**LEFT BUNDLE BRANCH BLOCK: IS IT TIME TO RECONSIDER THE CRITERIA FOR PRIMARY PERCUTANEOUS CORONARY INTERVENTION?**

J Basu, **M. Mikhail**, T. Realey, W. Orr

Royal Berkshire NHS Foundation Trust, Reading, UK

*Background*: The European Society of Cardiology includes ST-elevation and presumed new onset left bundle branch block (LBBB) as indications for immediate reperfusion therapy but LBBB may be caused by a number of alternative pathologies.

*Objectives*: This audit sought to ascertain the proportion of patients presenting with chest pain and LBBB who were confirmed as having acute coronary syndrome (ACS) compared to patients presenting with ST/T wave ECG changes. We also studied characteristics that might help to differentiate patients with LBBB into low and high likelihood of ACS.

*Methods*: We analysed data from 3103 patients presenting with chest pain. Demographics, mortality rates and co morbidity data in patients presenting with LBBB were directly compared with patients who presented with ST/T wave ECG changes.

*Results*: Patients with LBBB represented only 6.5% of all ACS admissions. Only 58% of these triggered primary PCI activation compared to 92% of patients admitted with ST elevation. LBBB patients were not older, were less likely to be male but had significantly higher mortality rates than patients with ST/T wave ECG changes. Several factors appear to be useful in stratifying LBBB patients into high risk of ACS including previous infarction, peripheral vascular disease, cerebrovascular disease, chronic renal failure and smoking history.

*Conclusion*: LBBB is only a small component of ACS admissions, is a much less accurate predictor of acute coronary occlusion, but is undoubtedly a marker of greatly increased risk of mortality. Further work is needed to identify factors that aid risk stratification of these patients.