



HANDS ON COURSE FOR 3D ECHOCARDIOGRAPHY

Oct 17, 2019 – Oct 19, 2019

**TC HEALTH MINISTRY: ISTANBUL SULTAN ABDUL HAMIT HAN
RESEARCH AND TRAINING HOSPITAL**

ISCU (International Society of Cardiovascular Ultrasound)



Sakarya University



University of Health Sciences



TSC (Turkish Society of Cardiology)



Course details

ALL YOU WANT TO KNOW ABOUT 3D ECHOCARDIOGRAPHY

President of the course: Prof. Navin C. Nanda

Co-President of the course: Prof. Nurgül Keser

What will you learn?

- To gain familiarity with the technique and performance of 3D Echocardiography
- To understand the usefulness of 3D Echo in clinical day to day practice and during interventional procedures
- To gain knowledge of its limitations and how to overcome them

Educational methods

Hands-on, Lectures, On-site

Who is this course for?

Cardiologists

17 th October-Thursday- Introduction to 3D and TOE

08:00-09:00: Registration

09:00-09:10: Welcome and Introduction of the Course – Nurgül Keser, Navin C. Nanda

09:10-10:30: Session I: Basics of Transoesophageal Echocardiography

Chair: Lütfullah Orhan, Cihangir Kaymaz

09:10-09:40: Beginning to TOE: Sedation and Anesthesia, Probe Insertion Techniques, Instrument Controls, Instrument Manipulation - Gülay Gök

09:40-10:10: Standard Tomographic TOE views-Esophageal, Transgastric and Aortic -Alev Kılıçgedik

10:10-10:30: Physics and Image Optimization (Case based) -Mehmet Uzun

10:30-10:50: Coffee break

10:50-12:00: Session II: Basics of 3D Echocardiography

Chair: Navin C. Nanda, Cevdet Erdöl

10:50-11:10: How 3D ultrasound works? Basic principles.Which patients would benefit from 3D TTE in day-to-day clinical practice- Navin C. Nanda

11:10-11:30: How 3D images are created? Acquisition of 3D datasets (modes and image settings, dealing with artefacts): TTE and TOE- Gökhan Kahveci

11:30-12:00: How 3D images are created? Post processing of 3D datasets (cropping, slicing): TTE and TOE- Navin C. Nanda

12:00-13:00: Lunch break

13:00-13:40: Session II: Basics of 3D (cont.)

Chair: Nurgül Keser, Ertuğrul Okuyan

13:00-13:20: Assessing LV function with 3D (TTE) -Nihan Turhan Çağlar

13:20-13:40: Assessing RV function with 3D (TTE) - Elif Eroğlu

13:40-14:00: Coffe Break

14:00-17:00: Session III: Parallel hands-on sessions

- Knobology and acquisition of LV using the matrix probe (on volunteer case)- **Philips-Alpay Sezer and Çiğdem Koca**
- Knobology and acquisition of RV using the matrix probe (on volunteer case)- **Philips- Elif Eroğlu and Alev Kılıçgedik**
- TOE simulator- **Mehmet Uzun and Gökhan Kahveci**

Attendees will be divided into 3 groups:

*Between 14:00-15:00; **Group A will practice LV, Group B will practice RV and Group C will practice TOE.***

*Between 15:00-16:00; **Group A will practice RV, Group B will practice TOE and Group C will practice LV.***

*Between 16:00-17:00; **Group A will practice TOE, Group B will practice LV and Group C will practice RV.***

18th October-Friday

Advanced applications of 3D (TTE/TOE) and TOE

09:00-10:30: Session I: Specific structural imaging with TOE (2D and3D)

Chair: Saide Aytekin, İlker Tekkeşin

09:00-09:30: Mitral valve anatomy and function assessment - **Alpay Sezer**

09:30-10:00: Aortic valve anatomy and function assessment -**Çiğdem Koca**

10.00-10:30: Tricuspid and pulmonary anatomy and function assessment -**Elif Eroğlu**

10:30-10:50: Coffe Break

10:50-12:30: Session I: Specific structural imaging with TOE (2D and3D) (cont.)

