

The St. Christopher's Hospice Regimen for drug control of common symptoms in the dying.

Edited for the 3rd General Practitioner's Congress by
Dr M V SILBERT MBChB

Pain and other symptoms in advancing cancer are usually chronic and constant in nature, even if variable in intensity. Chronic pain, unlike acute pain, is a situation rather than an episodic event. It usually grows worse rather than better, and often expands to occupy the patient's whole attention, isolating him from the world around him. Depression, anxiety and other unrelieved symptoms tend to exacerbate the total pain experience. These factors must all be considered in relieving terminal pain. In terms of the general practitioner's commitment to total care, the patient must be managed in the traditional modalities of physical, psychological and social care.

Chronic pain requires constant relief. The analgesic should be given regularly, the time interval being determined by the length of action of the drug. The aim is to titrate the level of analgesia against the patient's pain, increasing the dose until the patient is free of pain. The next dose must be given before the effect of the previous one has worn off and therefore, before the patient may think it necessary. In this way the memory of fear and pain is erased.

Similar principles apply to the control of other symptoms, such as nausea, dyspnoea and constipation. All need continuing treatment for their sustained relief.

Addiction, an overpowering drive to take a drug for its psychological and mood-altering effects, does not appear to occur as frequently in terminal patients in pain. In fact, an opiate may be given in gradually reducing doses, or even discontinued, if pain lessens for instance after palliative radio-therapy or nerve block or even when anxiety and depression are controlled. Patients may appear to be 'addicted' when demanding an injection every two or three hours: he is in fact craving the one treatment he has found of some effect in relieving his pain. On basic principles, however, the drug should be so titrated to obviate the patient having to request it.

Some tolerance may occur in the final weeks of treatment, but it is easily managed by an increase in analgesia to maintain pain control.

The successful control of pain in a patient with advanced cancer is facilitated if the specific cause of the pain can be found. Among the more commonly occurring are the following:

- **Bone pain:** Bone metastases are thought to cause pain by their production of prostaglandins which sensitise free nerve endings.

The non-steroidal anti-inflammatory drugs inhibit prostaglandin synthesis and are recommended in bone pain. Soluble aspirin or its equivalents are also most useful. The combined use of morphine with these drugs is more effective than morphine alone.

- **Secondary infection:** Systemic antibiotics, plus metronidazole (Flagyl) if there is a possibility of anaerobic infection.
- **Colic:** Anti-peristaltic and anti-spasmodic agents including faecal softeners dioctyl sodium sulphosuccinate (Donbaxex or Norilax) are useful. Accompanying diarrhoea could be treated with agents such as loperamide (Imodium) or diphenoxylate with atropine (Lomotil).
- **Headache due to raised intra-cranial pressure:** e.g. Dexamethasone 16 mg daily for a week, reducing slowly to maintenance dose of 4-6mg daily if possible, to minimise side-effects.

ANALGESIC DRUGS

The aim is to maintain pain control throughout the 24 hours with a simple oral regime, as few side effects as possible, and an alert patient.

First-line (antipyretic-type) analgesics: e.g. paracetamol, aspirin, codeine, propoxyphene and various combinations of these, may be adequate for mild to moderate pain. If pain is not controlled with these mild analgesics, and appropriate adjuvants, e.g. anxiolytic or anti-depressant tricyclics, a change should be made to an opiate, e.g. morphine.

Morphine remains the most useful strong analgesic. It is well absorbed by mouth, giving a peak blood flow level after one-and-a-half to two hours. It is usually given four hourly to maintain an adequate blood level for analgesia.

Morphine is usually prescribed as morphine sulphate or morphine hydrochloride in a mixture with chloroform water; so constituted, it has a shelf-life of at least a month. The mixture has the advantage over tablets in that the dose can be increased *twenty-fold if required with no change in volume*. The prescription could therefore read: -

Morphine 5mg (five mg)
Chloroform water to 10ml
To take 10ml 4-hourly

OR

Morphine 100mg (one hundred mg)
Chloroform water to 10ml
To take 10ml 4-hourly

The dose can be increased every 24 to 48 hours, *but more frequently if the pain is severe*. Suggested doses range between 5mg and 60mg (a dose up to 150mg may be given but is very rarely needed). The patient should be warned that he may be drowsy at first, but this will wear off in a few days. Constipation should be anticipated and managed accordingly.

