

CARING FOR THE TERMINALLY ILL ELDERLY

Dr Kok Jaan Yang

INTRODUCTION

A terminally ill person is one who has an advanced, incurable and progressive disease, and whose lifespan is expected to be short.

As the number one killer in Singapore,^{1,2} cancer is the most common cause of terminal illness in the elderly. Other causes of terminal illness in the elderly include advanced dementia and end-stage organ failure. Many of these terminally ill elderly will like to be cared for at their own homes. Family physicians are expected to provide palliative care to them at their own homes.

Modern palliative care originated with the establishment of the St Christopher's Hospice in London by Dame Cecily Saunders in 1967,³ as a response to the outcry of the unmet needs of dying patients in the hospital. Since then, the practice of palliative care has slowly spread all over Britain and all over the world. Palliative Care was first introduced to Singapore in 1986. There are now well-established hospital-based palliative care services and community-based hospices in Singapore.

The components of palliative care will include:

- κ effective symptoms relief
- κ effective communication with patients and families
- κ psychological and spiritual care
- κ a support system to help patients live as actively as possible until death and to help families cope during patient's illness.

A family physician who wishes to care for the terminally ill elderly will need to be familiar with

the various components of palliative care, including the knowledge of the common cancers & their treatment, the management of the common symptoms in palliative care and the various palliative care services in Singapore.

One of the pitfalls in palliative care is labelling a patient as "terminal" when he or she is not. Patients may have advanced cancer but may not be in their terminal phase yet. These patients may have many months and even years of good quality living, especially if their cancer is under control or is progressing slowly. Active treatment for reversible causes may still be appropriate for this group of patients.

Symptoms Management in the Terminally Ill Elderly

Terminally ill elderly will expect their doctors caring for them to be able to manage their symptoms well. The principle of symptom management in palliative care can be summarized into:

1. Determine the likely cause of the symptom + explanation to patient/family
2. Correct the correctable
3. Non-drug treatment
4. Drug treatment.

The most commonly reported symptoms⁴ in palliative care are listed in Table 1. We will use pain to illustrate the principle of symptom management and we will also briefly touch on two other symptoms – nausea/vomiting and dyspnoea.

Pain

Pain is the most common and most feared symptom in terminally ill elderly as cancer is always equated to severe pain. The truth is that only about ¾ of patients with advanced cancer experience

Table 1: Commonest Symptoms in Terminal Ill Elderly

κ	pain (often several types simultaneously)
κ	nausea/vomiting
κ	dyspnoea
κ	confusion
κ	agitation/restlessness
κ	noisy breathing/respiratory tract secretion
κ	urinary incontinence/retention
κ	dry/sore mouth
κ	extreme fatigue.

pain⁵ and most of these pains can be controlled. For those who experience pain, they may have more than one pain and each pain should be evaluated separately. It is useful to distinguish pain that is caused by stimulation of nerve endings (nociceptive pain) which is often opioid responsive, and pain that is caused by nerve dysfunction (neuropathic pain) which is often opioid resistant or semi-responsive. Analgesic adjuvants such as tricyclics (amitriptylline), anti-epileptics (carbamazepine, vaproate, gabapentin), steroids etc. may be added in the management of neuropathic pain.

While evaluating the likely cause of the pain, it is important to keep in mind that not all the pains in a terminally ill elderly are due to cancer. For example, it was estimated that only 60% of pain in advanced cancers is due to cancer itself, 5% is caused by treatment, 20% is related to cancer and the remaining 15% is caused by a concurrent disorders⁵. Also look out for possible psychosocial and spiritual factors that may affect the pain.

Once the likely cause is determined, correctable causes should be corrected e.g. radiation to bone metastases that cause pain. Non-drug treatment will include immobilization of fracture to prevent painful movement, relaxation therapy etc. Drug treatment will involve analgesics and adjuvants.

World Health Organisation's (WHO) 3-step analgesic ladder^{6,7} for cancer pain is a very useful guide for treating cancer pain. The ladder is shown in Table 2. Most mild to moderate nociceptive pain can be controlled with step 1 or 2 analgesic drugs. If the pain is very severe, or if pain is not controlled with optimized dose of step 2 analgesics, a step 3 analgesic (strong opioid) such as morphine should be used.

Morphine is a very SAFE and EFFECTIVE drug for pain relief, even in non-terminally ill or non-cancer patients. If it is used appropriately, it will not hasten death, lead to addiction or cause respiratory depression⁵. Oral morphine is as effective as morphine injection. Oral morphine in the form of syrup morphine 1mg/ml or 2mg/ml is **not** a Controlled Drug, unlike morphine injection (10mg/ml) and slow-release morphine tablets (10mg, 30mg and 60mg). The step to start oral morphine is summarised in Table 3. There is no ceiling effect for morphine and the increment should only be limited by severe side effects. Some patients may require very high dose of morphine (such as 1gram/day) without any side effect.

