ROBOTIC CARDIAC SURGERY
PROCEDURES 2017

- MITRAL VALVE REPAIR
- MITRAL VALVE REPLACEMENT
- TRICUSPID VALVE REPAIR
- ASD REPAIR
- EXCISION CARDIAC TUMOR
- A FIB ABLATION-MAZE
- CABG
- LV LEAD PLACEMENT
MITRAL VALVE REPAIR

- 2016 = 58
- TOTAL = 650
ROBOTIC PORTS
rMVP
Port Placement
ROBOTIC MITRAL VALVE REPAIR
P2 Resection
Anterior Leaflet Prolapse
Anterior Leaflet Prolapse
CANDIDATES

- SEVERE MR
- ISOLATED MR OR MR/TR
- VIRGIN RT CHEST (PRIOR STERNOTOMY OK)
- MINIMAL PVD
- REPAIRABLE VALVE
ADVANTAGES

- HIGHER REPAIR RATES
- FASTER RECOVERY
- FEWER TRANSFUSIONS
- LOWER WOUND INFECTION RATE
- IMPROVED COSMESIS
MITRAL VALVE REPLACEMENT

- ISOLATED MITRAL VALVE DISEASE (TVP IS OK)
- NON REPAIRABLE VALVE
- VIRGIN RIGHT CHEST (PRIOR STERNOTOMY OK)
- PRIOR MV OPERATION OK
- ISCHEMIC MR PRIMARY INDICATION
VIDEO RMVR
ADVANTAGES

- FASTER RECOVERY
- FEWER TRANSFUSIONS
- LOWER WOUND INFECTION RATE
- IMPROVED COSMESIS
ROBOTIC TVP

- ANY ISOLATED TR (N = 14)
- MITRAL/TRICUSPID (N = 165)
- CAN REPLACE - ENDOCARDITIS
- VIRGIN RIGHT CHEST (PRIOR OHS OK)
- IDEAL CASE FOR ON PUMP NON ARRESTED
VIDEO RE DO TVP
ISOLATED REDO
RTVP

- N = 14
- PRIOR OPS = 10 (66.7%)
- CPB = 58m (48m-88m) (1 X CLAMP)
- BRING BACK = 2 (14%)
- MORTALITY = 1 (7%)
- STROKE = 0
INDICATIONS FOR TVP

- SEVERE TR
- MODERATE TR + OTHER OHS
- DILATED TV ANNULUS + OTHER OHS
CONTRAINDICATED

TVP

- SEVER PV HTN
- SEVERE RV DYSFUNCTION
- LIVER FAILURE
- SEVERE DEBILITATION
- ** EARLY REFERRAL
RASD REPAIR

- Any type ASD not approachable by structuralist

- Virgin RT chest

- Isolated ASD (TVP, MVP OK) exclude common common assoc. anomalies

- Check PV HTN and bidirectional shunt
EXCISION CARDIAC TUMOR

- ISOLATED TUMOR LEFT OR RIGHT
- VIRGIN RT CHEST
- CHECK PVD
EXPERIENCE

• N =
• LEFT =
• RIGHT =
• CPB =
• X CLAMP =
EXPERIENCE

• MORTALITY =
• STROKE =
• BRING BACK =
• PATCH =
• LOS =
RIGHT ATRIAL MYXOMA

Excision of a Right Atrial Myxoma
A FIB ABLATION

- CONCOMITANT MAZE - WITH rMVP
- CANDIDATE - POTENTIALLY ANY PATIENT WITH MITRAL AND A FIB
- EXCLUDE LAA ON AL PATIENTS
 VIDEO CLIP LAA/CRYOMAZE
LAA ORIFACE
STAND ALONE
RMAZE

- VIRGIN CHEST / NO REDO
- A FIB NON RESPONSIVE TO MEDICAL AND INTERVENTIONAL APPROACHES
- NO MORBID OBESITY
- HYBRID APPROACH
EXPERIENCE

- N = 12
- MORTALITY = 0
- UNABLE TO COMPLETE = 2
- CONVERSION TO NSR = 92%
- BRING BACK = 0
VIDEO RMAZE
ROBOTIC CABG

- Selective
- Single vessel disease (LAD)
- MID CABG
- Normal body habitus
- No redo

- Big vessels
- Low threshold to convert
- Can consider hybrid stent/robot
- Failure rate of LIMA - LAD is higher
PICTURE OF HOW TO REFER/TEAM