control SMC), as these coronary blood vessels cannot be isolated to examine unless the patient has undergone invasive surgery. Determining whether more accessible SMC, for example from skin microcirculation, are comparable to macrovascular SMC may therefore be a potential proxy for examining vascular dysfunction.

Methods Following informed consent, primary human SMC were isolated from macrovascular saphenous vein (SV) and the subdermal plexus (DV) by explant technique from multiple donors undergoing lower limb amputation at the Bradford Royal Infirmary. Validation of SMC identity and purity was performed using immunocytochemistry for alpha smooth muscle actin (α-SMA) and smooth muscle myosin heavy chain (SM-MHC). Morphological parameters were quantified using light microscopy and Image J analysis, and proliferation by live cell count.

Results The purity and identity of both SV-SMC and DV-SMC was confirmed by co-staining for α-SMA and SM-MHC. DV-SMC were spindle-shaped with an average spread cell area of 8279±1459 μm2. This was not significantly different to SV-SMC which had a mean spread cell area of 5081±1491 μm2. Proliferation curves over one week were slightly lower for DV-SMC as a 3.2-fold increase over initial seeding density, and 5.6-fold increase in SV-SMC.

Discussion/Conclusion This is the first description of the isolation of primary SMC from the dermal plexus. DV-SMC appeared comparable to SV-SMC in terms of phenotype, though more detailed further studies on cell function and behaviour would be valued. In summary, dermal vessels may be an accessible way to examine vascular SMC health in the clinic.

Conflict of Interest none

**BS8**

HIGH SENSITIVITY C-REACTIVE PROTEIN AT BASELINE PREDICTS CARDIOVASCULAR OUTCOMES AT 20-YEAR FOLLOW-UP IN THE ASCOT LEGACY STUDY

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Rationale for the Study The prediction of future cardiovascular events in those with vascular risk factors is important to appropriately optimise preventative therapies in those at greatest risk. The value of high sensitivity C-reactive Protein (hsCRP) has been questioned in this regard, and recent studies have suggested the utility of this widely assessed biomarker for predicting future mortality in those presenting with suspected myocardial infarction (MI), however the relationship in stable patients is still debated. Therefore, we investigated the usefulness of baseline hsCRP for predicting incident cardiovascular events in hypertensive patients in the Anglo-Scandinavian Cardiac Outcomes Trial (ASCOT) Legacy Study.

Methodology The ASCOT Legacy Study reports events after 16 years of follow-up of the UK participants in the original ASCOT trial. ASCOT was a multicentre randomised trial, randomising patients with hypertension into amldipine-based or atenolol-based blood pressure-lowering (BPL) treatment. Furthermore, those with total cholesterol £6.5 mmol/L and no previous lipid-lowering treatment, underwent further randomisation to either atorvastatin or placebo as part of the lipid-lowering (LL) arm of ASCOT. We examined outcomes related to hsCRP levels in the LL arm, dichotomously (< or ≥ 2mg/L), in tertiles or continuously, adjusting in Model 1 (age, sex, socio-economic status [years of education] and ethnicity) and Model 2 (Model 1 plus current smoker, body mass index, baseline systolic blood pressure, creatinine, diabetes, history of vascular diseases, history of antihypertensive medication and allocation to BPL and LL). All-cause mortality, non-fatal and fatal MI, total coronary events and procedures and total cardiovascular events were assessed.

Results 5,294 participants were included in the final cohort, after exclusion of 3,286 participants in the LL arm (n=8,580) without hsCRP data. There were no substantial differences in baseline characteristics between treatment allocation arms (non-randomised, placebo or atorvastatin). The highest tertile of hsCRP (median [IQR], 6.41 [4.81-10.44]) strongly related to all-cause mortality, withstanding adjustment in both Model 1 (HR 95% CI, 1.38 [1.27-1.53]; p<0.001; p<0.001 for interaction) and Model 2 (HR 1.25 [1.10-1.42]; p<0.001; p<0.001 for interaction). Moreover, the highest hsCRP tertile also related to fatal and non-fatal MI (Model 2 HR 1.32 [1.05-1.67]; p=0.020; p=0.019 for interaction); total coronary events and procedures (Model 2 HR 1.27 [1.09-1.47]; p=0.002; p=0.003 for interaction); and total cardiovascular events (Model 2 HR 1.22 [1.08-1.37]; p=0.001; p=0.001 for interaction). These findings were confirmed in Kaplan-Meier analysis, with p<0.001 between tertiles for all outcomes.

Conclusions This analysis of ASCOT Legacy Study demonstrates that higher baseline hsCRP levels independently predict cardiovascular events and all-cause mortality at long term follow-up in stable patients with hypertension.

Conflict of Interest None

**BS9**

ANTIBODIES AGAINST OXIDISED LOW-DENSITY LIPOPROTEIN AND VALVE CALCIFICATION IN THE SCOT-HEART TRIAL

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Background Coronary CT-derived valve calcification is becoming increasingly important in the multi-modality assessment of valvular disease, especially in aortic and mitral stenosis, where trans-catheter structural heart interventions may be indicated. Natural antibodies targeted against oxidised low-density lipoprotein (oxLDL), are related to lower coronary calcification, less coronary atherosclerotic necrotic core and freedom from cardiovascular events.

Methods In a study of the multicentre randomised controlled SCOT-HEART trial (Scottish COmputed Tomography of the HEART), a multicentre randomised controlled trial exploring the impact of coronary CT angiography in the management of patients with stable chest pain, the relationship between the presence or absence of mitral and aortic valve calcification and IgM/ IgG anti-oxLDL antibodies was