adult pain management guidelines - SUMMARY

developed by the PAIN MANAGEMENT TASK GROUP of the
HULL & EAST RIDING CLINICAL POLICY FORUM

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NHS

adult
pain management guidelines
SUMMARY BOOKLET

Introduction and Acknowledgements

These guidelines have been developed by local pain control specialists working across primary and secondary care, with input from a range of healthcare professionals from acute and chronic pain management and palliative care.

The Pain Management Task Group gratefully acknowledges the permission granted to use the following sources of information to help compile these guidelines:

- The Wessex Palliative Physicians -
  The Palliative Care Handbook (5th Edition) 2002
- Joint North and North East Lincolnshire Palliative Care group -
  Management of Cancer Pain in Adults

This booklet is a summary of the full document which is available on the accompanying CD-ROM. The full guidelines are also available on the local NHS intranet sites.

This CD icon appears in sections where it may be helpful to seek more detailed information by referring to the full guidelines.

This 'word wide web' icon appears in sections where it may be helpful to view more detailed information by referring to a specified website.

Contents (and principal authors)

SECTION A

Key Messages

Context and Purpose

The purpose of this booklet is to provide clinical guidance for the assessment and management of

- Acute Pain
- Chronic Pain
- Cancer Pain

plus a directory of useful contact numbers and websites.

Key Themes

The group has focussed throughout on key themes: a patient centred approach, accurate assessment of pain and evidence based management of pain.

We hope that you find this resource of value. We would be pleased to hear from you if you feel that the resource can be improved in any way or if you feel there are significant omissions.

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SECTION B

Guideline Dissemination and Education

These Pain Management Guidelines are to be disseminated throughout the local health economy in printed and electronic formats (summary and full version respectively), and supported by educational events and supplementary materials on the accompanying CD-ROM.

Future evaluation will be via prescribing audits and surveys as appropriate.

SECTION C

Pain Assessment and the Patient's View of Pain

This section aims to help healthcare professionals explore all aspects of pain and understand their importance. During a consultation the most important thing is to listen actively to the patient, showing empathy and a desire to fully understand the situation. The patient should be allowed to tell their story. Use of open questions and encouragement allows the patient to cover those aspects that they feel are important. Extra encouragement may be needed in areas that are not always considered in more straightforward consultations. A consultation that feels like a relaxed conversation will often result in more information than a list of questions. Possible questions that may help explore the significance of the pain to the patient include:

What are your thoughts about this pain?
Is there anything about this that is particularly worrying?
Have you considered what this might be?
What is the most difficult thing about this pain?

Understanding the whole person

Consideration of a person's pain gives us a very narrow perspective on them as a person. An attempt to understand the whole person can often improve our understanding and allow us to give more helpful suggestions for managing the pain. This includes their personality and usual coping mechanisms, the influence of past events on current behaviours in response to illness and care, the role of spirituality in their life, and how family and social support affects their response to pain. Other aspects affect pain less directly:

- Participation in leisure activities (improves mood and widens social support networks)
- Educational background (influences access to health services, information and help)
- Occupation (offers insight into social status, skills, perspective on life - and much more)
- Financial concerns (can have a profound influence on well-being and ability to cope with pain or suggested treatment options)
- Cultural or ethnic group (language and other considerations)
- Mental health (eg. anxiety and depression)

At the same time we need to be wary of applying stereotypes, perhaps checking out any assumptions that we might make with the individual. Questions might include:

Can you tell me something about you as a person?
Has anyone else you know had similar symptoms?
How did they cope?
What keeps you going?
Apart from medical help what helps you to cope?
How do these things help you cope?
How does your family react to your pain?
How do they affect your pain?

Spirituality

Illness often involves physical, emotional, intellectual and spiritual components, none more so than pain. Pain may prompt people to question the meaning of life or reflect on their lifestyle and values. They may seek to explain the situation by blaming something or someone outside themselves or harbour thoughts of guilt. Spirituality is part of the holistic assessment of any patient and their situation, but may be most helpful in patients with chronic or life threatening conditions. It is important to avoid sounding judgemental throughout the consultation, but perhaps particularly when exploring spirituality.

