

Deprescribing in palliative care

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ABSTRACT

The use of multiple medications is common in palliative care, putting patients at risk of adverse events and a high tablet burden. Deprescribing is the process of reviewing and stopping potentially inappropriate medications in order to improve quality of life. Barriers to deprescribing exist meaning many patients will take multiple medications despite being in the final months of life. The OncPal deprescribing guideline is a useful tool to support the process for patients with a limited life expectancy. There is evidence for the safety of stopping certain medications, particularly those aimed at primary prevention. A systematic process of reviewing individual medications and their appropriateness is recommended.

Introduction

Deprescribing describes the process of identifying and discontinuing medications with little or no benefit and potential harm, in order to improve quality of life.¹ It is common for patients who are being treated with palliative intent to still be prescribed multiple medications, often aimed at primary or secondary prevention despite their prognosis being in the region of weeks to months. These are often only discontinued in the final days of life when the patients are no longer able to swallow.

The practice of deprescribing involves a stepwise, patient-centred process that is not about denying effective treatment but reducing the risks and burden of taking multiple medications.¹ The initial stage involves taking a detailed medication history to ascertain all medications that a patient is taking (prescribed and 'over the counter'). This should also include details regarding the indication for each, when they were started, and whether they are actually being taken. Following this, consideration of the risk of drug induced harm for individual patients is recommended, taking into account factors such as age, co-morbidities, number of medications and types of medications. Each individual medication should then be assessed considering the potential to provide ongoing benefit and its resultant eligibility to be discontinued. Medications for discontinuation can then be prioritised (usually one at a time) and a plan for follow-up and monitoring of effects agreed upon with the patient (see Box 1).¹

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Box 1. Steps to deprescribing

- > Take detailed medication history including indication for each drug.
- > Consider potential for drug induced harm ie age of patient, comorbidities, number of medications, types of medications.
- > Consider each individual medication and the potential to provide ongoing benefit.
- > Prioritise medications for deprescribing (usually one at a time), give explanations to patient. Agree follow-up arrangements.
- > Carry out follow-up assessment to assess effects of deprescribing. Consider further deprescribing.

Polypharmacy

The process of deprescribing reduces polypharmacy which can be defined as the use of multiple medications² or the use of any unnecessary or inappropriate medication.³ Polypharmacy is common in the palliative care population due to the fact that patients are often taking medications for long-term conditions and potentially anti-cancer therapy, coupled with an increasing number of drugs for symptom management. Sera *et al*, for example, found the mean number of drugs prescribed for 4,252 patients across 11 hospices in the United States of America was 15.7 (range 1–100 medications), albeit some of these were 'as required' medications.⁴ Similarly, Lundy *et al* reviewed medications

Key points

Polypharmacy is common in the palliative population.

Deprescribing refers to the discontinuation of inappropriate or unnecessary medications.

There is evidence to support the safety of stopping certain preventative medications in patients with a limited life expectancy.

The 'OncPal deprescribing guideline' is a useful tool to support the process for cancer patients with a limited life expectancy.

KEYWORDS: Polypharmacy, deprescribing, OncPal deprescribing guideline, medication review ■

Box 2. Barriers to deprescribing^{1,2,8,9}

- > Limited time.¹
- > Lack of clarity over whose role it is to deprescribe.⁸
- > Concern regarding stopping medications initiated by specialists.¹
- > Uncertainty regarding the ongoing benefits of medications.¹
- > Concern over drug withdrawal effects.²
- > Uncertainty regarding the timing of deprescribing discussions when goals of care are unclear.¹
- > Concern from healthcare professionals that patients may feel they are 'giving up hope'.⁹
- > Reluctance from patients to change medications.²

being taken by 138 patients admitted to five hospices in Northern Ireland and found the mean number of medications being taken was eight (range 0–17).⁵

The consequences of polypharmacy include an increased risk of adverse events due to the combinations of medications prescribed, a high tablet burden for patients and increased costs.⁶ There is also the risk that, faced with an increasing number of medications to take, patients may not prioritise the most essential drugs. Schenker *et al* evaluated the associations between polypharmacy and quality of life in 372 patients with a life-limiting illness.⁷ They found that taking more medications was indeed associated with higher symptom burden and lower quality of life.

Barriers to deprescribing

The above begs the question as to why deprescribing is not more commonplace for patients whose disease is palliative when there are clear benefits to the process? Barriers to the process exist at patient, prescriber and organisational levels (see Box 2).

