

Sweet as – the initial impact of an acute coronary syndrome admission on glycaemic control in known diabetic patients

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Background: Diabetes mellitus (DM) is a cardinal cardiovascular risk factor. Tight glycaemic control is advocated as part of primary and secondary CV disease prevention.

Purpose: The aim of this study was to investigate the impact of acute coronary syndrome (ACS) admission on subsequent glycaemic control in known type I/II DM patients.

Methods: Patients were included if (a) known to have type I/type II DM prior to admission (b) admitted with ACS under the care of a cardiologist between January and December 2020 and (c) in possession of a glycated haemoglobin (HbA1c) result within 6 weeks of index admission (peri-admission) and a repeat result around 6 months thereafter (follow-up). Peri-admission and follow-up HbA1c levels were compared using Wilcoxon signed-rank test.

Results: One hundred and seventy patients [124 (72.9%) male; mean age 67.88 ± 10.18 years] were included. During index admission, a change in DM treatment was performed in 80 (47.1%) patients, while a diabetology review was requested for 37 (21.8%) patients. A significant reduction in HbA1c levels was demonstrated following an ACS admission with a peri-admission median level of 7.5% (IQR 2.3%) to a follow-up median of 7.1% (IQR 1.7%) (Z statistic -4.145 , $p < 0.001$), although at 6 months 119/170 (70%) patients still had an HbA1c above the 6.5% target.

Conclusion: Changes in DM treatment and/or advice during ACS admission appear to have an initial beneficial impact on glycaemic control in known diabetics. Aggressive long-term control is necessary to ensure more effective risk reduction.