

## **Withdrawing life-extending drugs at the end of life**

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There is a transition in end-of-life care from medications that can help to prolong life and prevent complications to those that can provide immediate symptomatic benefits. How this transition is managed is an individualized process and is significantly dependent on the psychological adaptation of patients and families to having a terminal illness.

The major groups of drugs that are withdrawn include antihypertensives, cardiac drugs, chemotherapy, diabetic medication, steroids, anticoagulants and anticonvulsants. This list is not exhaustive but the principles behind withdrawal remain the same. In this article we will discuss how and why drugs are withdrawn as the patient approaches death.

With life-limiting illnesses there is generally no clear demarcation between treatment that extends life and prevents complications and treatment aimed at symptomatic relief alone. Rather, the process can be gradual. In some circumstances, such as in heart failure, symptomatic benefit and life-extending therapy are both a part of the same treatment - ACE inhibitors keep heart failure under control but also help to lengthen life.

The main consideration for prescribing in end-of-life care is contextual. Where is the patient in the course of their illness and how much has the patient and the family adjusted to mortality issues? As death approaches, the metabolism changes and the need for medication naturally reduces.

### **Why patients experience difficulties coming off drugs**

The psychological adaptation to having a terminal illness is a big challenge. Patients with advancing disease will often feel that they are losing their identity. Illness fatigue and reduced mobility may result in patients being unable to perform their everyday roles and tasks. Typically, loss of appetite with reduction in food intake, which is common in a variety of terminal illnesses upon reaching the final stages, can be a significant cause of concern to the patient, unrelated to the nutritional benefits of food. Reducing medication can have a similar psychological effect.

Drugs that people may have been taking for many years have significant symbolic meaning. For example, if antihypertensives are no longer needed trying to stop them may be an indication to the patient of impending death or may give the patient the sense that the doctor is giving up on them.

### **Advance care planning**

Beginning the process of advance care planning (<http://bit.ly/12BF6EO>) with patients and families can be a great benefit in helping them come to terms with mortality.

The Preferred Priorities for Care document (<http://bit.ly/1b2304q>) helps patients to think about and prepare for the future, while Planning Ahead takes a slightly broader view of the different issues that people like to consider in the context of advance care planning.

It is important to start the process of advanced care planning early enough to allow patients and families to consider options carefully before the advent of a crisis. The Find Your 1 per cent campaign from the Dying Matters coalition (<http://dyingmatters.org>) aims to support healthcare professionals in identifying the 1 per cent of people who are likely to die within the next year, so that advanced care planning can be started sufficiently early enough to allow for adapting to having a terminal illness.

## **Drug groups**

Consideration of withdrawing drugs becomes more pressing as people approach the final weeks and days of their life. Specific issues arise with individual drugs, which are discussed below. Swallowing difficulties, whether from obstructive reasons or from generalized weakness, are a reason for discontinuing oral medication. It may be necessary to give alternative medication via other routes, such as a subcutaneous syringe driver or via a percutaneous gastrostomy feeding tube.

### **\*Antihypertensives**

Body weight reduces and metabolism slows down in those approaching death. It is common for blood pressure to fall, particularly in the last few days of life. Antihypertensive medication can exacerbate feelings of weakness and fatigue, which are commonplace in terminal illness. Some symptom benefit may be gained by stopping these medications. Generally this is well tolerated. Monitoring of blood pressure for a few days is recommended unless death is imminent. As mentioned, psychological adjustment can be a problem.

### **\*Cardiac drugs**

A number of cardiac drugs help to relieve the main symptom of breathlessness by maximizing the hemodynamic functions of the heart. However, there are some drugs such as statins that treat a risk rather than a specific symptom. Discontinuation of these drugs is dependent on the psychological adjustment to mortality. Patients are often disconcerted by the number of drugs they take towards end of life, and stopping statins and aspirin may be a way of reducing total medication burden.

