Degenerative Mitral Valve Disease

Interactive "Minds-On" / "Hands-On" Stations

There are six 45 minute sessions which will run with three parallel sessions for each time slot. Groups will be allocated and each session will be repeated three times as detailed in the final pages of this document.

The 75 minutes for the trainee's lunch will allow time for trainees to take food boxes and attend the working lunch in a timely fashion, whilst other delegates can take a more leisurely lunch.

Contemporary Mitral Valve Interrogation — **Alain Berrebi**
Setting the Scene - 15 minutes — **"Hands-On" TOE Manikin - 30 minutes**

Understanding the Terminology:

Alain Berrebi
alainberrebi@hotmail.com

- Regurgitant Volume
- EROA
- PISA
- Vena Contracta Width

Understanding the Tools, and the information they can provide:

- TTE
- TOE
- CT / MRI
- 3D echo

Understanding Mitral Valve Pathophysiology:

- Functional Testing
  - Stress Echocardiography
  - Dobutamine Stress TTE
  - Exercise TTE
- Influence of Functional Testing on decision making

"Hands-On" Station
Heart Work Manikin — **Roberto Mosca**

Work stations with TOE probe, manikin and TOE/anatomy software programme. — **Mark Patrick**

"Hands-on" TOE probe manipulation allows real-time computerised simulation of TOE — **Tessa Oelofse**

image generation alongside simultaneous anatomical illustration. — **Peter Townsend**

The Rationale for Intervention: Encouraging Early Referral — **Ben Bridgewater**
Setting the Scene - 15 minutes — **"Minds-On" - 30 minutes**

How to Grow a Referral Practice

J-L Vanoverschelde
jean-louis.vanoverschelde@uclouvain.be

How to Develop a Surgical Practice

Ben Bridgewater
ben.bridgewater@uhsm.nhs.uk

Hugo Vanermen
hugo.vanermen@olvz-aalst.be

"Minds-On" Station

The management of asymptomatic mitral valve regurgitation
The timing of intervention: When should we operate?
Where do AHA/ACC criteria and the Watchful Waiting Policy sit within treatment plans in 2010?
Exploration of the indications for mitral valve surgery
Exploration of the factors influencing poor outcome following mitral valve surgery

Functional Anatomy of the Mitral Valve — Neil Moat

Understanding the Spectrum of Mitral Valve Degenerative Disease

Setting the Scene - 15 minutes — **" Minds-On" /" Hands-On" – 30 minutes**

The Mitral Valve as a Functional Unit

Neil Moat
n.moat@rbht.nhs.uk

Aetiological classification of degenerative mitral disease

- Fibroelastic Deficiency
- Myxomatous
- Barlow's Disease

How pathology influences intraoperative decision making

The Tool Box: Understanding the Surgical Armamentarium

- **A**nnuloplasty ring prostheses: An insight to the different models — **Tom Spyt** tom.spyt@uhl-tr.nhs.uk
  - The impact of annuloplasty prosthesis on mitral valve function
- The theory behind prosthetic adjuncts
  - Bio Integral Surgical Mitrofix

"Minds-On" / "Hands-On" — **Ramesh Patel** ramesh1pat@aol.com

- Choice of Annuloplasty Prosthesis:
  - Complete Ring or Not?
  - Flexible or Rigid Rings?
- What is the role for Aetiological Annuloplasty Ring Designs?
- What is the place for the prosthetic adjuncts?

The Essential Principles of Repair — Francis Wells

Setting the Scene - 15 minutes — **"Hands-On" - 30 minutes**

Generic principles of mitral valve repair

Francis Wells
francis.wells@papworth.nhs.uk

- Anatomic considerations:
  - Annular structure, dimension and three-dimensional shape
  - The influence of papillary muscle position on reconstructive techniques
  - The importance of chordal classification and muscular origin
  - Restoration of leaflet coaptation and a symmetrical closure line
- Pathological Considerations:
  - The influence of mitral valve pathology on choice of reparative techniques

A Philosophy of Respect rather than Resect

Maximising early postoperative results

- Intraoperative testing
  - Water-testing
  - Defining the length of leaflet coaptation
- TOE criteria of successful mitral valve repair

Ensuring robust long-term mitral valve competence

- Determining the durability of mitral valve repair techniques

Establishing a "Gold-Standard" of repair surgery

"Hands-On" Station — **Steve Livesey** Steve.Livesey@suht.swest.nhs.uk

Explore Resection Surgical Techniques

- Quadrangular Resection
- Sliding Leaflet

Techniques for judgement of NeoChord length — **Malcolm Underwood** mjunderwood@surgery.cuhk.edu.hk

Standard Surgical Approaches & The Role of Alternative Approaches — Chris Munsch

Setting the Scene - 15 minutes | "Minds-On" / "Hands-On" - 30 minutes

Surgical Approaches via median sternotomy — **Chris Munsch** chris.munsch@tiscali.co.uk

Optimising exposure via the Sondergaards groove

Superior Transeptal Incision: The pros and cons — **Hugo Vanermen** hugo.vanermen@olvz-aalst.be

Left atrial roof incision

Adjuncts to facilitate exposure
- SVC mobilization
- SVC division
- Left atrial roof incisions