Chair: Nurgül Keser , Lutfullah Orhan

10:50-11:10: Evaluation of pulmonary valve and right atrial structures by 3DTTE- **Navin C.Nanda**

11:10-11:30: Examination of valvular prostheses with 2D/3D TOE- **Münevver Sarı**

11:30-11:50: Examination of LA/LAA/Pulmonary Veins/RA/IVC/SVC -**Özlem Yıldırım Türk**

11:50-12:10: Endocarditis – **Tuba Kemaloğlu Öz**

12:10-12:30: Masses and sources of embolism - **Sibel Enar**

12:30-13:30: Lunch Break

13:30-17:00: Session II: Hands-on case studies of 3D TTE-TOE (pre-recorded cases on work sitations)

Chair: Navin C. Nanda, Şennur Ünal

13:30-14:00: LV and LA quantification (from pre-recorded 3D-TTE images) -**Begüm Uygur**

14:00-14:30: Mitral valve proplapse with regurgitation (orientation, cropping, MR quantification-VCA, MVQ)- **Gamze Babür Güler**

14:30-14:50: Mitral valve stenosis (orientation, cropping, slicing, measuring MVA-MPR)- **Alev Kılıçgedik**

14:50-15:20: Mitral valve prosthesis with perivalvular leak (Leak location, cropping, measuring defect size-MPR, MR quantification)- **Gökhan Kahveci**

15:20-15:40: Coffee break

15:40-17:00: Session II: Hands-on case studies of 3D TTE-TOE (pre-recorded cases on work sitations)(cont.)

Chair: Navin C. Nanda, Nurgül Keser

15.40-16.00: Tricuspid and pulmonary valve (orientation, cropping, TR quantification-VCA)- **Tuba Kemaloğlu Öz**

16:00-16:20: Aortic valve stenosis (orientation, cropping, MPR for TAVI measurements, measuring LVOT Area-AVA)- **Münevver Sarı**

16:20-16.50: Aortic valve regurgitation (orientation, cropping, MPR, measuring VCA) –**Çiğdem Koca**

16.50-17.10: Atrial septal defect (orientation, cropping, location, sizing, MPR, deciding for interv.)-**Ebru Özpelit**

19th October Saturday

Interventional 2D/3D TOE

08:30-09:30: Session I: Interventional 2D/3D TOE (Theoretical)

Chair: Ahmet Turan Yılmaz, Lütfullah Orhan

08:30-09:00: Interatrial septum puncture (Case based) (echocardiographer with electrophysiologist-Dual presentation)- **Alpay Sezer (Echo)-Ahmet Taha Alper (Interv)- Mert İlker Hayiroğlu**

09:00-09:30: Percutaneous Mitral Interventions (Case based) (Mitraclip/Closureof Paravalvular Leaks)-**Navin C.Nanda**

09:30-09:50: LAA closure/imaging and interventional -**Şükrü Akyüz**

09:50-12:20: Session II: Interventional 2D/3D TOE (Live-Case session)

Chair: Mustafa Kemal Erol, Nihal Özdemir

09.50-10:50: ASD closure (Live case from Cath Lab)- Müslüm Şahin, Tufan Çınar, Muhammed Keskin
Interventional Echo: **Ebru Özpelit**

10:50-11:10: Coffee break

11:10-12:15: Session II: Interventional 2D/3D TOE (Live-Case session) Cont.

Chair: Navin C. Nanda ,Cevat Kıрма

Perivalvular leak closure (Live case from Cath Lab) –**Can Yücel Karabay, Mert İlker Hayiroğlu**

Interventional Echo: **Gökhan Kahveci**

12:15-13:00: Session III: Intraoperative 2D/3D TOE (Live-Case session from OR)

Ahmet Turan Yılmaz (Surgeon)

Intraoperative Echo: **Mehmet Uzun- Emre Yalçinkaya**

13:00-13:30 Closing remarks and future of Imaging: **Navin C.Nanda, Nurgül Keser**