

Results Of Mechanical Mitral Valve Replacement By Video Assisted Minimally Invasive Via Right Mini-thoracotomy

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Backgrounds: *Minimal invasive cardiac surgery (MICS) has been proven being benificial for recentlydecades. We have started MICS since July 2018 in Thongnhat hospital. The aims of this study to access the results of mechanical mitral valve replacement by Video Assisted minimally invasive via right minithoracotomy in our hospital*

Method: *We collect all of patients who underwent **m**achenical mitral valve replacement by Video Assisted minimally invasive via right minithoracotomy in Thongnhat hospital from 12/2020 to 12/2022. Selective endobronchial anesthesia was done for all patient. Patients on supine position with a small pillow put under right chest. Femoral artery and vein cannulation were performed. A 4-6 cm incision on the 4th intercostal space for approaching procedure. Custadiol solution for myocardial protection. Left Atrium was opened by longitudinal incision, mitral valve was removed, mechanical mitral valve was implanted. Operating data, postoperation complications ICU, hospital stay length were noted and statistic analysis.*



Figure 1: Patient position

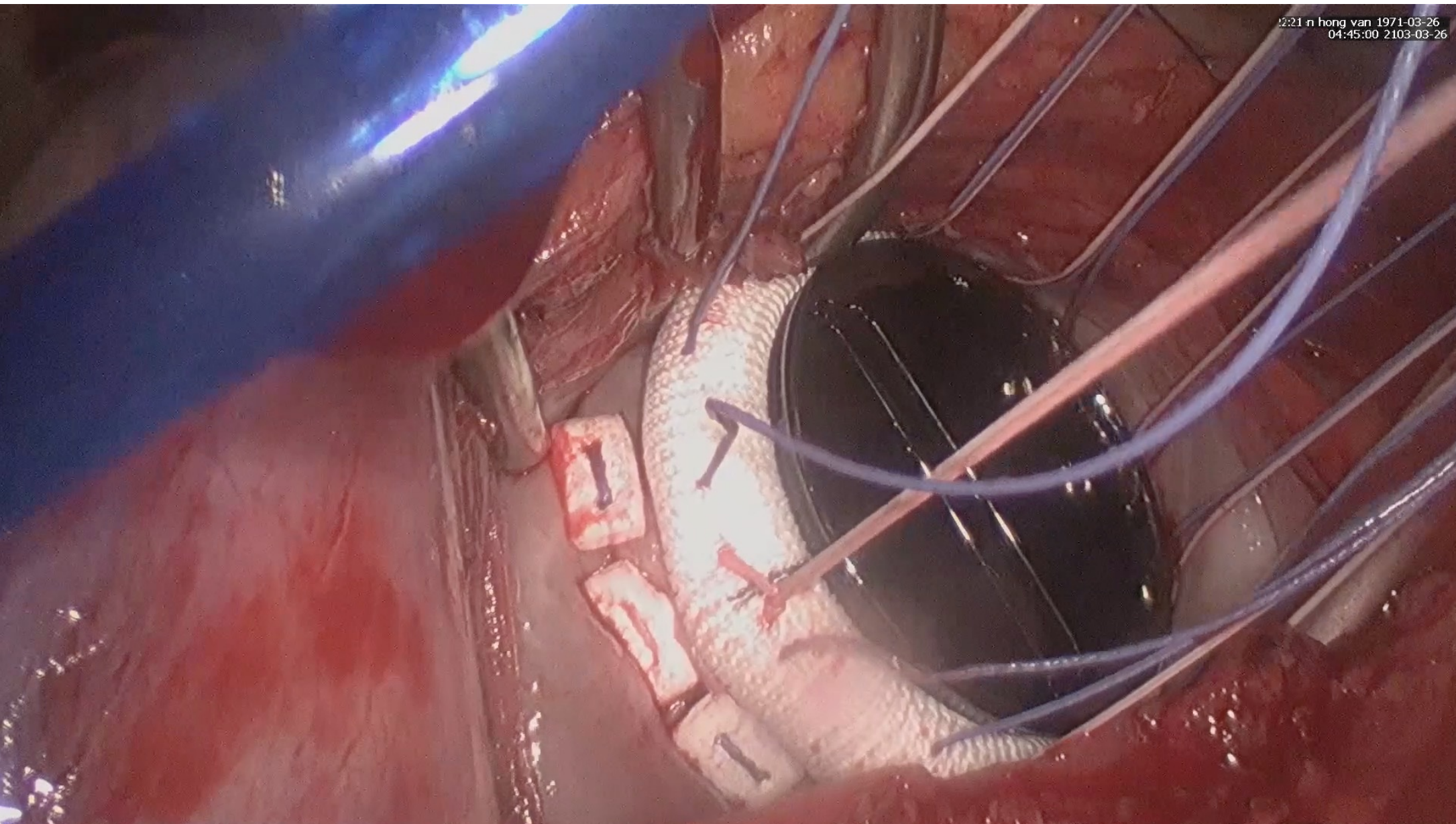


Figure 2: Mechanical mitral valve implantation

	No Pt(20)	%
Mean age	52,2 ± 9,8 (30 – 66)	
Male	11	55,0%
Simple MVR	16	80,0%
MVR + TAP	02	10,0%
MVR + MAZE	02	10,0%

Table 1: patient characteristics

Results: *There are 20 patients underwent mechanical mitral valve replacement by Video Assisted minimally invasive via right minithoracotomy. Mean age was 52.2 ± 9.8. Male to female ratio was 1:1. All patients were intubated with selective bronchial tube. CPB with duo IVC and SVC canulae installed from femoral vein. Mean CPB time was 177,8 ± 60,8 minutes (range 87 - 250). Mean cross aortic clamp time time was 106,8 ± 41,3 minutes (range 57 - 206). No death, only one patient has bleeding and need re- thoracothomy for controlling bleeding.*

Conclusions: *Machenical mitral valve replacement by Video Assisted minimally invasive via right minithoracotomy was safe and feasible. The outcomes are satisfactory with low morbidity and no mortality.*

Key words: *Minimally invasive cardiac surgery, minithoracotomy, thoracoendoscopy, mechanical mitral valve.*