Table 2 : WHO 3-step Ladders

Step 1: Non-opioid (e.g. paracetamol, NSAIDs) +/- adjuvants
Step 2: Weak opioid (e.g. codeine, tramadol) + non-opioid +/- adjuvants
Step 3: Strong opioid (e.g. morphine, fentanyl patch) + non-opioid +/- adjuvants
WHO also recommends that the analgesic should be given
– by the mouth (oral route is the best, if possible),
– by the clock (regularly and prophylactically rather than prn),
– by the ladder, and
– by the individual

Table 3 : How to start oral morphine

-
- | | |
|----|---|
| A. | Use Step 1 and 2 analgesics first, if possible |
| B. | 'Start slow and go slow' |
| C. | The starting dose of syrup morphine in elderly is 2.5mg 4 hourly |
| D. | Warn patients of the common side effects such as initial drowsiness for the first few days, nausea and constipation |
| E. | Can double the dose at midnight for convenience to avoid waking at 4am to take the next dose |
| F. | Can increase by 30-50% every 1 to 2 days if pain is not well controlled |
| G. | Breakthrough dose of morphine at 1/6 of the daily dose should also be given for any breakthrough pain. |
-

In severe pain which requires very quick relief, morphine injections via subcutaneous route in doses of 2.5-5.0mg can be given. Intra-muscular injections are not advisable in terminally ill patients as most of these patients are cachexic and have very little muscle bulk. In addition, intra-muscular injection is very painful.

In patients with controlled pain but are no longer able to take morphine orally, oral morphine can be converted to a transdermal fentanyl patch which is available in 25mcg/hr or 50mcg/hr strength, that can last for 3 days. But for patients who still have uncontrolled pain and are unable to take orally, they will need continuous infusion of morphine via a syringe driver to titrate the dose of morphine – a hospice service will need to be involved to assist in this administration.

Nausea & Vomiting

Nausea & vomiting are common in terminally ill patients. The mechanism is mediated by two closely-linked foci within the brainstem – the vomiting centre and chemoreceptor trigger zone.

The emetic pathway may appear to be quite confusing but understanding it well will help one to make rational use of pharmacological agents available⁸. Common causes to exclude are intestinal obstruction/constipation, gastric outlet obstruction, pharyngeal irritation from sputum or oral thrush, increased intracranial pressure from brain metastases, metabolic causes (hypercalcemia, uremia etc.) and drug e.g. morphine. Common emetics used are metaclopramide (prokinetic and a weak dopamine antagonist), haloperidol (strong dopamine antagonist).

Dyspnoea

Dyspnoea is a subjective experience, which can impact adversely on a patient's quality of living. The first step is always to identify and treat potential reversible causes such as SVC obstruction, chest infection, pleural effusion, if appropriate. Explaining and discussing with the patient and family on the likely cause and possible treatment plan is essential. Non-drug treatment such as proper positioning, good ventilation and relaxation therapy may be helpful. Oxygen therapy can be considered if patient is hypoxemic and can be given at home via a rented oxygen concentrator. Drug treatment with opioid and/or benzodiazepine can help to reduce the sensation of dyspnoea⁹.

Last Hours Care of the Terminally Ill Elderly

When the patient deteriorates and is likely to demise in the next 48 hours at home, the family physician should institute the Last Hour Care^{10,11}:

1. Explain to the family that the patient is dying and provide psychological support to the family, if appropriate.
2. Review the medications and stop all non-essential drugs. As a general rule, the only

drugs that are needed in the last hours are the analgesics for pain, the benzodiazepine, hyosine¹² for respiratory secretion or rattle and anti-emetic, if indicated.

3. If oral route is not possible, consider using rectal route or subcutaneous route, if symptomatic. If continual infusion of these drugs is required via a syringe driver, the help of hospice home care service can be sought if patient has been referred. Most dying elderly can be managed at home with support.
4. Further advice to the family on patient care during the last hours can be found in Table 4.

Referral to In-Patient Hospice/Hospice Home Care Services

The various in-patient hospice services and hospice home care services are listed in Table 5. Family physicians should be familiar with these services so that appropriate referrals can be made to assist in the care of the terminally ill elderly.

CONCLUSION

The need to provide palliative care to the terminal ill elderly at home will increase. Family physicians must prepare themselves to acquire the necessary skills & knowledge to meet this need.

