

**Analysis of valve replacement for recurrent mitral valve
disease in 233 cases**

Wensheng Chen

Dept. of Cardiovascular Surgery, Xijing Hospital, FMMU, Xi'an China



Clinical data

- * 233 Ps with RCVD under MVR
- * 106 male and 127 female Ps
- * Ages ranged from 12-71(40.2 ± 11.6)ys
- * Duration: 5 ms \sim 23 ys(17.2 ± 5.8 ys)



Reasons of reoperation

- MV restenosis after closed mitral commissurotomy in 142 cases
- MV restenosis or/and insufficiency after mitral valvuloplasty in 39
- Bioprosthetic valve decline in 25
- perivalvular leakage in 12
- IE after valve replacement or valvuloplasty in 9
- Prosthetic valve obstruction in 4
- MV restenosis after percutaneous balloon mitral valvuloplasty in 2



-
- X-ray: C/T 0.48-0.89(0.62 ± 0.13)
 - Atrial fibrillation in ECG: 93 Ps
 - LA size in UCG:43-124(66 ± 19)mm
 - NYHA III in 135 ps, IV in 23 Ps

Operative technique

Medium chest incision

Moderate hypothermia CPB

Cool blood or crystalloid cardioplegia

Emergency surgery in 5

Using pledgetted interrupted suture

Bioprosthetic valve in 12

Mechanical prosthetic valve in 221

Results

21 patients died, 212 survived and discharged

Main causes of early-stage deaths

- * low cardiac output syndrome
- * ventricular arrhythmia
- * multiple organ dysfunction failure
- * left ventricle rupture
- * infective endocarditis
- * renal failure

Severe complications after the surgery

- * bleeding
- * acute cardiac tamponade
- * low cardiac output syndrome
- * ventricular arrhythmia
- * multiple organ dysfunction failure
- * left ventricle rupture
- * infection
- * renal failure

Follow-up

192(192/ 212) Ps were followed-up

Duration: 6 ms - 21 ys (9.8 ± 5.4 y)

Cardiac function status: NYHA I - II in 169 Ps

Discussion

Risk factors of reoperation about RMVD

- * low preoperative cardiac function
- * dysfunction failure of important organs
- * emergent surgery
- * long time aortic clamping and CPB

Key to the good results for RMVD

- * early diagnosis and treatment
- * complete surgical correction
- * proper perioperative management



thanks