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## Valvular Heart Disease

### FEVER FOLLOWING TRANSCATHETER AORTIC VALVE IMPLANTATION: PREVALENCE, PATTERN AND RATE ATTRIBUTED TO AN INFECTIOUS ORIGIN

Moderated Poster Contributions

Poster Sessions, Expo North

Saturday, March 09, 2013, 3:45 p.m.-4:30 p.m.

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Session Title: TAVR I: Predictors of TAVR Outcomes Including LVEF, Contractile Reserve, BNP, Pulmonary HTN, CA 125, and Fever

Abstract Category: 32. Valvular Heart Disease: Therapy

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**Background:** The occurrence of fever following transcatheter aortic valve implantation (TAVI) is common and may result in extensive workup, treatment with broad-spectrum antibiotics and prolonged hospitalization. We aimed to assess the prevalence and nature of fever following TAVI, and analyze whether cases of fever were attributed to infection.

**Methods:** An observational retrospective study of the first 141 consecutive patients undergoing TAVI in a 1,200-bed university hospital. All patients received peri-procedural antibiotic prophylaxis with a first or second generation cephalosporin (or vancomycin upon penicillin allergy). Data regarding fever was extracted from medical and nursing records. All microbiologic samples were reviewed and analyzed.

**Results:** Fever above 37.8c occurred in 32 patients (22.7%) in the first 96 hours following TAVI. A single measure above 37.8c was reported for 19 (59.4%) patients, while 13 (40.6%) patients had at least two measures > 37.8c. Empiric broad-spectrum antibiotic was initiated in 75% of febrile patients, more commonly when fever was high and in all cases when prolonged. Bacteremia was found in 2 febrile patients, both pathogens isolated not covered by the standard prophylactic regimen (*Enterococcus Fecalis*; ESBL-producing *Klebsiella Pneumoniae*). Fever was not associated with increased 30 days mortality, yet correlated with several post-procedural complications and prolonged hospitalization.

**Conclusions:** Fever following TAVI is common, yet rarely associates with microbiologically-proven infection and may actually represent an inflammatory response following valve deployment. Differing antibiotic treatment in the face of a single peri-procedural febrile spike may be considered, yet a protracted course of fever mandates the initiation of broad-spectrum antibiotics.

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