

3<sup>rd</sup> World Congress on  
Cardiology

&

16<sup>th</sup> International Conference on  
Nutrition and Fitness

October 29-30, 2018 | London, UK

## Mini invasive cardiac surgery program in low resource setting is it worth the pain

**Ravi Baral**

Tribhuvan University, Nepal

**Background:** Mini-invasive cardiac surgery has become a routine in most centres worldwide but still is not much popular in our part of world in view of high cost involved. Suture less heart valve and mini invasive instruments costs have become a most limiting factor for use of mini-thoracotomy in heart surgeries. We in our center have reexplored use of the conventional valve and instruments to start mini invasive heart surgery and staged procurement of the instruments for the sustainability and cost effectiveness of the program.

**Method:** It is a review of a prospectively collected data of patient undergoing Minimal invasive heart surgery over three years period. We have done over hundred cases of mini ASD repair, used conventional mechanical heart valve in aortic and mitral position.

**Result:** Total 120 ASD closure has been performed from right anterior mini thoracotomy over three years. We have performed 30 cases of AVR in over 18 months period and we have recently started MVR from mini thoracotomy approach and had performed 1 MVR. We have used slightly bigger thoracotomy of 8 cm length to begin with the use of conventional instruments,

later changed with smaller incision of 5cm. Average aortic cross clamp time and pump run was 30 minutes and 43 minutes for ASD, 67 minutes and 92 minutes for AVR and 96 minutes and 145 minutes. One of the AVR patient got reexplored from the same incision for bleeding, 5 patients had peripheral cannulation site complications. Our hospital has recently procured a set of mini invasive instruments and our program will become viable as more and more colleagues are interested in performing mini invasive heart surgery.

**Conclusion:** Mini invasive heart surgery is feasible with conventional instruments and conventional valve. For the viable mini invasive program institutional commitment in terms of infrastructure development and expertise development is the prime.

### Speaker Biography

Ravi Baral is a young and vibrant cardiac surgeon working in a position of an assistant professor of cardiothoracic and vascular surgery, in the university hospital. He has completed his Mch in cardiothoracic and vascular surgery in the year 2015. He has a special interest in aortic surgery and mini-invasive cardiac surgery. He has performed more than 60 cases of mini atrial septal defect surgeries before moving into more complex valvular surgeries through a mini-invasive approach.

e: ravi.baral4@gmail.com



Notes: