

Primum non nocere – deprescribing in more vulnerable individuals

Tight glycaemic control can lead to harm, including hypoglycaemia and other adverse drug events, in more vulnerable individuals with limited life expectancy. These authors explored the impact of deintensification of diabetes medications on hospital visits and mortality in older nursing home residents with limited life expectancy and/or advanced dementia and tight glycaemic control. During the 60 days following deintensification of treatment, nearly a third of all residents presented at hospital and 3.9% died. Analysis found no association between these 60-day adverse outcomes and deintensification of treatment. These findings suggest that deintensification of diabetes treatment is an appropriate and holistic strategy in older adults with limited life expectancy and is not likely to increase harm in the short term.

Management of diabetes in older adults should be individualised, especially in the context of co-morbidities such as frailty. Tight glycaemic control may be appropriate in those with a long life expectancy so that they might derive the benefit of reductions in microvascular and, to a lesser extent, macrovascular complications. However, tight glycaemic control can lead to harm, including hypoglycaemia and other adverse drug events, in more vulnerable individuals with limited life expectancy, in whom instead the emphasis should be on quality rather than quantity of life.

The well-conducted, retrospective cohort study reviewed here explores the impact of deintensification of diabetes medications on all-cause A&E visits, hospitalisations and mortality in older male nursing home residents with limited life expectancy and/or advanced dementia and tight glycaemic control (based on an HbA_{1c} <58 mmol/mol).

Nearly a third of the nursing home residents had their diabetes medications deintensified within 30 days of their HbA_{1c} measurement (dose reduction or cessation of a non-insulin medication, or stopping insulin for over 7 days and not replacing with an alternative glucose-lowering medication). Notably, those who had their medication deintensified were more likely to have an HbA_{1c} <42 mmol/mol and were more likely to be receiving short-acting insulins or a sulfonylurea at baseline.

During the 60 days following deintensification of treatment, nearly a third of all residents were assessed in A&E or hospitalised for any cause, and 3.9% died. After entropy weighting (a similar

statistical technique to propensity score matching, used to estimate treatment effect and minimise bias due to confounding), there was no association found between these 60-day adverse outcomes and deintensification of treatment.

These findings suggest that deintensification of diabetes treatment is an appropriate and holistic strategy in older adults with limited life expectancy and is not likely to increase harm in the short term.

The authors do highlight potential limitations of the study: the participants were entirely male and changes in insulin dose were not assessed as part of deintensification. Finally, the authors acknowledge that there has been increased prescribing of newer cardioprotective diabetes therapies, such as SGLT2 inhibitors and GLP-1 receptor agonists, since the study closed (circa 2015), which may also have impacted the results and their generalisability.

On a related note, a recently published systematic review explored attitudes of older adults (≥65 years) and their carers towards deprescribing (Seewoodharry et al, 2022). An important key theme elicited was that older adults and their carers were willing to have their medication deprescribed if facilitated by a **trusted** healthcare professional. Specifically, the study also found that pill burden, any adverse effects and lack of effect acted as enablers of de-prescribing. Conversely, fear of stopping medications (the possibility of negative consequences such as withdrawal effects and progression of disease) and insufficient time to fully discuss deintensification of treatment were barriers to deprescribing. Moreover, when conversations about deprescribing were initiated, some older



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