Dorset Position Statement on:

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

Background

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 was an 88% reduction in prescriptions of AP in the UK, this 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.

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.

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.

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”.

British Cardiac Society (BCS) position statement 2018

In August 2018 the BCS produced a position statement to adopt ESC guidance 2015. The Wessex Cardiac Forum and Southampton Cardiac Surgeons had already in 2017 agreed to do the same. In Wessex local dental groups have agreed to prescribe the antibiotics for their patients

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

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).

Dr RA Swallow and Sally Osborn March 2019

Dorset Plan

The RBCH has reviewed their Cardiac Rehabilitation Tomcat database to find all of the patients since Tomcat records started in whom antibiotic prophylaxis will be required (1200 patients).

These patients will receive a letter to them, a copy for their dentist and GP to inform them why they require prophylaxis and what they require. They will also receive an antibiotic card for their wallets.

All future high risk patients will be informed by their Cardiologist in the outpatient department at the time of their consultation or as an inpatient that they require antibiotic prophylaxis and be given the letter and card.

DCH will need to find and contact all patients in a similar way.

Dr RA Swallow and Sally Osborn March 2019