Reviewer’s report

**Title:** Surgical site infections following transcatheter apical aortic valve implantation: incidence and management.

**Version:** 2 **Date:** 6 September 2012

**Reviewer:** T G Mesana

**Reviewer's report:**

REVIEW OF PAPER: Dr T Mesana, Ottawa Heart Institute

Surgical Site Infections Following Transcatheter Apical Aortic Valve Implantation: Incidence and Management

This is a paper written by a well-experienced group from Quebec having a large volume of TAVI cases. They looked at 154 patients who had transapical TAVI with Edwards Sapien bioprosthesis. Although minitoracotomy is minimally invasive surgery and being less prone to surgical infection, they found that five (3.2%) patients in the cohort presented with surgical site infection acquired in the hospital. The writing is well done and as detailed as possible regarding the description of the infectious occurrence and complication. They observed that the SSI were associated with obesity. The authors recommended debridement and rib resection, as well as wound coverage with great omentum, or pectoralis muscle to treat successfully these patients.

The interesting point about this study was to describe how the infection occurred and how it spreaded towards the apex of the left ventricle, which basically needed to be debrided, which I think is important information. All the case histories are well described and since it is the first report to describe infectious complication associated with TA TAVI, I believe this paper has merit for publishing. I am not seeing a major essential revision, although it is a limited number of patients that have an infection after Trans Apical TAVI, I think that it is important for the surgical community to read some experience about the management of surgical complications of this relatively new procedure. I suggest that the authors add among their information, their overall SSI rate in conventional AVR as a benchmark, otherwise I recommend publication of this paper.

**Level of interest:** An article of outstanding merit and interest in its field

**Declaration of competing interests:**

None