



NEW GUIDELINES FROM THE AMERICAN DENTAL ASSOCIATION AND THE AMERICAN HEART ASSOCIATION

Evidence Weighs Against Use of Antibiotics *Before Dental Procedures To Prevent* *Infective Endocarditis*

For decades, the American Heart Association (AHA) recommended that patients with certain heart conditions take antibiotics shortly before dental treatment. This was done with the belief that antibiotics would prevent infective endocarditis (IE), previously referred to as bacterial endocarditis. The AHA's latest guidelines were published in its scientific journal, *Circulation*, in April 2007 and there is good news: **the AHA recommends that most of these patients no longer need short-term antibiotics as a preventive measure before their dental treatment.**

The American Dental Association participated in the development of the new guidelines and has approved those portions relevant to dentistry. The guidelines were also endorsed by the Infectious Diseases Society of America and by the Pediatric Infectious Diseases Society.

The guidelines are based on a growing body of scientific evidence that shows the risks of taking preventive antibiotics outweigh the benefits for most patients. The risks include adverse reactions to antibiotics that range from mild to potentially severe and, in very rare cases, death. Inappropriate use of antibiotics can also lead to the development of drug-resistant bacteria.

Scientists also found no compelling evidence that taking antibiotics prior to a dental procedure prevents IE in patients who are at risk of developing a heart infection. Their hearts are already often exposed to bacteria from the mouth, which can enter their

bloodstream during basic daily activities such as brushing or flossing. The new guidelines are based on a comprehensive review of published studies that suggests IE is more likely to occur as a result of these everyday activities than from a dental procedure.

The guidelines say **patients who have taken prophylactic antibiotics routinely in the past but no longer need them** include people with:

- ◆ mitral valve prolapse;
- ◆ rheumatic heart disease;
- ◆ bicuspid valve disease;
- ◆ calcified aortic stenosis;
- ◆ congenital heart conditions such as ventricular septal defect, atrial septal defect and hypertrophic cardiomyopathy.

The new guidelines are aimed at patients who would have the greatest danger of a bad outcome if they developed a heart infection.

Preventive antibiotics prior to a dental procedure are advised for patients with:

1. artificial heart valves
2. a history of infective endocarditis
3. certain specific, serious congenital (present from birth) heart conditions, including
 - unrepaired or incompletely repaired cyanotic congenital heart disease, including those with palliative shunts and conduits;

CONTINUED ON PAGE 47

COLLEGE CONTACT

Dr. Lesia Waschuk

Practice Advisor

416-934-5614

1-800-565-4591

lwaschuk@rcdso.org



ON APPEAL

CONTINUED FROM PAGE 32

No excessive bleeding was noted after the extractions nor was there any event that would indicate that the patient was unhappy or dissatisfied.

The police decided to take no action.

DECISION OF THE COMPLAINTS COMMITTEE

The Complaints Committee reviewed the police report, the hospital records, the patient's chart, and the College's full investigation. The Committee stated that the parties' versions were so far apart that it was difficult to understand how that could be. The Committee sided with the dentist stating that the staff supported the contention of the dentist and that there was no independent or corroborative information from the patient otherwise. The Complaints Committee agreed that the extractions were justified and that the work was done within the standards.

HEALTH PROFESSIONS APPEAL AND REVIEW BOARD

The patient was dissatisfied with the Complaints Committee's decision and appealed to the Board. In particular, the patient criticized the College's investigator

who interviewed dental staff but did not do a personal interview with the patient. He was also very critical of the Committee and stated that it was grossly unfair in its comments and very misleading in its opinions.

The Board stated that although the patient was not interviewed, the patient was given opportunities to comment on the investigation.

The Board stated that there was no obligation on the part of staff to conduct personal interviews, and while the investigation was not perfect, it was certainly adequate. It went on to state that any further investigation was not in the public interest.

The Board reviewed the reasons of the Committee and found the reasons to be adequate and the decision reasonable. Therefore it confirmed the decision of the Complaints Committee.

The decision of the Board was not unanimous. There was one dissenter who stated that the complainant should have been interviewed.

Evidence Weighs Against Use of Antibiotics...

CONTINUED FROM PAGE 45

-a completely repaired congenital heart defect with prosthetic material or device, whether placed by surgery or by catheter intervention, during the first six months after the procedure;

-any repaired congenital heart defect with residual defect at the site or adjacent to the site of a prosthetic patch or a prosthetic device;

4. a cardiac transplant that develops a problem in a heart valve.

The new recommendations apply to many dental procedures, including teeth cleaning and extractions. Patients with congenital heart disease can have complicated circumstances. They should check with their cardiologist if there is any question at all as to the category that best fits their needs.

The full report is available to download, along with supporting charts, from the website of the American Dental Association at www.ada.org.