

Overtreatment and undertreatment in a sample of elderly people with diabetes

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Abstract

Aims In older adults with type 2 diabetes (T2D), overtreatment remains prevalent and undertreatment ignored. The main objective is to estimate the prevalence and examine factors associated with potential overtreatment and undertreatment. **Method** Observational study conducted within an administrative database of older adults with T2D who registered in 2018 at the Portuguese Diabetes Association. Participants were categorized either as potentially overtreated (HbA1c[?]7.5%), appropriately on target (HbA1c[?]7.5–[?]9%), or potentially undertreated (HbA1c>9%). Results of 444 participants, potential overtreatment, and undertreatment were found in 60.5% and 12.6% of the study population. Taking the patients on target as a comparator, the group of potentially overtreated showed to be more males (61.3% vs.52.2%), less-obese (34.1% vs.39.2%), higher cardiovascular diseases (13.7% vs.11%), peripheral vascular diseases (16.7% vs.12.8%), diabetic foot (10% vs.4.5%), and severe kidney disease (5.2% vs.4.5%). Conversely, the potentially undertreated participants were more females (64.2% vs.47.7%), obese (49% vs.39.2%), had more dyslipidemia (69% vs.63.1%), peripheral vascular disease (14.2% vs.12.8%), diabetic foot (8.9% vs.4.5%), and infections (14.2% vs.11.9%). The odds of potential overtreatment were mostly decreased by 59% of females, 73.5% in those with retinopathy, and 86.3% in insulin, 65.4% sulfonylureas, and 66.8% in SGLT2 inhibitors users. Contrariwise, an increase in the odds of potential undertreatment was more than 4.8times higher in insulin, and more than 3.1times higher in sulfonylureas users. **Conclusion** potential overtreatment and undertreatment in older adults with T2D in routine clinical practice should guide the clinicians to balance the use of newer oral antidiabetic agents considering its safety profile regarding hypoglycemia.

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