Failure Rate of Endocarditis Prophylaxis

Elizabeth Cox, MD
**Patient or problem** - Pt with bicuspid aortic valve undergoing dental procedure

**Intervention** - Antibiotic prophylaxis

**Comparison** - No antibiotic prophylaxis

**Outcomes** - 1) Incidence of endocarditis, 2) Failure rate of appropriate prophylaxis
Guidelines

- Bicuspid aortic valve
  - 2006 Recommendations: Antibiotic prophylaxis recommended for patients with congenital cardiac valve malformations, particularly those with bicuspid aortic valves (Class I, Level C)
  - 2008 Recommendations: No recommendations for bicuspid aortic valve—although “clinicians and patients may still feel more comfortable continuing with prophylaxis”
What’s the Evidence?

- Cochrane- Penicillins for the prophylaxis of bacterial endocarditis in dentistry
  - No RCTs, CCTs or cohort studies were included. Many, many reviews, commentaries and guidelines but very few primary studies. One case control study met the inclusion criteria.
Participants: All of the 349 people who developed native-valve endocarditis in the Netherlands over a 2 year period (1986-1988) were collected.

- Eligibility: Previously had CHD, coarctation of the aorta, rheumatic or other valvular dysfunction, or MVP with MR.
- Controls: Had one of the cardiac conditions but did not have endocarditis.

Interventions: Underwent a medical or dental procedure that required prophylaxis within 180 days of onset of symptoms of endocarditis (cases) OR of their interview (controls)

Outcomes: No significant effect of penicillin prophylaxis on the incidence of endocarditis