### **\*Chemotherapy**

In the palliative setting chemotherapy aims to lengthen life and provide symptomatic relief. Treatment should be continually reviewed to ensure these two objectives are being achieved and that chemotherapy is appropriately given.

Stopping chemotherapy can be more emotionally traumatic for someone than receiving the original diagnosis of cancer. Oncologists are often very sensitive to the role of hope, particularly of hope of cure in the context of palliative chemotherapy. However, the hope of coming to terms with living and dying is also very important. It is better to hope for the best and plan for the worst as a way of coping. Doing this sufficiently early is a way of avoiding what can be a crushing blow when chemotherapy is discontinued.

It is important to emphasize that stopping treatment does not mean there is nothing more we can do.

### **\*Diabetic medication**

With weight loss and reduced metabolism the need for diabetic medication is commonly reduced at end of life. It is necessary to keep a close eye on blood sugar control. Sometimes it is possible to stop hypoglycaemic agents, including insulin, altogether. Patients may commonly experience hypos in the late stages of their illness so being vigilant in blood sugar control is a way of improving symptoms. Usually, medication should be withdrawn in a stepwise fashion as the need reduces gradually.

### **\*Steroids**

Generally, steroids such as dexamethasone are given either to reduce oedema or inflammation, such as in spinal cord compression or treatment of brain metastases, or are given to try and improve appetite and energy levels. It is important to make sure that steroids are reduced appropriately as prolonged use can cause muscle loss and disabling proximal myopathy. However, this may have to be balanced by the symptomatic benefits such as reduction of headaches with brain metastases. It may be necessary to continue steroids in these circumstances.

Pragmatically, in our unit, when the patient can no longer swallow because of decreased consciousness or profound generalized weakness, we consider stopping steroids altogether and manage symptoms, including pain, using other medication

### **\*Anticoagulants**

Discontinuing anticoagulants can be a complex decision. There is evidence to show that the use of low molecular weight heparins is as effective as warfarin at preventing further thromboembolic disease and is acceptable to patients and their families. The advantage of doing so is that, if patients are not on warfarin, they do not need blood monitoring.

There are circumstances, however, where patients are bleeding and the risk of significant haemorrhage outweighs that of thromboembolism. Discussion with the patient and families is important in these circumstances.

### **\*Anticonvulsants**

Anticonvulsants may be used to control both seizures and neuropathic pain. Discontinuing them is usually needed when the patient can no longer swallow.

Midazolam given via a subcutaneous syringe driver is a good alternative. It is an anticonvulsant as well as an anxiolytic, muscle relaxant and sedative, all of which may have a role to play in the terminal setting.

### **Conclusion**

The shift in emphasis from life-prolonging to symptomatic treatments alone at end of life can be a gradual one. Discontinuing medication needs to balance the symptomatic benefits of treatment with psychological adaption to having a terminal illness. Advance care planning is a key component of helping patients and families to adapt.

### **Key Points:**

- the reasons for prescribing medication changes as end of life approaches, from preventive or life extending to symptomatic
- the decision to discontinue medication has to be taken in the context of how much the patient and family have come to terms with a terminal diagnosis
- advance care planning is a key component in helping patients and families make choices about end-of-life care, including medication

### **Liverpool Care Pathway:**

The Liverpool Care Pathway for the Dying Patient **was** widely adopted across a number of regions in England. It is a support system using documentation to focus on a number of different issues in the last *two* to three days of life. Part of this is to ensure that unnecessary medications are discontinued while at the same time making sure that anticipatory prescribing is in place to deal with symptom issues that may arise. Use of this Pathway - a way to help ensure that only necessary medication is used immediately prior to death.

*\*It was discontinued in 2014 following mounting criticism and a national review.*

\*Advance care planning allows patients and families to adapt to the transition from life-prolonging to symptomatic treatment at the end of life approaches, the metabolism changes and the need for medication naturally reduces.

Why patients experience difficulties coming off drugs

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