There is no doubt that managing medications for life-threatening illnesses, non-life threatening co-morbid conditions and symptom control is challenging for clinical staff. The initiation of medicines is often guideline driven, but guidance is generally unclear regarding when it may be safe or appropriate to discontinue treatment.¹⁰

Overcoming the barriers to deprescribing is important. An understanding of the potential benefits of the process may prompt clinicians to be more proactive particularly for patients with a limited life expectancy. A stepwise approach as described previously can help alleviate patient anxiety with regard to stopping medications and the implications of this process.¹¹ These discussions can form part of advance care planning where priorities of care are considered. Clinicians need to be confident in initiating these discussions, despite a potential degree of discomfort regarding how the patient will respond. In fact, evidence suggests physicians overestimate patients' discomfort with stopping medications.¹²

Deprescribing tools

Various tools have been developed to support deprescribing practices but the majority of these relate to the elderly care population and do not obviously translate across to palliative care. One tool aimed at supporting deprescribing in palliative oncology

patients is the 'OncPal deprescribing guideline'.¹³ The guideline was developed by systematically reviewing medication classes and examining the literature to support the discontinuation of each medication. The guideline was drafted and sent to oncology consultants, palliative medicine consultants and senior pharmacists for review.

The guideline was tested by a clinical pharmacist applying it to the medication lists of 61 cancer patients with an estimated prognosis of 6 months or less. The same medication lists were reviewed by a panel of experts (clinical oncologist, medical oncologist and palliative care consultant) who used their knowledge and expertise to identify potentially inappropriate medications. The results from the two groups were compared to establish the robustness of the OncPal guideline. The proportion of medications assessed correctly using the OncPal guideline was 94% (as compared to the expert panel). Overall agreement using Cohen's kappa coefficient was 0.83.¹³ The reliability of the tool has however not been reported. Table 1 shows an adapted version of the OncPal.

Medication classes suitable for deprescribing

Classes of medications highlighted as being appropriate to consider deprescribing are those prescribed for primary and secondary prevention, or those with no short term benefit eg statins, antihypertensives, gastric protection and, in some cases, oral hypoglycaemics.

Kutner *et al* conducted a multicentre, randomised controlled trial on the safety of discontinuing statins in patients with a life expectancy of less than 1 year.¹⁴ They showed no difference in the number of patients who died within 60 days of study enrolment and no difference between the two groups of occurrence of cardiovascular-related events. They conclude that stopping statins in this cohort of patients was safe and may have benefits including enhanced quality of life.¹⁴

Antihypertensive medications are also an option for deprescription in the palliative population, particularly when geared towards primary prevention, and when the time to therapeutic benefit is greater than estimated life expectancy.¹⁵ Pasierski highlights the importance of reviewing and considering stopping antihypertensives for patients with a limited life expectancy.¹⁶ Often towards the end of life there is a natural lowering of blood pressure putting those continuing to take these drugs at risk of hypotension (and dizziness and falls).¹⁶

Gastric protection where there is no history of gastrointestinal bleeding, peptic ulcer, gastritis, or when taken to prevent side effects of other medications that have been ceased (eg steroids or nonsteroidal anti-inflammatory drugs) is likely to be unnecessary.¹⁷ Oral hypoglycaemics may no longer be indicated if the sole use was secondary prevention of diabetic associated events or to treat mild hyperglycaemia.¹⁸ Certainly in the final weeks of life there should be more relaxed blood glucose control for patients previously on strict regimens.¹⁸

Conclusion

Deprescribing is an important consideration for patients with a limited life expectancy. It can result in reduced adverse events, reduced tablet burden, prioritisation of the most essential medications, reduced costs and, most importantly, enhanced quality of life. A stepwise approach to deprescribing is

Table 1. The OncPal deprescribing guideline.

Class of medication	Medication	Situations of limited benefit
Aspirin	Aspirin	Primary prevention
Lipid lowering medications	Statins Fibrates Ezetimibe	All indications
Blood pressure lowering medications	ACE inhibitors Sartans Beta blockers Calcium channel blockers Thiazide Diuretics	Mild to moderate hypertension Secondary prevention of cardiovascular events Management of stable coronary artery disease
Anti-ulcer medications	Proton pump inhibitors H2 antagonists	All indications unless recent history of gastrointestinal bleeding, peptic ulcer, gastritis, GORD, or the concomitant use of NSAIDs and steroids
Oral hypoglycaemics	Metformin Sulfonylureas Thiazolidinediones DPP-4 inhibitors GLP-1 analogues Acarbose	Mild hyperglycaemia (prevention of diabetic complications)
Osteoporosis medications	Bisphosphonates Raloxifene Strontium Denosumab	All indications except hypercalcaemia
Vitamins	n/a	All except treatment of low serum concentrations
Minerals	n/a	All except treatment of low serum concentrations
Complementary therapies	n/a	All indications

Adapted with permission from Lindsay J, Dooley M, Martin J *et al.* The development and evaluation of an oncological palliative care deprescribing guideline: the 'OncPal deprescribing guideline'. *Support Care Cancer* 2015;23:71–8.

ACE = angiotensin-converting enzyme; DPP-4 = dipeptidyl peptidase-4; GLP-1 = glucagon-like peptide-1; GORD = gastro-oesophageal reflux disease; NSAIDs = nonsteroidal anti-inflammatory drugs; n/a = not applicable.

recommended, a key element of this is establishing the primary indication for each medication which helps inform the decision as to whether they can be discontinued. The process of deprescribing needs to involve the patient and must include regular follow-up (to review the effects of deprescribing). ■

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