Methods We performed a retrospective analysis of prospectively collected data on surgical turndown patients who underwent PCI between April 2013 and November 2020. Data were collected from the institutional electronic database.

Results Of 473 patients, 69.8% were male with mean age of 72±11 years and mean body mass index of 29±6 kg/m2. Turndown reasons were documented in 52.4 % of patients and mainly included the perceived frailty of the patient with associated comorbidities and/or the quality of distal coronary arteries. Elective cases with stable angina constituted 216 patients (45.7%) and urgent cases with acute coronary syndromes constituted 257 patients (54.3%). Mean hospital stay was 4±5 days. Procedural success was documented in 457 out of 473 patients (96.6%). Adjunctive tools included physiological assessments in 34 patients (7.2%), intracoronary imaging in 97 patients (20.5%), rotational atherectomy in 96 patients (20.3%), laser atherectomy in 12 patients (2.5%) and lithotripsy in 3 patients (0.6%). In-hospital complications included major adverse cardiac events in 32 patients (6.8%), death in 12 patients (2.5%), myocardial infarction in 21 patients (4.4%), ischaemic stroke in 1 patient (0.2%), coronary perforation in 7 patients (1.5%), repeat target vessel revascularization in 6 patients (1.3%), major access-site bleeding in 2 patients (0.4%), aortic dissection in 1 patient (0.2%) and new acute kidney injury requiring dialysis in 1 patient (0.2%).

Conclusions In real-world data, the process of determining suitability for surgical revascularization is often complex. PCI in surgically ineligible patients is generally safe and effective.

Conflict of Interest None

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PRASUGREL LOADING FOR PATIENTS WITH HIGH BLEEDING RISK PRESENTING WITH ST-SEGMENT ELEVATION MYOCARDIAL INFARCTION REFERRED FOR PRIMARY PERCUTANEOUS INTERVENTION – A RETROSPECTIVE ANALYSIS OF BLEEDING AND MORTALITY

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Background and introduction Prasugrel is an ideal antiplatelet agent for use in patients presenting with ST-segment elevation myocardial infarction (STEMI) undergoing primary percutaneous coronary intervention (PPCI) because of its rapid onset of antiplatelet action. However, trials have suggested an increased bleeding risk with Prasugrel compared to Clopidogrel because of its increased relative potency leading to a recommendation that it should not be used in patients with high bleeding risk (HBR) - >75yrs of age, <60kg in weight or a prior history of cerebrovascular accident (CVA).

Purpose There are some theoretical advantages in using Prasugrel for loading in all patients undergoing PPCI and switching to Clopidogrel (or low dose Prasugrel) for maintenance. Our STEMI protocol suggests Prasugrel loading for all comers undergoing PPCI on this basis (irrespective of bleeding risk). We examined the bleeding incidence and mortality in STEMI patients who underwent PPCI and received Prasugrel loading despite having HBR characteristics and compared it to those who received Clopidogrel (because of HBR) and those who did not have HBR characteristics (who received Prasugrel loading).

Abstract 59 Table 1 Table with incidence of bleeding on the 3 groups of patients based on BARC score

	BARC	Group 1			Group 2			Group 3			
		Score 1	Score 2	Score 5	Score 1	Score 2	Score 3a	Score 1	Score 2	Score 3a	Score 3b
Bleeding	Pre-Discharge	-	1	1	1	1	2	-	1	4	1
	Post-discharge	1	-	-	1	4	-	1	6	-	-
No bleeding		32			45			193			
Mortality		7			4			11			
		(20%)			(7.4%)			(5.33%)			

Methods 295 patients who underwent PPCI from 1/9/2017 - 4/6/2018 at Nottingham University Hospitals had their records reviewed retrospectively. The patients were assigned to one of 3 groups: 1) Clopidogrel Loading (generally because of HBR), 2) Prasugrel Loading-HBR and 3) Prasugrel Loading non-HBR. The Bleeding Academic Research Consortium (BARC) score was used to evaluate the bleeding episodes during admission and out to 6 weeks at clinic review. Mortality data were also collected.

