Wessex Cardiac Forum Position Statement

NHS Wessex Clinical Networks

Antibiotic Prophylaxis (AP) prior to Dental Treatment to prevent Infective Endocarditis (IE)

The most recent NICE guidance published March 2008 recommended that AP to prevent IE prior to invasive dental procedures should stop. The reasons for this were the paucity of evidence regarding efficacy of AP and the lack of randomised control trial data on the subject, along with concerns regarding adverse drug reactions to antibiotics.

After adoption of the NICE guidance 2008 by 2015 there had been an 88% reduction in prescriptions of AP in the UK, this had coincided with a progressive rise in the number of cases of IE. In 2015 there were 2,150 cases in the UK with in-hospital mortality of 15-20% and further 15-20% mortality in the same year; this is not a benign condition.

Background

The ESC and the AHA produced new guidance in 2015 drawing different conclusions to the NICE 2008 guidance. Both groups felt that the potential risks of IE were greater than the risks of AP particularly in high risk groups. Both groups recommended, despite absence of evidence that AP was recommended in high risk individuals. The high risk groups included past history of IE, prosthetic heart valves, any heart valve repaired with prosthetic material, unrepaired cyanotic heart disease and other certain repairs of congenital heart defects.

ESC recommended no AP in moderate risk patients but each patient should have an annual dental review and each case discussed with the cardiologists if there was any uncertainty. Moderate risk patients are described as past history of rheumatic fever, native valve disease (including bicuspid aortic valve, mitral valve prolapse and aortic stenosis).

In 2015 NICE reviewed the ESC 2015 guidance and came to different conclusions, NICE recommended continuing with their original guidance of 2008.

Latest NICE Recommendations

NICE recently (August 2016) changed their guidance following approaches to Sir Andrew Dillon by a widow of a patient with aortic valve replacement who died from IE after unprotected dental scaling. The change in guidance was to include the word “routinely” in their recommendation 1.1.1.3: “AP against IE is not recommended **routinely** for people undergoing dental procedures”. In a letter about the change Sir Andrew Dillon CEO of NICE confirmed that in individual cases AP “may be appropriate”.

Wessex Cardiac Forum and Southampton Cardiac Surgeons’ position

The Wessex Cardiac Forum raised the question as to whether they as a group of cardiologists jointly with the Southampton cardiac surgeons should continue to follow the NICE guidance or adopt ESC guidance. The collective response from the group (cardiology and surgery) was to adopt ESC guidance 2015.

The ESC currently recommends AP in high risk groups (past history of IE, prosthetic heart valves, any heart valve repaired with prosthetic material, unrepaired cyanotic heart disease and other certain repairs of congenital heart defects) and prior to the following dental procedures; extractions, descaling, root canal manipulation or any perforation of the oral mucosa or manipulation of gingival or peri-apical region of the teeth.

The ESC guidance currently recommends 2 g orally of Amoxicillin or 600 mg of Clindamycin (for penicillin allergic individuals) orally 30 to 60 minutes pre-procedure. In the UK, AP when used is 3 g orally of Amoxicillin or 600 mg of Clindamycin (for penicillin allergic individuals) 30 to 60 minutes pre-procedure (in the BNF).

Author: Dr Rosie Swallow, Consultant Cardiologist on behalf of the Wessex Cardiac Forum and Southampton General Hospital Cardiac Surgeons. Agreed by members of the Wessex Cardiac Forum on 30 March 2017.

Review date: March 2019

This document is available to view and download from the Wessex Clinical Networks website at www.wessexscn.nhs.uk .