**Demonstration of Coronary Atheroma on Computed Tomography Coronary Angiography is Associated with Appropriate Changes in Statin Therapy**

**Background:**

Computed tomography coronary angiography (CTCA) is important in assessment of chest pain, with opportunities for early diagnosis and preventive therapy. The study assessed whether finding of atheroma on CTCA was associated with statin use early, and up to one year later.

**Methods:**

Patients with chest pain undergoing CTCA between 21 September 2020 and 31 December 2021 were identified from the Aotearoa New Zealand All Cardiology Services Quality Improvement (ANZACS-QI) cardiac CT Registry at Middlemore Hospital, Auckland, New Zealand. Patients were classified into three groups: no atheroma, non-obstructive, and obstructive coronary artery disease (CAD).

**Results:**

548 patients with acute chest pain and 746 with stable chest pain underwent CTCA. Of those with acute chest pain and obstructive CAD, statin dispensing increased from 52.9% prior to admission to 92.6% early post-CTCA. 87.5% remained on a statin up to a year post-CTCA. In patients with non-obstructive CAD, statin dispensing was 45.7% prior to admission, 67.8% early post-CTCA and 59.6% at 1-year. In those without atheroma there was a small increase in statin dispensing post-CTCA which fell by 1 year. Patterns of statin dispensing were similar in with stable chest pain except that dispensing increased in the community prior to CTCA. , Multivariate regression demonstrated that the presence of atheroma both with/without obstructive CAD on CTCA was associated with higher levels of statin dispensing.

**Conclusion:**

CTCA finding of atheroma is associated with increases in statin use. There may be opportunities to further optimise care by greater statin utilisation in patients with non-obstructive CAD.