Results 35 patients received Clopidogrel (group 1). The incidence of any BARC bleeding was 8.6% and in-hospital mortality was 20%. 54 patients with HBR received Prasugrel (group 2). The incidence of any BARC bleeding was 16.7% (p=0.27 by chi squared compared to group 1) and in-hospital mortality was 7.4% (p=0.078 by chi squared compared to group 1). 206 patients without HBR characteristics received Prasugrel loading (group 3). The incidence of any BARC bleeding was 6.3%. In-hospital mortality was 5.3%. (Table 1).
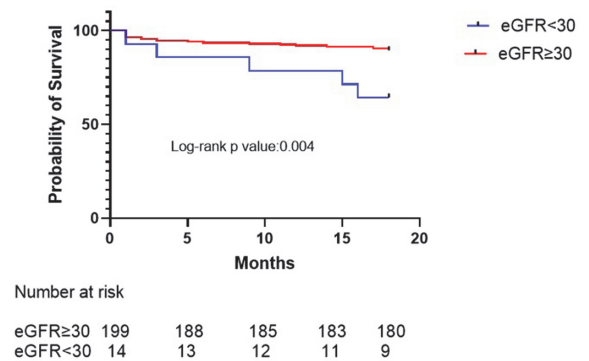
Conclusions HBR patients with Prasugrel loading before undergoing PPCI have a numerical increase in the risk of bleeding as compared to those receiving Clopidogrel loading, but this was not statistically significant. Furthermore, most of the bleeding was relatively minor (BARC1-22.2%, BARC2-55.6%, BARC3a-22.2%). However, there was a numerically lower in-hospital mortality for patients with HBR loaded with Prasugrel compared to Clopidogrel (although not quite reaching statistical significance). There are limitations with this retrospective analysis and prospective randomised trials looking at Prasugrel loading for patients with HBR undergoing PPCI would be useful. Potentially, STEMI protocols could be significantly simplified if Prasugrel loading for all-comers was deemed to be safe and efficacious.

Conflict of Interest None

LONG TERM OUTCOMES OF ROTATIONAL ATHERECTOMY IN PATIENTS WITH SEVERE LEFT VENTRICULAR SYSTOLIC DYSFUNCTION AND CHRONIC KIDNEY DISEASE: A 10-YEAR UNITED KINGDOM TERTIARY CENTRE EXPERIENCE
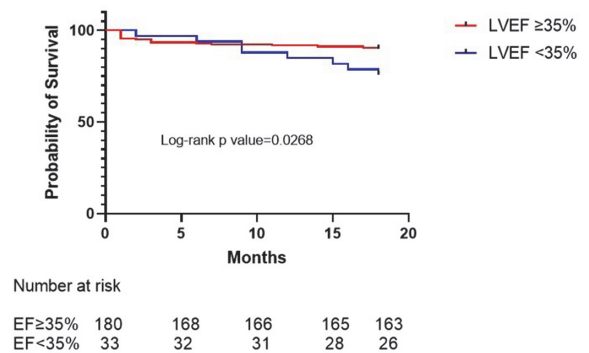
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Introduction Coronary artery calcification (CAC) is commonly seen in patients undergoing percutaneous coronary intervention (PCI) in the United Kingdom (UK). An aging population with risk factors such as diabetes and chronic kidney disease (CKD) have contributed to the rise in the prevalence of CAC. Despite advancement in PCI and alternative plaque modifying technology, rotational atherectomy (RA) remains an important adjunct to facilitate stent delivery. The UK records the highest use of RA in Europe, with a rate of 3.1% of total PCI. We report the 10-year experience of RA in a large UK tertiary hospital.

Method This was a single tertiary centre, retrospective study of prospectively collected data on 213 patients who underwent RA PCI between October 2010 to February 2020. Procedural success and complications were assessed. The clinical outcomes evaluated were: target lesion revascularisation (TLR), readmission with heart failure, acute coronary syndrome (ACS) within 1 year, 30-day mortality and 18-month mortality.

Subgroup analysis of outcomes in patients aged more than 80, severe left ventricular dysfunction and chronic kidney disease was performed.

Results Patients had a mean age of 72.9 ± 8.6 years. 77.9% (n=166) were male. 67.6% (n=144) had hypertension, 35.7% (n=76) had diabetes, 9.4% (n=20) were actively smoking, 6.6% (n=14) had CKD 4-5, and 15% (n=32) had severe left ventricular systolic dysfunction (LVSD). 51.2% (n=109) had prior MI, 34.7% (n= 74) had previous PCI and 20.2% (n=43) previously had coronary artery bypass grafts. Indications were: acute coronary syndrome (52.6%), stable angina (41.3%) and bailout during STEMI (6.1%). 75% were discussed at the MDT prior to RA, and 25% were ad-hoc PCI. Predominant access was via the radial artery (74.6%), using

Abstract 60 Figure 1 Kaplan-Meier survival curves of patients with CKD

Abstract 60 Figure 2 Kaplan-Meier survival curves of patients with LVEF <35%

Abstract 60 Table 1 List of complications

Complications	N(%)
No reflow	5 (2.3)
Coronary perforation	9 (4.2)
Aortic dissection	1 (0.5)
Burr entrapment	3 (1.4)
Severe bleeding*	1 (0.5)
Stent thrombosis	2 (0.9)
Peri-procedural stroke	0 (0)
Immediate death	1 (0.5)

Values are N (%).
*Bleeding complications as defined by Type 3-5 Bleeding Academic Research Consortium criteria (BARC).