Improving the prescription of secondary prevention medications in patients with acute coronary syndrome in acute assessment unit: a quality improvement project

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Introduction

The European Society of Cardiology recommends secondary prevention medications in patients with acute coronary syndrome (ACS).[1] This not only includes antiplatelet and antithrombotic drugs, but also statins, angiotensin converting enzyme inhibitor (ACEi) and beta blockers, the latter two of which have to be uptitrated daily until the maximum tolerable dose is achieved before discharge.

In this particular project, we identified the perceived suboptimal practice of prescribing ACEi, beta blockers and statins in patients with confirmed ACS in the acute assessment unit (AAU). Stable patients with ACS stay in Hull Royal Infirmary for 1–2 days due to the bed situation in cardiology wards at Castle Hill Hospital before transfer for coronary angiogram (PCI). After percutaneous coronary intervention the majority are discharged the following day if stable. We identified that such patients could potentially be discharged on a much higher tolerable dose of these medications if started in AAU at Hull Royal Infirmary instead of cardiologists having to rely on general practitioners to uptitrate in the community.

Our objective was to improve secondary prevention prescription to ideally 100% or at least 80% in line with our trust audit departmental cut-off for good practice. Diagnostic uncertainty, acute renal insult, hypotension, heart blocks, acute heart failure, drug allergy and pre-admission intake of these medications were among the exclusion criteria.

Methodology

PDSA* 1: Current practice feedback to AAU workforce via trust email (foundation trainees, core medical trainees, ACCS trainees, registrars, consultants). Baseline prescription for ACEi, beta blocker and statin was 50%.

PDSA 2: Educational session was conducted about society recommendations in ACS during handovers. We disseminated our local secondary prevention prescription guideline via a trust email to all AAU workforce.

PDSA 3: Educational posters disseminated across the department for reminder.

PDSA 4: Re-education and reinforcement, targeting a weekend cohort of the workforce.

*PDSA = Plan, Do, Study, Act.

Results and discussion

A total of 27 patients had confirmed diagnosis of ACS during the course of this project. We nearly achieved the objective of achieving 100% prescription after three PDSA cycles in 3 weeks. We learned that constant reminder, education and prompting did improve the performance level of our junior medical team for the betterment of patient care. Changing the cohort of junior doctors on AAU was an identified barrier in sustaining the good practice. Therefore, we recommended continuous surveillance, education and feedback by registrars and consultants during post-take ward rounds and handovers.

Conclusion

Maintaining good clinical practice in acute assessment unit can be challenging due to the constant changing nature of the workforce. Foundation and core trainees with no prior experience of specialised medical rotation are not always aware of society guidelines when managing specialised cases. Our methodology was centred on education and feedback targeting the workforce. Within 3 weeks, nearly every patient with ACS was appropriately commenced on secondary preventive medications. This project supports further development and spread of this approach, encouraging all physicians at registrar and consultant level to supervise such small but effective teaching sessions during post-take ward rounds and daily handovers. ■

Reference

1 Roffi M, Patrono C, Collet JP *et al.* 2015 ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation: Task Force for the Management of Acute Coronary Syndromes in Patients Presenting without Persistent ST-Segment Elevation of the European Society of Cardiology (ESC). *Eur Heart J* 2016;3:267–315. Available at: https://academic.oup.com/eurheartj/article/37/3/267/2466099 [Accessed 28 February 2019].

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