

are reported as death, cardiac death, target vessel myocardial infarction (TVMI), target lesion revascularisation (TLR) and MACE (combination of cardiac death, TVMI and TLR).

During the study period; 890 lesions (766-patients) were treated with DCB. Of them; 433 were treated with PCB and 477 with SCB. Total of 81-lesions (9%) needed bailout stenting for either dissection and/or recoil of >50%. This included; 42-lesions in PCB group and 39-lesions in SCB group. There were no significant differences in the baseline characteristics between the two groups. During the median follow-up period of 18-months, the clinical outcomes between PCB and SCB group were; death: 3 (7%) vs. 0; $p=0.3$, cardiac death: 2 (5%) vs. 0; $p=0.5$, TVMI: 0 vs. 1 (2.6%); $p=0.4$, TLR: 1 (2.4%) vs. 3 (7.7%); $p=0.5$, MACE: 3 (7%) vs. 3 (7.7%); $p=0.7$. There were no reported cases of stent thrombosis in either group.

Conclusions The bailout stenting rate was relatively low in our group (9%) as compared to previously published studies. No significant differences were observed between the two-bail-out stenting groups, although numerically PCB + limus stent group had lower rates of TLR, but had higher mortality rates as compared to SCB + limus stent, implying potential synergistic effect, but maybe at the cost of toxicity? This needs to be confirmed with larger patient group with multi-centre experience.

Conflict of Interest None

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ADHERENCE TO CARDIOLOGIST RECOMMENDATIONS REGARDING EXTENDED DURATION OF TICAGRELOR FOR PATIENTS UNDERGOING PCI FOR MYOCARDIAL INFARCTION

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Introduction Ticagrelor is a potent, reversible, platelet P2Y₁₂ receptor antagonist. Patients with a history of a myocardial infarction (MI) have a persistently increased risk for future ischaemic events. PEGASUS-TIMI 54 demonstrated that patients with a history of MI, coupled with a high risk of ischaemic events and absence of conditions associated with excessive bleeding risk, may benefit from extended duration of dual antiplatelet therapy (DAPT) with aspirin 75-150mg once daily and ticagrelor 60mg twice daily (BD) beyond the first year after MI. This strategy is endorsed by current European Society of Cardiology guidelines and approved by NICE. Cardiologists may recommend this strategy but it remains unclear how often this is followed in a primary care setting.

Methods A list of consecutive patients who underwent percutaneous coronary intervention (PCI) between March 2015 to August 2018, performed by a single clinician was obtained. The discharge summaries of these patients were evaluated to determine whether they had been treated for MI and received the recommendation of extended DAPT duration with ticagrelor 60mg BD. The summary care records of patients who were found to have received the recommendation of extended DAPT duration were interrogated to determine compliance with the recommendation. Reasons for non-adherence were recorded if available.

Results 399 patients underwent PCI during the study period. 323 patients (81%) underwent PCI as part of their management for an acute coronary syndrome (ACS) while 76 patients (19%) underwent PCI as an elective case. Of 323 ACS patients, 6 patients died during their ACS hospital admission and were excluded. 61 out of 317 ACS patients (19%) and 3 out of 76 (4%) elective patients were recommended extended duration of ticagrelor with down-titration from 90mg BD to 60mg BD after the first year of treatment. On interrogation of the summary care record more than 1 year after hospital discharge, adherence to the recommendations was observed in 38 out of 61 ACS patients (62%) and 3 elective patients (100%). 23 out of 61 ACS patients (38%) did not receive the recommended lower dose of 60mg BD: 1 patient remained on ticagrelor 90mg BD and required reminder to down titrate; 1 patient was admitted for another ACS and restarted 1 year of ticagrelor 90mg BD; 2 patients discontinued ticagrelor due to rash or breathlessness; and 2 patients received an alternative P2Y₁₂ inhibitor (1 prasugrel, 1 clopidogrel). The remaining 17 patients (28% of patients with recommendation for extended therapy) had no documentation why ticagrelor 60mg BD was not continued.

Conclusions Treatment recommendations for extended DAPT in a discharge letter leads to reasonable levels of adherence but further work is required to determine if improved long-term communication between cardiologists and primary care physicians leads to better care and clinical outcomes following myocardial infarction.

Conflict of Interest None

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INCIDENCE AND OUTCOMES OF BAILOUT STENTING FOLLOWING USE OF SIROLIMUS DRUG COATED BALLOON

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Introduction Bailout stenting post-Paclitaxel drug coated balloon use (DCB) is done with Limus eluting stent as we don't use Paclitaxel eluting stent anymore. However, when using Sirolimus DCB, bailout stenting is done with Limus eluting stent, but this raises the issue of drug toxicity with double dose of Limus to the vessel wall. In this study, we evaluate all patients treated with Limus DCB that required bailout stenting for safety and clinical outcomes.

Methods and Results We evaluated all patients who were treated with MagicTouch Sirolimus eluting DCB (Concept Medical limited, India) March 2018-June 2019. Bailout stenting per lesion were identified and studied for endpoints which included cardiac death, target vessel MI, stent thrombosis, target lesion revascularisation and MACE.