About 40% of patients feel nauseated on commencing morphine, so a phenothiazine is often added. Prochlorperazine (Stemetil) syrup 5-10 mg may be added to the morphine solution. It can often be discontinued after a few days. Alternative management for nausea is detailed hereunder.

Morphine injections are required only if the patient is vomiting, cannot swallow or is semi-conscious.

DRUG CONTROL OF SYMPTOMS OTHER THAN PAIN

Nausea and Vomiting

An attempt should be made to find the definitive cause so as to institute appropriate management:

- (i) drug induced, e.g. chemotherapy or analgesics. If the offending drug cannot be withdrawn, phenothiazines are usually the management of choice;
- (ii) constipation: see management under separate heading;
- (iii) raised intra-cranial pressure: Dexamethasone 16 mg daily, reducing slowly when possible;
- (iv) hypercalcaemia: This should be suspected in patients with widespread metastases. Mild hypercalcaemia can be treated with prednisone 30 mg daily reducing when possible. More severe hypercalcaemia may require fluids and electrolyte correction.

In many cases of vomiting, however, no specific treatment is possible, and anti-emetics are required: -

- (i) Phenothiazines, e.g. prochlorperazine (Stemetil) and chlorpromazine (Largactil);
- (ii) Metoclopramide (Maxolon or Primperan);
- (iii) Anti-histamines, e.g. cyclizine (Valoid).

The abovementioned are available usually as tablets, syrup, injections or suppositories.

Extra pyramidal side effects occur infrequently. Anti-parkinsonian drugs may be used in such event.

Obstructive vomiting

This is fairly common in the later stages of abdominal malignancies, especially ovarian. It is usually of slow onset, and intermittent at first.

A faecal softener (see previously) should be given in the early phases with an anti-peristaltic or anti-spasmodic drug if required. Later the patient will require analgesics and anti-emetics, first by mouth, later by injection.

STOPAYNE® Reg. No. Paracetamol 120mg, Codeine phosphate 5mg, Promethazine HCL 0.5mg per 5ml.

The advertisement features a close-up photograph of a young girl with brown hair, looking directly at the camera with a slight smile. Her hand is raised to her chin in a thoughtful or 'shh' gesture. The background is dark and textured. Overlaid on the image is the text 'Thank you' in large, white, serif font. Below this, a white rectangular box contains a handwritten prescription 'Rx Stopayne.' and a paragraph of text. To the right of the text is a small image of a brown glass bottle of Stopayne syrup with a green label that reads '100ml S2 Stopayne' and 'syrup/syrup'. A small white spoon with red liquid is shown at the bottom left of the box. At the bottom of the advertisement, the RIO ETHICALS logo and address are visible.

Thank you

Rx Stopayne.

Young children may not understand how or why, but they know pain when they feel it. And they appreciate relief. So chase away those pain-filled frowns and let their smiles shine through. Give them the gentle relief they need with the syrup you trust. Give them Stopayne: one name that stops pain.

There's a thank you in every bottle.

100ml S2
Stopayne
syrup/syrup

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Anorexia

This is very common where there is widespread disease. The only effective drug treatment is with steroids, e.g. prednisone.

Dry or painful mouth

This may be due to candida, dehydration or may be drug-induced. Oral hygiene is of first importance. Treatment for thrush of both mouth and dentures, (nystatin oral suspensia may be required). Intravenous fluids and nasogastric feeding cannot be justified in dying patients. Interestingly enough, they seldom feel thirsty, and it is perfectly feasible to correct the only possible symptom of dehydration viz. a dry mouth, try local measures such as frequent small drinks, or crushed ice to suck. There must be meticulous attention to mouth care.

Hiccough

Either chlorpromazine (Largactil) 25 mg to 50 mg orally or IM, or metoclopramide (Maxolon or Primperan) orally or IM may be effective.