Achieving a bloodless surgical field

Retraction Devices: Making the most of technology

Tips on maximising exposure
Use of surgical adjuncts
- Combined Retraction / Suction devices

Alternative Approaches

Right Thoracotomy

Minithoracotomy

Robotic Surgery

"Minds-On" / "Hands-On" — **Moninder Bhabra** moninder.bhabra@rwh-tr.nhs.uk

Exploring standard approaches to the mitral valve
Examining optimal use of retraction devices
Discussing surgical tips to facilitate surgical exposure
Establishing the role for a right thoracotomy approach
Analysing the techniques and merits of minithoracotomy and robotic mitral valve surgery

Intraoperative Decision Making — Graham Venn

Setting the Scene - 15 minutes | "Minds-On" / "Hands-On" - 30 minutes

Preoperative Evaluation — **Jean-Louis Vanoverschelde** jean-louis.vanoverschelde@uclouvain.be

TOE guidance in operative repair

TOE identification of risk factors for poor postoperative result
- Recognition of risk factors for SAM
- Identification of potential pit-falls

Peroperative Decision making — **Graham Venn** grahamvenn@btinternet.com

Management of posterior mitral annular calcification
Operative findings and surgical techniques influencing risk of SAM

Postoperative Assessment

Identification and management of postoperative SAM
Risk factors for posterior left ventricular rupture and surgical management
Management of residual mitral valve regurgitation

"Minds-On" / "Hands-On" — **Prakask Punjabi** p.punjabi@imperial.ac.uk

TOE Manikin demonstrating interrogation of pertinent features
"Hands-On" reconstructive techniques of the posterior mitral valve annulus
Reconstructive techniques designed to reduce the risk of SAM
Case scenarios exploring the management of residual mitral valve regurgitation

Discussion **Full Faculty Panel**

A golden opportunity to unify opinions in areas of controversy with the assistance of a panel of experienced clinicians involved in contemporary practices of mitral valve surgery.

TIMINGS

08:00-08:30 Registration and Croissants

08:30 Formal Opening — Sir Bruce Keogh, Maura Buchanan

Chairman: Chris Munsch and Ben Bridgewater

09:00-09:45

The Rationale for Intervention: Encouraging Early Referral — **Ben Bridgewater**
15 minutes Setting the Scene — "Minds-On" - 30 minutes

Contemporary Mitral Valve Interrogation — **Alain Berrebi**
Setting the Scene - 15 minutes — "Hands-On" TOE Manikin - 30 minutes

Functional Anatomy of the Mitral Valve — **Neil Moat**
Understanding the Spectrum of Mitral Valve Degenerative Disease
Setting the Scene - 15 minutes — " Minds-On" /" Hands-On" – 30 minutes

09:45-10:30

The Rationale for Intervention: Encouraging Early Referral — **Ben Bridgewater**
15 minutes Setting the Scene — "Minds-On" - 30 minutes

Contemporary Mitral Valve Interrogation — **Alain Berrebi**
Setting the Scene - 15 minutes — "Hands-On" TOE Manikin - 30 minutes

Functional Anatomy of the Mitral Valve — **Neil Moat**
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10:30-10:45 Coffee

10:45-11:30

The Rationale for Intervention: Encouraging Early Referral — **Ben Bridgewater**
15 minutes Setting the Scene — "Minds-On" - 30 minutes

Contemporary Mitral Valve Interrogation — **Alain Berrebi**
Setting the Scene - 15 minutes — "Hands-On" TOE Manikin - 30 minutes

Functional Anatomy of the Mitral Valve — **Neil Moat**
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11:30-12:15

The Essential Principles of Repair Setting the Scene - 15 minutes	**Francis Wells** "Hands-On" - 30 minutes
Surgical Approaches & The Role of Alternative Approaches Setting the Scene - 15 minutes	**Chris Munsch** "Minds-On" / "Hands-On" - 30 minutes
Intraoperative Decision Making Setting the Scene - 15 minutes	**Graham Venn** "Minds-On" / "Hands-On" - 30 minutes

12:15-13:30 Lunch and Trainees Lunch

13:30-14:15

The Essential Principles of Repair Setting the Scene - 15 minutes	**Francis Wells** "Hands-On" - 30 minutes
Surgical Approaches & The Role of Alternative Approaches Setting the Scene - 15 minutes	**Chris Munsch** "Minds-On" / "Hands-On" - 30 minutes
Intraoperative Decision Making Setting the Scene - 15 minutes	**Graham Venn** "Minds-On" / "Hands-On" - 30 minutes

14:15-15:00

The Essential Principles of Repair Setting the Scene - 15 minutes	**Francis Wells** "Hands-On" - 30 minutes
Surgical Approaches & The Role of Alternative Approaches Setting the Scene - 15 minutes	**Chris Munsch** "Minds-On" / "Hands-On" - 30 minutes
Surgical Approaches & The Role of Alternative Approaches Setting the Scene - 15 minutes	**Chris Munsch** "Minds-On" / "Hands-On" - 30 minutes

15:00-15:30

Discussion	**Full Faculty Panel**

15:00-16:45 Trainees Meeting