Between the study period; 406 patients (477-lesions) with a mean age of 66 ± 11.2 years (range; 37-90) were treated with MagicTouch DCB. Bailout stenting was required in 39 lesions (8%) and of which 22 were due to dissections and 17 were due to >50% recoil following DCB use. During a median follow-up of 302 days; there were no cases of cardiac death, 1-case of target vessel MI (2.6%) and 3-cases (7%) of

TLR. The MACE rate was 7%. There were no cases of stent thrombosis as per the ARC definition.

Conclusion One of the highlighting features of our study is low-rates of bailout stenting (9%). This may be due to our criteria of not stenting mild dissections (unless they are flow limiting) and not to expect stent like results. The outcomes in the bailout stenting group is excellent with very low hard clinical endpoints indicating there may not be any toxic effect from double dose of Limus drug (DCB + DES).

Conflict of Interest None

53 INVASIVE ANGIOGRAPHY FOLLOWING FFRCT – A REAL WORLD NHS EXPERIENCE

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Introduction Computed Tomography Coronary Angiography (CTCA) is NICE recommended as the diagnostic investigation of choice for patients presenting with stable angina. The technology is well recognised for providing coronary anatomy and descriptive analysis of coronary disease. Fractional Flow Reserve derived from CTCA (FFRCT) is an additional, FDA approved non-invasive technique for defining the probability of flow-limiting coronary artery stenosis that correlates with invasive FFR measurements. Previous studies undertaken at this District General Hospital highlighted the value of this tool in streamlining invasive strategies. This follow-up study sought to assess the next step in the patient pathway, comparing those identified as intermediate to high risk based for flow limiting disease on FFRCT with the findings and management strategy employed at subsequent invasive coronary angiography.

Methods A retrospective analysis of all CTCA's (SOMATON Definition edge, Siemens) reports between April 2018 and January 2019 with FFRCT (Heartflow Inc.) undertaken were reviewed. Any imaging that reported an intermediate to high risk of flow limiting coronary disease based on FFRCT were included, (values of <0.75 = High likelihood of flow-limitation; 0.75 - 0.80 = Intermediate). These were then compared to the strategy employed at invasive angiography, and invasive pressure wire assessments where undertaken.

Results A total of 108 studies were sent for Heartflow analysis, of which 27 had intermediate or high likelihood of flow limiting coronary disease reported and have had subsequent invasive angiography. This consisted of 60% male, with a mean of age 67 (range 42-83 years). Invasive pressure wire assessment via iFR (instantaneous wave free ratio) and/or FFR was carried out in 9 (33%) patients at angiography.

In total, 43 vessels with FFRCT intermediate or high likelihood vessels were assessed invasively. Table 1 below outlines the FFRCT findings versus invasive angiography management.

FFRCT Invasive Coronary angiogram

iFR/FFR -ve/iFR/FFR +ve Direct Re-vascularisation (PCI)

Direct Re-vascularisation (CABG) Not Invasively assessed

Intermediate 7 3 1 1 5

High 0 1 12 10 3

Table 1. This table compares FFRCT findings with invasive angiography strategy / findings.

Abstract 53 Table 1 Patient demographics, investigations and revascularisation

FFRCT	Invasive Coronary angiogram				
	iFR/FFR -ve	iFR/FFR +ve	Direct Re-vascularisation (PCI)	Direct Re-vascularisation (CABG)	Not Invasively assessed
Intermediate	7	3	1	1	5
High	0	1	12	10	3

Of the 3 vessels with 'high probability of flow-limiting disease' that were not invasively assessed, all were branch vessels (2 diagonals and 1 obtuse marginal).

Conclusions This study represents a real world NHS experience of activity undertaken in the catheter lab when functional information of coronary flow is known in advance of an invasive procedure. In some cases (13/16 [81%] of patients with a high probability of flow limiting disease) a direct decision on re-vascularisation was taken by the operator without further invasive pressure wire assessment, which may have reduced procedure duration. Further experience with FFRCT may increase operator confidence and thus increase the frequency of proceeding directly to re-vascularisation where indicated, thus reducing both procedure and fluoroscopic screening times. A further assessment of the role of FFRCT employed for stent planning pre-procedure is intended.

Conflict of Interest None

Allied Health Professionals/Nursing/Health Scientists

54 A CONTEMPORARY INTERPROFESSIONAL COLLABORATION SCHEME TO SUPPORT PATIENTS UNDERGOING PERCUTANEOUS CORONARY INTERVENTION FOR MYOCARDIAL INFARCTION

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Introduction There is a profound physical and psychological impact on patients presenting with acute ST elevation myocardial infarction (STEMI) during symptom onset, transit to hospital, during primary percutaneous coronary intervention (PPCI), and prior to discharge. There is little multimedia support for patients during this acute phase.

To (i) undertake a survey of healthcare professionals about patient support for STEMI, and (ii) develop a high quality mobile application with film, animation and audio as an educational resource, utilizing a novel interprofessional collaboration (IC) utilising experience and thoughts from key health professionals who support STEMI patients during the early phase of an acute admission.

Methods A mixed methods questionnaire survey about communication and patient education was prospectively self-administered to members of the IC. Results were utilised to develop multimedia resources hosted on a novel mobile application and website to support patients during acute STEMI.