Constipation

Most dying patients are constipated. This is due to a combination of factors – inactivity, anorexia, low residue diet and drugs. It is best treated with a combination of stool-softening and peristaltic-inducing aperients, suppositories or an enema, or digital disimpaction may be needed if the rectum is loaded.

Diarrhoea

It is mandatory to do a rectal examination to exclude impacted stool with overflow. Treatment is with digital disimpaction or enema, or suppositories, followed by oral aperients. Drug-induced diarrhoea and bowel infections require appropriate treatment – with strong analgesics, if there is painful colic present. Loperamide (Imodium) or diphenoxylate with atropine (Lomotil) or codeine phosphate are the drugs found most effective. Diarrhoea with accompanying discharge due to rectal carcinoma may respond to prednisone retention enemas.

Dyspnoea

Once again an attempt should be made to find the specific cause so that appropriate management can be instituted e.g. diuretics, prazosin (Minipress) or isosorbide (Isordil) in cardiac failure, and broncho-dilation in bronchospasm. However, certain groups of drugs are of special interests and benefit:

- (i) *Glucocorticoids*: Dexamethasone 16 mg daily is effective in lymphangitis carcinomatosa, and dexamethasone, or prednisone 40 mg daily, reducing appropriately, may be effective in refractory bronchospasm;
- (ii) *Antibiotics*: It is important to consider each case on its merits before embarking on treatment which essentially would be palliative:
- (iii) *Opiates*: The mode of action of the drugs is uncertain, but they certainly relieve the sensation of dyspnoea. Morphine 5-10 mg in a mixture may well be adequate, but the dose may have to be titrated as with control-

ling pain. An anxiolytic drug may be added to combat associated anxiety. Oxygen can be useful in acute dyspnoea, but infinitely better control for chronic dyspnoea can be obtained with the opiates.

Cough

Expectorants such as ammonium chloride and ipecacuanha are included in many 'expectorant' mixtures. They are not of proven efficacy. Patients benefit if they can inhale warm moist air, e.g. Tinct benzoin inhalations. It is reasonable to suppress an unproductive cough especially at night to allow rest. Codeine, pholcodeine or methadone (Physeptone) linctus is useful.

Urinary frequency and incontinence

This may be caused by urinary infection, pelvic disease, neurological causes and constipation. Rectal examination is therefore mandatory. If specific treatment does not relieve the symptom, palliative medication in the form of emepromium bromide (Cetiprin) oxybutynin (Ditropan) or tricyclic drug, e.g. imipramine (together with an appropriate aperient to prevent constipation) could be useful. A condom or Paul's tubing could be tried, but an indwelling catheter is usually the best way of treating severe incontinence or frequency, as the risks of long term catheterisation no longer apply.

Fungating growths

The lesion is often malodorous, and therefore regular cleansing is essential: an emulsion of 4% povidone-iodine solution (Betadine) with liquid paraffin in a ratio of 1:4 has been found to be most effective. It is used to clean the wound, then gauze soaked in it, is applied as a deodorising and non-adhesive dressing.

For vulval lesions chlorhexidine (Hibitane) 1 in 2 000 is used for frequent washdowns.

A course of antibiotics together with metronidazole (Flagyl) may reduce sepsis with its associated offensive discharge.

Itch

If the irritation is caused by biliary stasis, cholestyramine (Questran) is the drug of choice. Anti-histamines e.g. trimeprazine (Vallergran) 10mg tds and promethazine (Phenergan) 25mg at night, or hydroxyzine (Aterax) 10-20mg tds, and crotamiton (Eurax) as a topical application, are useful anti-pruritic agents.

Insomnia

The short-acting benzodiazepines e.g. temazepam (Normison) 10-30mg at night, are preferred to the long-acting benzodiazepines and to the barbiturates. In addition, chlormethiazole (Heminevrin) is a good hypnotic for the elderly as it is the most unlikely to precipitate or increase confusion. The usual dose is 1g but a further 500mg can be given with benefit if the patient is restless during the night. Insomnia may be caused by night pain or stiffness, or painful pressure areas: oral morphine solution is recommended.

Night sweats

These may respond to indomethacin as a suppository at

night, or Indocid - R as a sustained release capsule taken orally.

