

# Duration of post-stent clopidogrel treatment: a prescribing audit in primary care

Katherine Lucy Maskell

## Abstract

**Background** Coronary artery disease is the most common cause of mortality worldwide; in 2015, it was responsible for 69 163 deaths in the UK. When clinically appropriate, the National Institute for Health and Care Excellence recommends percutaneous coronary intervention (PCI), often involving stent insertion. To reduce the risk of post-stent thrombosis, dual antiplatelet therapy for up to 12 months after PCI is recommended, unless otherwise specified. Prolonged therapy can increase risk of bleeding and is rarely recommended. This audit aimed to determine whether patients in one general practice received the appropriate duration of clopidogrel treatment.

**Methods** In January, 2016, an electronic notes audit was undertaken in an 8000-patient general practice in Brighton, UK, to identify the number of patients undergoing PCI, and to determine whether these patients received up to 12 months of dual antiplatelet therapy post intervention. Patients were identified with the codes “insertion coronary artery stent” and “coronary angioplasty”, who also had a clopidogrel prescription issued in the past 10 years. Reasons for undertreatment and overtreatment were assessed.

**Findings** 32 patients (0·004%) had PCI and subsequent clopidogrel treatment. 22 of them (69%, 95% CI 53–85) received up to 12 months' clopidogrel treatment, and eight (25%, 10–40) received less than 10 months', of whom only one had a valid reason documented. Ten patients (31%, 15–47) exceeded the recommended treatment, of whom only four had a valid reason documented.

**Interpretation** This audit identified that duration of clopidogrel treatment was inappropriate in around two-fifths of patients. This finding demonstrates a specific example of a wider issue of concordance with recommendations after initiation of an appropriate medication, and the lack of a system to stop prescriptions after a particular period of time. Limitations include the small sample size, the potential for recommendations to have changed during the retrospective period, and the possibility of miscoding of patients. Patients receiving antiplatelet therapy after PCI should have the appropriate treatment duration documented in their notes and included on the prescription, with further prescriptions not being issued until the end-date has been reviewed. This study highlights the importance of an efficient health-care primary–secondary–tertiary interface.

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### Declaration of interests

I declare no competing interests.

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Brighton and Sussex Medical  
School, University of Sussex,  
Brighton, UK (K L Maskell)

Correspondence to:  
Miss Katherine Lucy Maskell,  
Brighton and Sussex Medical  
School, Department of Public  
Health and Primary Care,  
Mayfield House, University of  
Brighton, Brighton BN1 9PH, UK  
K.Maskell1@uni.bsms.ac.uk