

Standardisation of diabetes screening and management in patients admitted to NHS Golden Jubilee National Hospital with Acute Coronary Syndromes

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- Diabetes is a modifiable risk factor for cardiovascular disease (CVD)
- Patients with coexistent diabetes and coronary artery disease are at higher risk for recurrent myocardial infarctions and complications such as in-stent restenosis
- Screening for diabetes using a HbA1c blood test in patients with CVD carries a Class IA recommendation¹
- NHS Golden Jubilee National Hospital (GJNH) is a tertiary cardiac referral centre in Scotland
- Currently, screening for diabetes in patients with Acute Coronary Syndromes (ACS) occurs only sporadically at GJNH and its referring health boards

OBJECTIVES

- Audit current diabetes screening activity among ACS patients treated at GJNH
- Engage with Clinical Chemistry service to identify potential barriers to increasing HbA1c processing
- Obtain support from Cardiology Clinical Governance committee to implement routine HbA1c screening as standard of care at GJNH

METHODS

- Current guidelines on management of diabetes and cardiovascular disease were consulted
- Medical records of all patients admitted to the Coronary Care Unit at GJNH during the last 7 days of April 2020 and April 2021 were reviewed to identify recent trends in diabetes screening activity
- Engagement with Laboratory Services to understand sample processing workflow, cost and potential efficiencies of scale from increased volume of HbA1c requests
- SBAR position paper presented to Cardiology Clinical Governance committee recommending implementation of routine HbA1c screening

RESULTS

- In the April 2020 audit cohort, 8/26 (31%) of ACS patients had a HbA1c level checked – among these, 2 new diagnoses of diabetes were made
- Despite increased awareness and discussion on HbA1c screening in the interim, just 6/28 (21%) of patients were screened in the corresponding period in April 2021 – 1 new diagnosis of diabetes made but management delayed as result only became available after the patient's discharge
- Following a presentation in which guideline recommendations and current practice at GJNH were outlined, the Clinical Governance committee has recommended that routine HbA1c screening be implemented for all patients with Acute Coronary Syndromes
- Relevant department heads are now collaborating on developing a new screening policy
- The proposal has prompted an overall reassessment of diabetes management at GJNH.
- GJNH does not have a clinical endocrinology service on-site. In conjunction with diabetes teams in neighbouring health boards, we plan to develop new 'care bundles' for the management of diabetes in patients with cardiovascular disease
- These bundles will incorporate algorithms for the initiation of appropriate medications in newly diagnosed diabetes and titration of therapy in ACS patients identified as having suboptimal glycaemic control
- Rather than pushing the issue back to primary care, a more proactive approach in our tertiary centre will afford earlier initial intervention and risk factor modification in our patients.

CONCLUSIONS

- Screening for diabetes among patients with Acute Coronary Syndromes at the NHS Golden Jubilee and its referring health boards is performed sporadically at present.
- Due to a low volume of requests at GJNH, HbA1c is currently only batch processed twice-weekly leading to an extended turn-around-time and creating a clinical risk where results can become available after patients have already been transferred or discharged.
- Implementing routine HbA1c screening will 1) reduce variation by ensuring all our patients receive care in line with best practice guidelines and 2) mitigate clinical risk as rapid reporting becomes available with efficiencies of scale
- What began as a quality improvement project to improve screening policies has led to an overall review of diabetes management at GJNH. The undertaking has expanded to become a truly multidisciplinary endeavour with the promise of tangible improvements in the safety and quality of the service provided to our patients.

REFERENCES

1. Cosentino F et al. 2019 ESC Guidelines on diabetes, pre-diabetes, and cardiovascular diseases developed in collaboration with the EASD. Eur Heart J. 2020;41(2):255-323.