Anxiety and depression

Psychotropic drugs play a minor role in the treatment of these symptoms. Much more appropriate is relief of *physical symptoms and emotional and spiritual support for the patient and his family*, with time given by doctors, nurses, hospital community workers and social workers for an open discussion of the illness and attendant problems. However, benzodiazepines and phenothiazines could be useful as adjuvant therapy: diazepam (Valium) or chlorpromazine (Largactil) or promazine (Sparine) are the most frequently employed. The value of antidepressant drugs, tricyclics and others, in a patient facing death is difficult to determine. Clinical depression may be hard to distinguish from natural sadness. Tricyclics e.g. imipramine (Tofranil) and amitriptylene (Tryptanol) may occasionally be useful in protracted illness, and also as adjuvants to analgesics which they appear to potentiate.

Confusion

The differential diagnosis of confusion in terminally ill patients is a common and most difficult problem. However, an attempt must be made at diagnosis as some specific treatments are available, e.g. control of pyrexial illnesses, alteration in sedative drugs, the use of glucocorticoids in cerebral metastases, and the correction of dehydration or electrolyte disturbances. These are palliative procedures to control confusion which is most distressing for family members as well as for the patient. Persistently confused patients who remain quiet and appear content should not be given psychotropic or sedative drugs. It is the restless confused patient who is distressing to family and staff who needs sedation. Haloperidol (Serenace) 5-10mg is useful in an emergency, to be followed by an oral prepara-

tion 5-10mg daily in divided doses, and thioridazine (Melleril) 25mg tds is suitable for the elderly. Alternatively chlorpromazine (Largactil) 25-50mg tds is useful if added sedation is required.

Terminal restlessness

This may be due to unrelieved pain, or a distended bladder or impacted rectum. Frequently, however, there is no specific cause. Diazepam (Valium) 5-10mg IM is used in the last day or so to control this symptom as well as possible accompanying muscle twitching.

Emergencies

These include major haemorrhage, pulmonary embolus, choking attacks or fracture of a bone. The most feasible and humane management is the immediate injection of morphine.

Convulsions

Some patients with cerebral tumour or uraemia develop fits. If a fit occurs anti-convulsants are started. Sodium valproate (Epilim) 200mg tds increasing if necessary until control is established or a satisfactory plasma level is obtained, is preferred to phenytoin as the latter may interact with other drugs which may be needed. When a patient is unable to take oral anti-convulsants, phenobarbitone 60mg bd by injection should be given. The depressing effect of the drug is no longer relevant, and it is a conveniently small injection. Status epilepticus is rare; it should be treated with intravenous diazepam (Valium) given slowly at 10mg per minute.

Dying patients may be relieved from pain and many discomforts by the appropriate use of these effective drugs. Even more so if these drugs are given by people who care for the whole person.

From the journals

Van die tydskrifte

DYING AT HOME

Terminal care at home should be more generally available, but is often not offered because hospital treatment is perceived as better, because active treatment is not stopped until it is too late to move the patient, because families do not have the necessary resources, or because they are not given the option. To help families cope, good contact with the hospital and the family physician is essential. The decision to stop active treatment must include the family physician's perspective. Family resources must be explored, without assumptions that higher socioeconomic conditions are good, and lower ones bad. Many families are afraid of the unknown, or not being able to cope. They can be helped by short, informative visits. Pain control is paramount, but communication between members of the health care team comes a close second.

Hampton, Stuart
Canadian Family Physician Vol 29: 1983 (1857 - 1860)

RESPIRE CARE

Respite care is a program of planned admissions to the hospital for short periods of time to give the caregiver and family a rest from caring for the disabled person at home. It complements day hospitals, day care and home care. The Assiniboine Centre, a 201-bed rehabilitation/extended care facility in Brandon, Manitoba, has a respite program for the elderly and for multihandicapped children and adults. Family physicians are in an ideal position to encourage families to use the respite program because they know the family background and relationships, the caregiver's mental and physical strengths and weaknesses and can identify problems before they become a crisis.

Joubert, Doreen
Canadian Family Physician Vol 29: 1983 (1853 - 1855)