing the procedural steps of lead implantation
- Selecting lead fixation type based on patient scenario and anatomy
- Acquisition of pertinent technical and manipulation skills
- Navigation of right atrium and ventricle using fluoroscopy
- Pacing system analysis with threshold testing
- Placing the leads based on impedance and capture threshold
- Cannulation of Coronary Sinus (CS) in various anatomies
- Recognition of procedural complications
- Confirmation of lead attachment
- Positioning of CS lead to avoid stimulating the phrenic nerve

Functionality and Features

- Option for 1, 2 or 3 lead placement based on patient needs
- ECG responsive to pacing
- Extra systolic beats trigged when interacting with the ventricle
- Clinical scenarios ensuring patient oriented learning
- Anatomical variations including surgically removed right auricle
- Procedural complications
- Venous collaterals in the enlarged hearts
- Medical conditions like post-CABG and scar tissue from infarctions



Fluoro view showing three implanted leads

3D view of the coronary sinus

ECG:s indicating ventricular extra systoles

MENTICE

Features

- Detailed patient scenarios
  Demographics, clinical presentation, medical history, current medications, lab values, non-invasive tests and baseline vitals
- Full C-arm and table manipulation
  LAO/RAO & CRA/CAU angulations, image intensifier control, table height adjustment, magnification, brightness
- Imaging modalities
  Positive X-ray, negative X-ray and 3D mode (unique to simulation)
- Projection controls
  3 pre-set standard projections, possible to save user preferred projections for later use in training case
- Introducer sheath
  Possibility to select introducer sheath size
- Contrast injections
  Manual syringe injection
- Imaging
  - Series: cine recording, playback, acquisition of landmarks, ability to return the C-arm to previous projections and blending of landmarks
  - Measuring capabilities
- Pacing System Analyzer (PSA)
  - Supports working with three leads
  - Controls the active lead fixation
  - Measuring of intrinsic signal
  - Testing lead impedance
  - Testing and evaluation of capture thresholds
  - Patient interactions
- Vital signs - dynamic information
  Provides accurate calculations of EP data obtained during the lead placement and pacing
- "Fluoro & Vitals" screen
  - Realistic fluoroscopic image
  - Status bar with case statistics
  - Vital signs always visible
  - X-ray reference image of patient positioning
  - Device status panel showing selected and active devices

Inventory

- .035" and .014" guide wires
- Guide catheters, inner catheters and EP catheters
- Wedge balloons
- Active and Passive Bradycardia leads
- Active and Passive Defibrillator leads
- CRT Leads
- Stylets for the different lead types

Simulation

- ECG shows real-time pacing response dependent on the lead position and patients medical condition
- Patients respond the phrenic nerve stimulation
- Procedural complications included in selected cases
- Vasculature contain venous collaterals

VIST® - Family of Simulation Solutions

provides a relevant, realistic teaching and learning environment for hands-on training of angiographic and interventional skills.

VIST® Simulator Systems

The VIST® and the VIST®-C systems share unique advantages in terms of highest fidelity, clinical realism and use of actual clinical devices.

VIST® Lab is compatible with both VIST® and VIST®-C systems.

VIST®-C is a fully portable high-fidelity simulator.

VIST® Training Modules

A structured and comprehensive suite of modules with clearly defined learning objectives giving trainees exposure to a wide range of patient scenarios and anatomical variations.


Neuro Intervention


Carotid Intervention


Coronary Angiography


Coronary PRO


Transseptal Puncture


Cardiac Rhythm Management


EndoVascular Aortic Repair


Peripheral Angiography


Renal Intervention


Uterine Artery Embolization


Iliac/SFA Intervention


BTK Intervention

MENTICE is a global medical simulation company founded in 1999 with headquarters in Gothenburg, Sweden. The company pioneered virtual reality for medical training and is today the global leader in endovascular simulation.

Contact us to learn more about simulation and how it can benefit your training efforts:
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