

DEPRESCRIBING ANTIHYPERGLYCAEMIC DRUGS IN THE ELDERLY

A QUALITY IMPROVEMENT PROJECT



Wye Valley
NHS Trust

Dr Pavithralakshmi Venkatraghavan, Dr Richard Gilpin

INTRODUCTION

There has been a recent shift in guidelines regarding HbA1c targets in the elderly population from a stringent approach towards more relaxed treatment targets. NICE (June 2022) advocate more individualised and less imposing HbA1c targets for elderly/frail pts with type two diabetes (T2DM) especially in the following circumstances:

1. Long term benefit is uncertain for e.g. due to limited life expectancy/significant comorbidities.
2. Tight glycaemic control would increase the risk of poor clinical outcomes should they develop hypoglycaemia, for example, in patients who are at risk of falls, dementia and impaired hypo awareness.

These guidelines are backed up by randomised control trials have showed that HbA1c levels below 53 mmol/mol (7%) because of anti-hyperglycaemic therapy are associated with increased morbidity and mortality in elderly patients with T2DM. This is particularly true with hypoglycaemia causing medications such as sulfonylureas and insulin (1,2).

This led us to explore the current standards with regards to HBA1c review and consequent anti-hyperglycaemic deprescribing in older patients

PDSA1: INFORMATION POSTER:

FRAILITY
SAME DAY EMERGENCY CARE



DID YOU KNOW?

ANTIHYPERGLYCAEMICS

HbA1c levels **below 53 mmol/mol** as a result of antihyperglycaemic therapy are associated with increased morbidity and mortality in older people with type two diabetes

The microvascular benefits gained from 10+ years of tight glucose control **persist for many years**, regardless of whether the intensity of treatment is subsequently reduced.

Consider deprescribing for patients over 65 years old and:



At risk of or experiencing hypoglycaemia



HbA1c lower than individualised target



Unclear benefit from therapy continuation, e.g. frail, significant comorbidities

THINK DEPRESCRIBING!



- Is my patient presenting with an adverse event from their medication?
- Are all of their current medications appropriate?
- Do I know why they are taking their current medications?

OBJECTIVES

- Prepare a list of randomly selected hospitalised elderly diabetic patients with multiple co-morbidities and/or issues with frailty.
- Evaluate whether these patients had their Hba1c reviewed and collaborated with their clinical condition to consider deprescribing their anti-hyperglycaemic medications.
- Demonstrate practical recommendations which would be both welcoming and optimal for better clinical outcomes.

METHOD

Study group: Patients aged 65 and over with a history of T2DM (on at least one anti-hyperglycaemic drug) and had a Rockwood Frailty score of 5 or more were included in the analysis. Patients were randomly selected from ED database (Symphony), Medical take and ward admissions.

2 audit cycles have been completed over a period from March - May 2024 with a total sample size of 23 patients. Data was collected from ED clinician notes and discharge summaries, Clinical Noting in Maxims and included:

- Clinical information including diagnosis, co-morbidities, Estimated life expectancy.
- Date and test result of the most recent HbA1c
- Evidence of hbA1c being reviewed and documented at any point during their stay and subsequent considerations to deprescribe their anti-hyperglycaemics accordingly.

RESULTS

The results of the first cycle showed that only 2 out of the 10 patients had their HbA1c reviewed and documented out of which one had evidence of deprescribing considerations for anti-hyperglycaemics in the notes. Most of the patients had their HbA1c ranging from 50-60mmol/mol and could have benefited from potential deprescribing of their anti-hyperglycaemics.

After the first cycle, a poster was created highlighting the importance of appropriate HbA1c targets in the elderly/frail patients and displayed in various wards in the hospital which received good informal feedback. The results of the second cycle showed that there has not been much clinical improvement so further work is ongoing.

DISCUSSION

It is well known that hypoglycaemia in older people is associated with significant comorbidities leading to physical and cognitive dysfunction (3). Intensive glycaemic control strategies in older people with strict HbA1c targets have been shown to increase the frequency of hypoglycaemia leading to poor clinical outcomes such as increased risk of cardiovascular events, falls, dementia, further hospital admissions and an overall increased mortality. There is also significant economic burden on the healthcare due to higher annual healthcare costs (4,5).

LEARNING AND SHARING

We now know from this audit that most older diabetic patients presenting to the hospital do not have their Hba1c reviewed and deprescribed diabetic medications. This means that they may be on diabetic medications that could be potentially causing more harm than benefit. Despite an unmet need, more work needs to be done to ensure that deprescribing is considered for these patients.



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