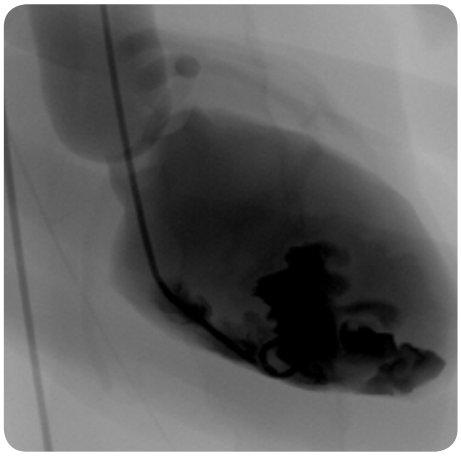
VIST®

Coronary Angiography 8

Procedural Training Module

Mentice Coronary Angiography module is designed for healthcare professionals to develop the essential skills specific to LV Gram and Coronary angiography in a risk-free training environment. The module provides a range of patient cases with distinguished anatomies and scenarios, facilitating knowledge based and procedural skills training for this procedure.



Simulated LV-gram

Educational Context and Skills

The Mentice Coronary Angiography module provides the opportunity to teach core coronary angiography skills to a variety of learner levels. The module set a new standard for medical education and learning objectives are designed to fulfill the technical and cognitive skills acquisition for cardiologists and all members of the procedure team.

Core skills

- Introduction to clinical devices used in coronary angiography
- Utilization of X-ray equipment
- Principles of radiation hygiene during use of fluoroscopy
- Learning the procedural steps for coronary angiography
- Acquisition of pertinent technical and manipulation skills
- Diagnosis and decision for treatment options

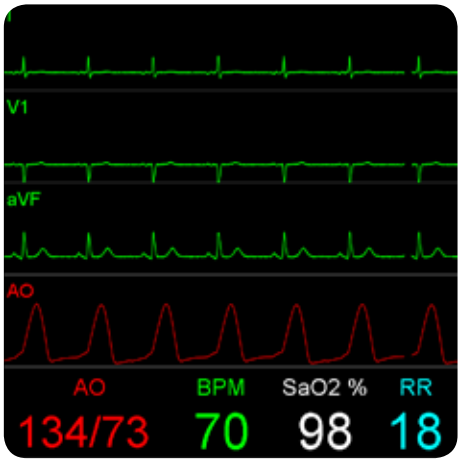
3-D view of aortic root and coronary arteries

Coronary skills

- Recognize and describe basic and challenging anatomies
- Selection and use of appropriate introducers, wires and catheters
- Manipulation of devices while engaged in coronary arteries
- Recognize and respond to changes in haemodynamics and ECG
- Determine projections required and position C-arm accordingly
- Identification of lesions and coronary anomalies

LV-gram skills

- Gain access to the left ventricle
- Placement of the catheter within the ventricle for injection
- Recognize the different pressures and associated gradients
- Acquisition of LV-grams and identification of heart wall conditions
- Trace the LV for calculation of ejection fraction



Vital signs from an LV-gram

Functionality and Features

- Intuitive user interface
- Device panel displays type and status of selected devices
- Detailed metrics for assessment and debriefing
- Clinical scenarios challenge the learners awareness of the patient
- Power injector with user definable volume and flow rate
- Medication to manage patient scenario
- Vital signs responsive to catheter manipulation and placement
- Realistic device behavior requiring appropriate device selection

MENTICE

Features

- Detailed patient scenarios
  Demographics, clinical presentation, medical history, current medications, lab values, non invasive tests and base line vitals
- Full C-arm and table manipulation
  LAO/RAO & CRA/CAU angulations, image intensifier control, table height adjustment, magnification and brightness
- Imaging modalities
  Positive X-ray, negative X-ray and 3D mode (unique to simulation)
- Projection controls
  3 pre-set standard projectionst, possible to save user preferred projection for later use in training case
- Introducer sheath
  Possibility to select introducer sheath size
- Contrast injections
  - Manual syringe injection
  - Power injector with user definable volume and injection rate
- Imaging
  - Series: cine recording, playback, acquisition of landmarks, ability to return the C-arm to previous projections and blending of landmarks
  - Measurement: easy to use vessel and lesion measurement system
  - Ejection fraction: intuitive heart wall tracing and calculation tool
- Vital signs - dynamic information
  Provides accurate calculations of haemodynamic and EP data obtained during catheterization
  - Catheter based aortic (AO) pressure
  - 12-lead ECG, ability to select any 3 for dynamic display
  - Blood pressure, heart rate, respiratory rate, oxygen saturation displayed
- Medication
  Capability to administer 15 different drugs including heparin, morphine, nitroglycerin
- "Fluoro & Vital signs" screen
  - Realistic fluoroscopic image
  - Status bar with current case statistics
  - Vital signs always visible
  - X-ray reference image of patient positioning
  - Device status panel showing selected and active devices

Inventory

- Range of 24 selective catheter shapes and sizes including
  Judkins, Amplatz, Contralateral support, Kiesz, Multipurpose, Voda, Williams Right
- 4 flush catheter shapes
  Pigtail, modified pigtail, angled pigtail and straight
- Range of standard and hydrophilic wires

Simulation

- 6 cases to teach coronary skills
  Including right and left dominant systems with normal anatomies and variations such as separate LAD & CX, short LM etc
- 3 cases to teach LV-gram skills
- Anatomically and haemodynamically accurate simulation
- Realistic device behavior
- Fully integrated vital signs
  Including normal, damping and ventricular tracing, all responsive to catheter manipulation and placement
- All cases support femoral and transradial approach

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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