ANS referrals resulted in greater trend towards change of management (38.2%) of patients compared with GC (32.7%) and EP (31.4%) (p=0.593 nurse vs. consultant). For those needing pacing, 24 were from ANS referrals compared to 25 for clinicians (23.5% vs 18.3% respectively, p=0.012). Median time to developing a pacing indication was 2.6 months for ANS and 4.1 months for clinicians; 25 had pacing indication within 3 months of ILR insertion. Overall, an ILR had a diagnostic yield of 34.1% (n= 104) (table 1).

**Conclusion**
The diagnostic yield of ILR insertion was 34%. ANS referrals trended towards greater diagnostic yield compared with clinicians and significantly more pacemaker indications. Our data suggest ANS patient selection for ILRs are at least comparable to clinicians.

**Conflict of Interest**
None

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**Interventional Cardiology**

**ISCHAEMIA AND NO OBSTRUCTIVE CORONARY ARTERY DISEASE (INOCA): PREVALENCE AND PREDICTORS OF CORONARY VASOMOTION DISORDERS**

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University of Glasgow; NHS NWTC; West of Scotland Heart and Lung Centre, Golden Jubilee National Hospital, UK; University Hospital Hairmyres, East Kilbride, UK; British Heart Foundation Glasgow Cardiovascular Research Centre; NHS Greater Glasgow & Clyde

**Background**
Ischemia and no obstructive epicardial coronary artery disease (INOCA) is a common clinical syndrome with distinct underlying causes.

**Objective**
To evaluate the prevalence and predictors of microvascular and/or vasospastic angina (MVA/VSA) in an unselected cohort of angina patients referred for invasive coronary angiography with suspected ischaemic heart disease in whom obstructive coronary artery disease (CAD) is excluded.

**Methods**
Prospective cohort study at two regional centres between November 2016 and December 2017 including patients with symptoms and/or signs of ischaemia prior to undergoing invasive coronary angiography (NCT03193294). Baseline risk was assessed (ASSIGN score) and validated questionnaires were completed prior to the angiogram including Rose angina, quality of life (EuroQOL [EQ-5D-5L]) and angina severity according to the Seattle Angina Questionnaire (SAQ). Patients with definite or probable angina without CAD [diameter stenosis <50% and/or FFR > 0.80] proceeded directly to assessment for disorders of coronary vasomotion. This involved an ad hoc interventional diagnostic procedure (IDP) using reference invasive tests for microvascular angina (MVA), vasospastic angina (VSA), both conditions or none. MVA and VSA groups were compared before logistic regression was performed to assess predictors of MVA and VSA.

**Results**
Three hundred and ninety-one patients with angina were recruited before undergoing invasive coronary angiography during the study period. Overall, 185 (47%) of subjects had INOCA and 151 of these underwent an IDP. INOCA patients reported similar angina burden with worse quality of life than CAD subjects (EQ5D-5L index 0.60 v 0.65 units; P=0.041). The mean age of patients who underwent the IDP was 60.9 years, 74% were female and their median predicted 10-year IHD risk was 18.6% (10.6, 31.4). 78 subjects (52%)...
had isolated microvascular angina, 25 (17%) had isolated vasospastic angina, 31 (20%) had both (MVA & VSA) only 17 (11%) had non-cardiac chest pain. Myocardial bridging of cor-

Introduction Patient understanding of angiography and angi-

methods Forty consecutive patients were interviewed, twenty

Results Table 1 shows that patients in the animation group

Abstract 51 Table 1 Clinical characteristics of the forty patients

According to whether they were or were not shown the animation

before their procedure

<table>
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Abstract 51 Figure 1 Patient understanding of the procedure in the animation and no animation groups

p value not significant for any differences in variables between two groups

of the procedure (ratio 3.0 (95% CI 1.2 to 7.7), p=0.023) and a 2.5-fold increase in the proportion of patients who felt

completely informed before giving consent (2.5 (1.2 to 5.1), p=0.01). There were directional, but non-significant, increases

in understanding of the benefits and alternatives of the procedure; ratios 1.6 (0.8 to 3.2), p=0.34 and 2.0 (0.6 to 6.9),

p=0.45, respectively.

Conclusion Viewing animations of angiography and angioplasty

before consent was associated with a greater understanding of

the procedures and the associated risks. Multi-language narra-

tion has the potential to further improve communication sur-

rounding consent. The approach is not limited to cardiology

and has the potential to be applied to all specialties in

medicine.

Conflict of Interest No conflict of interest

Current pharmacological approaches aimed at improving stent designs are limited by their inability to reduce endothelial
damage following stent placement and improve healing. Here,

we consider in vitro approaches that could be used to assess

effects of novel anti-oxidant stent coatings on damaged

endothelial cells following stent placement. Oxidative stress is

a physiological response to inflammation and can result in

activation of intracellular signalling molecule, leading to patho-

logical effects. One such molecule is calcium/calmodulin

dependent protein kinase IIβ (CaMKIIβ). Hyper-activation of

CaMKII is known to be directly linked to disease progression

in the heart and it has been implicated in endothelial dysfunc-
tion. It is therefore of interest to examine how novel drug-

free stent coatings might reduce or reverse oxidative damage

following stent placement and whether CaMKII may be a

potential target. Our initial experiments have used human

umbilical vein endothelial cells (HUVECs), challenged with

inflammatory and oxidative stress as a model for future inves-
tigations with novel stent coatings.

Novel stent-coatings were generated on 200 µm stainless

steel wires (316L medical grade), and their antioxidant activity

assessed at 8h and 24h using a DPPH (2,2-diphenyl-1-picryl-

hydrazyl) colorimetric assay and expressed as a percentage of

scavenged to total radicals. Antioxidant activity was observed