Understanding the minimally invasive mitral valve surgery, by comparing some severe mitral valve disease patients who had just undergone mitral valve replacement with minimally invasive approach and conventional median sternotomy approach.

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Introduction
The conventional midline sternotomy approach for heart valve surgery have been the standard for more than 30 years. From the mid 1990s, the minimally invasive techniques in open heart procedure were developed, in order to improve the recovery pace of patient by minimizing the surgical incision of patients. Over the past 10 years, the evolving technologies of many western cardiac centers have already established the minimally invasive heart valve surgery as clinical routine. However, it is still seem to be a relative novel surgery in our center, moreover solely few minimally invasive MVR have been performed in the past two years. By studying the real cases those have just undergone the minimally invasive mitral valve replacement in our centre, to understand more about this new approach. What is it? What are the benefits of this approach? What are the limitations? What are the disadvantages? And how did the patient feel after performing the minimally invasive procedure subjectively? Will this approach take a higher portion of isolated mitral valve surgery in future?

Objectives
Understanding the minimally invasive mitral valve surgery, by comparing some severe mitral valve disease patients who had just undergone mitral valve replacement with minimally invasive approach and conventional median sternotomy approach.

Methodology
cases study

Result
Our centre is still in a learning phase for the RMT-MVS procedure, the discrepancies of CBP time between RMT-MVS and CONV-MVS would be shortened after the more exposure and a more mature and skilled technique has developed. However, in our very limited resource healthcare environment, the public hospital is facing a long queue of patients. It seems to be a bit of difficult and luxury to spend extra operation section and resource to develop new skill set in RMT-MVS when the CONV-MVS skill
is so mature and skilled. That is why many cardiac surgeons still prefer the
CONV-MVS. As a responsible healthcare professional must be careful balance
between operative safety, speed of recovery, level of discomfort, procedural cost and
long-term operative quality. Thus, RMT-MVS as a clinical routine have been already
established in many other western countries but in the tight-resource center may take
a longer time to do so.