Table 4 : Practical Advice for Family Members in the Last Hours¹¹

A.	Get patient's identity card/passport ready.
B.	Oral Intake and Hydration. There will be reduced oral intake, reduced urinary output and mild dehydration ¹² in the last hours. This is a natural process. Patient is not likely to feel hungry at this stage and forcing food into the mouth is likely to cause choking. Give sips of water if patient is still able to swallow. Otherwise, wetting the lips with a moist gauze or a moist cloth will suffice. Nasogastric insertion for feeding is uncomfortable and should be discouraged in a dying patient. Similarly, parenteral hydration is not likely to benefit a dying patient but may cause pulmonary oedema ¹² .
C.	Mouth Care. Maintain good oral hygiene is essential to alleviate oral discomfort. The mouth can be cleaned at least two to three times a day with a moist gauze wrapped around the tip of a chop-stick or with the use a foam stick applicator ¹² .
D.	Prevention of Bedsore. Turn the patient every two hours to prevent bedsore.
E.	Reduce disturbance. A quiet and cool room is helpful. If the patient becomes comatose, he/she is still likely to hear even if he/she cannot respond. Ask the family member to hold the hand, talk to patient with a reassuring voice or play familiar music. Do not ask patient to respond like moving the tip of the finger or blinking of eyes.
F.	Breathing & Secretion. Breathing pattern may become irregular. The breathing may become noisy due to the collection of saliva. No management is needed if patient does not appear to be disturbed by it. Suction of the saliva is usually not necessary. The patient can be turned to one side after removing the pillow, and allow the saliva to flow into the cheek and wipe it out with a gauze; the pillow is then replaced and patient can be turned back to the supine position.
G.	If patient stops breathing, do not panic. Observe for 10 minutes to ensure that patient has indeed stopped breathing. Call other family members to come to help you. Put patient's hands on his abdomen. Get his identity card ready. Call the family physician to certify death. This can be done the next morning if patient demise in the late night. Keep the room cool. Do not call the police or the ambulance.
H.	After obtaining the Certificate of Cause of Death (CCOD) from their doctor, a family member should bring this certificate along with patient's identity card to the nearest police post to report death. The family member should also bring his/her own identity card to identify himself/herself. The family member will need to inform the police if the body is to be cremated or buried to obtain the necessary permit. The police will retain the identity card of the deceased & the CCOD. A Certificate of Registration of Death will then be issued.

Table 5 : Hospice Services in Singapore**Hospice Home Care Services**

1. Hospice Care Association – Hospice Centre (Tel 6251-2561)
2. Assisi Home & Hospice (Tel 6347-6446)
3. Singapore Cancer Society (Tel 6221-9575).

In-patient Hospices

1. Dover Park Hospice – Hospice Centre (Tel 6355-8200)
2. Assisi Home & Hospice (Tel 6347-6446)
3. St Joseph's Home & Hospice (Tel 6268-0482).

Criteria for Admission to In-Patient Hospice

1. Patient must have an advanced, incurable and progressive disease.
2. The prognosis is less than 3 months.
(Please refer to the referral form of each hospice organization).

REFERENCES

1. Chia KS, Seow A, Lee HP, Shanmugaratnam K. Cancer Incidence in Singapore 1993-1997: Singapore Cancer Registry Report No 5.
2. Ministry of Health. Health Facts Singapore 2001.
3. O'Neill B, Fallon M. Principle of Palliative Care and Pain Control. In: ABC of Palliative Care 1998, Editors: O'Neill B, Fallon M. Chapter 1.
4. Working Party on Clinical Guidelines in Palliative Care, UK. Changing Gears – Guidelines for Managing the Last Days of Life in Adults 1997.
5. Twycross R. Pain Relief. In: Symptom Management in Advanced Cancer 1st e1995. Editor R Twycross. Chapter 2.
6. World Health Organisation, Cancer Pain Relief. Geneva: WHO, 1986.
7. World Health Organisation, Cancer Pain Relief. 2nd ed. Geneva: WHO, 1996.
8. Twycross R, Back I. Nausea and Vomiting in Advanced Cancer. European Journal in Palliative Care. European Journal of Palliative Care, 1998; 5(2), pg 39-45.
9. Rawlinson F. Dyspnoea and Cough. European Journal of Palliative Care, 2000;7(5) pg 161-4.
10. Ellershaw J. Developing an Integrated Care Pathway for the Dying Patients. European Journal of Palliative Care 1997; 4(6), pg 203-7.
11. Hospice Care Association, Singapore. Patient Information – What to Do in the Last Hours 2000.
12. Working Party on Clinical Guidelines in Palliative Care, UK. Changing Gears – Guidelines for Managing the Last Days of Life in Adults 1997.