Prescribing in palliative care

Overview

Palliative care is the active and total approach to the care of children and young adults with life-limiting and life-threatening conditions, embracing physical, emotional, social, and spiritual elements of their care. It focuses on enhancing the quality of life for the child and support for their family, and includes the management of distressing symptoms, provision of respite, and care following death and bereavement.

Effective palliative care requires a broad multidisciplinary approach that includes the whole family, and ideally should start as soon as possible after diagnosis or recognition of a life-threatening condition.

Drug treatment The number of drugs should be as few as possible. Oral medication is usually appropriate unless there is severe nausea and vomiting, dysphagia, weakness, or coma, when parenteral medication may be necessary.

For further information on the use of medicines in paediatric palliative care, see the Association for Paediatric Palliative Medicine (APPM) Master Formulary available at www.appm.org.uk/10.html.

Pain

Pain management in palliative care is focused on achieving control of pain by administering the right drug in the right dose at the right time. Analgesics can be divided into three broad classes: non-opioid (paracetamol p. 288, NSAID), opioid (e.g. codeine phosphate p. 293 'weak', morphine p. 299 'strong') and adjuvant (e.g. antidepressants, antiepileptics). Drugs from the different classes are used alone or in combination according to the type of pain and response to treatment. Analgesics are more effective in preventing pain than in the relief of established pain; it is important that they are given regularly.

Paracetamol p. 288 or a NSAID given regularly will often be sufficient to manage mild pain. If non-opioid analgesics alone are not sufficient, then an opioid analgesic alone or in combination with a non-opioid analgesic at an adequate dosage, may be helpful in the control of moderate pain. Codeine phosphate p. 293 or tramadol hydrochloride p. 305 can be considered for moderate pain. If these preparations do not control the pain then morphine is the most useful opioid analgesic. Alternatives to morphine, including transdermal buprenorphine p. 291, transdermal fentanyl p. 296, hydromorphone hydrochloride p. 299, methadone hydrochloride p. 317, or oxycodone hydrochloride p. 302, should be initiated by those with experience in palliative care. Initiation of an opioid analgesic should not be delayed by concern over a theoretical likelihood of psychological dependence (addiction).

Bone metastases In addition to the above approach, radiotherapy and bisphosphonates may be useful for pain due to bone metastases.

Neuropathic pain Patients with neuropathic pain may benefit from a trial of a tricyclic antidepressant, most commonly amitriptyline hydrochloride p. 255, for several weeks. An antiepileptic such as carbamazepine p. 209, may be added or substituted if pain persists. Ketamine p. 879 is sometimes used under specialist supervision for neuropathic pain that responds poorly to opioid analgesics. Pain due to nerve compression may be reduced by a corticosteroid such as dexamethasone p. 475, which reduces oedema around the tumour, thus reducing compression. Nerve blocks can be considered when pain is localised to a specific area. Transcutaneous electrical nerve stimulation (TENS) may also help.

Pain management with opioids

Oral route Treatment with morphine p. 299 is given by mouth as immediate-release or modified-release preparations. During the titration phase the initial dose is based on the previous medication used, the severity of the pain, and other factors such as presence of renal impairment or frailty. The dose is given either as an immediate-release preparation 4-hourly (for starting doses, see Morphine), or as a 12-hourly modified-release preparation, in addition to rescue doses. If replacing a weaker opioid analgesic (such as codeine phosphate p. 293), starting doses are usually higher. If pain occurs between regular doses of morphine ('breakthrough pain'), an additional dose ('rescue dose') of immediate-release morphine should be given. An additional dose should also be given 30 minutes before an activity that causes pain, such as wound dressing. The standard dose of a strong opioid for breakthrough pain is usually one-tenth to one-sixth of the regular 24-hour dose, repeated every 2–4 hours as required (up to hourly may be needed if pain is severe or in the last days of life). Review pain management if rescue analgesic is required frequently (twice daily or more). Each child should be assessed on an individual basis.

Formulations of fentanyl p. 296 that are administered nasally, buccally or sublingually are not licensed for use in children; their usefulness in children is also limited by dose availability.

Children often require a higher dose of morphine in proportion to their body-weight compared to adults. Children are more susceptible to certain adverse effects of opioids such as urinary retention (which can be eased by bethanechol chloride), and opioid-induced pruritus.

When adjusting the dose of morphine, the number of rescue doses required and the response to them should be taken into account; increments of morphine should not exceed one-third to one-half of the total daily dose every 24 hours. Thereafter, the dose should be adjusted with careful assessment of the pain, and the use of adjuvant analgesics should also be considered. Upward titration of the dose of morphine stops when either the pain is relieved or unacceptable adverse effects occur, after which it is necessary to consider alternative measures.

Once their pain is controlled, children started on 4-hourly immediate-release morphine can be transferred to the same total 24-hour dose of morphine given as the modified-release preparation for 12-hourly or 24-hourly administration. The first dose of the modified-release preparation is given with, or within 4 hours of the last dose of the immediate-release preparation. For preparations suitable for 12-hourly or 24-hourly administration see modified-release preparations under morphine. Increments should be made to the dose, not to the frequency of administration. The patient must be monitored closely for efficacy and side-effects, particularly constipation, and nausea and vomiting. A suitable laxative should be prescribed routinely.

Oxycodone hydrochloride p. 302 can be used in children who require an opioid but cannot tolerate morphine. If the child is already receiving an opioid, oxycodone hydrochloride should be started at a dose equivalent to the current analgesic. Oxycodone hydrochloride immediate-release preparations can be given for breakthrough pain.