

NICE CLINICAL GUIDELINE 64: PROPHYLAXIS AGAINST INFECTIVE ENDOCARDITIS (MARCH 2008)

This new NICE Clinical Guideline significantly challenges established practice around the utilization of antibiotic prophylaxis in patients at risk of infective endocarditis. In the past, antibiotics have been offered routinely to those at risk of infective endocarditis undergoing interventional procedures. NICE have found little evidence to support this practice; antibiotic prophylaxis has not been proven to be effective and there is no clear association between episodes of infective endocarditis and interventional procedures. The risk of adverse reaction to the antimicrobial and contribution to the development of antibiotic resistance outweigh the paucity of evidence in favour of this practice. **All medical and dental practitioners are urged to review their practice with a view to making the required changes effective immediately.**

The key recommendations are as follows:

- **Antibiotic prophylaxis should no longer be offered routinely to those at risk of infective endocarditis undergoing defined interventional procedures.**
- The following people (both adults and children) are defined as being **at risk of developing infective endocarditis**: those with **acquired valvular heart disease** with stenosis or regurgitation; those with **valve replacement**; those with **structural congenital heart disease** (including surgically corrected or palliated structural conditions, but excluding isolated atrial septal defect, fully repaired ventricular septal defect or fully repaired patent ductus arteriosus, and closure devices that are judged to be endothelialised); those with **hypertrophic cardiomyopathy**; and those with **previous infective endocarditis**.
- These people should be offered clear and consistent information about **prevention of infective endocarditis** including: the **benefits and risks of antibiotic prophylaxis** (and an explanation of why **antibiotic prophylaxis is no longer routinely recommended**); the importance of maintaining **good oral health**; **symptoms that may be indicative of infective endocarditis** and when to seek expert advice; the **risks of undergoing invasive procedures** (including non-medical procedures such as body piercing or tattooing).

- **Antibiotic prophylaxis should not be offered to:**
 - people undergoing dental procedures;
 - people undergoing non-dental procedures at the following sites – upper and lower gastrointestinal tract, genitourinary tract (including urological, gynaecological and obstetric procedures and childbirth), upper and lower respiratory tract (including ear, nose and throat procedures and bronchoscopy).
- **Chlorhexidine mouthwash should not be offered as prophylaxis against infective endocarditis** to people at risk undergoing dental procedures.
- Clinicians are advised to investigate and treat promptly any episodes of infection in people at risk of infective endocarditis.
- Offer an antibiotic that covers organisms that cause infective endocarditis if a person at risk of infective endocarditis is receiving antimicrobial therapy because they are undergoing a gastrointestinal or genitourinary procedure at a site where there is a suspected infection. Advice on appropriate antimicrobial selection is given in the current edition of the British National Formulary (March 2008), page 279.

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