The illness or the possibility of surgery may imply to many people the threat of shortening of life. This may lead to a change in priorities, sometimes a desire to 'put things right'. Just having time lying in bed or restricted in activities by illness can lead people to reappraise their focus and values in life.

Illness may affect family and friends in different ways, some being supportive, caring and helpful, and others withdrawing at a time of need. Relationships with others may change dramatically as a result of the illness. Loss of health can lead to a bereavement type reaction, particularly when there does not seem to be a cure in sight. Disbelief, searching, anger, tearfulness, anxiety and depression, are all common as people struggle to come to terms with the situation.

Options for referral or support:

Macmillan nurses are often well placed to explore spiritual issues with patients and usually accept referrals to consider this aspect of patient care. The oncology health centres similarly would consider spirituality as part of their role. The hospital Chaplaincy team and the Social Work and Chaplaincy team at Dove House Hospice accept referrals for their own patients.

Spirituality includes but is not by any means restricted to religious beliefs and practices. When taking a spiritual history, questions might include:

Clearly you are in a lot of pain. What keeps you going?

This situation can be quite frightening.
Is there anything in particular that worries you?

Who is important to you? What gives meaning to your life?

Do you believe in God? If so, how does that affect your life?

Has your faith helped in this situation or has it made you question your beliefs? Have you been able to speak to someone in your religious community about all this?

Emotional Reactions to Pain

Pain can cause a variety of emotions in the patient, family and their carers. These emotions can be a reaction to the situation or an emotional response to the pain itself. Pain cannot be seen but affects every dimension of the sufferer's life with inevitable consequences for their family and friends. Pain and disability often lead to isolation which exacerbates the emotional symptoms. The situation is complex. Exploring these emotions can help deal not only with the emotion itself but improve pain control.

Negotiating the management plan - Finding common ground

Finding common ground is the process through which the patient and doctor reach a mutual understanding and agreement in 3 key areas:

1. Defining the problem;
2. Establishing the goals, priorities of treatment or management;
3. Identifying the roles to be assumed by the patient and doctor.

With chronic pain particularly, the discussion of pain management is a meeting of experts, a mutual discussion of pros and cons, rather than the healthcare professional telling a passive patient what to do.

Questions might include:

Let us consider this pain together:

What are your thoughts on what is causing this?

Why do you think you are getting this pain now?

Did anyone else suggest to you what the problem might be?

Have you changed your mind about what you think is causing the pain since you first felt it?

If I were to suggest that this might be ... what would you think?

What do you think that we might do about this pain?

I agree / disagree because ... but,
working together we can tackle the pain.

Always check that there is mutual understanding and aim for concordance. Concordance is an approach to the prescribing and taking of medicines that respects the wishes of the patient in determining when, whether and how medications are to be taken. Its aim is to come to some sort of agreement about a treatment plan, even if this involves an agreement to differ. (Contrast this with 'compliance', which is a measure of how far the patient is doing what the healthcare professional says).

So if I may just summarise what you have said, the pain is ... and is worse when ... and you are concerned that ... Is that right?

Is there anything else you would like to add?

So I see the options as ...

Is that clear? Is there anything else I can tell you?

After hearing those options for treatment, what are your feelings?

What would you like to do about this?

Can you think of any difficulties with this particular plan?

Is there anything we can do to make this treatment plan easier for you?

Enhancing the Doctor - Patient relationship

Clearly this refers not just to doctors but to all healthcare professionals. Patients in pain appreciate the opportunity to share some of their suffering by talking or sharing moments of deep understanding. The healthcare professional may be able to stay beside them in their journey, offering empathy, compassion, respect and friendship even if there is no 'cure'. This is not easy, particularly if our training has led us to expect to help by 'doing something'. It is often extremely difficult to be with patients in pain. Like the patient and their carers we may be left feeling helpless and hopeless.

Being realistic

It is very helpful to patients with acute pain to be given an idea of how long it may take to get better so that they can plan their lives with that in mind. For patients with chronic pain they may well be more aware than the healthcare professional of realistic goals for their pain and function. It is important not to 'let patients down' by offering unrealistic expectations of what can be done. Often the cause or diagnosis of pain is not clear. Healthcare professionals need to be realistic about uncertainty and the need to make rational decisions based on incomplete knowledge. Nevertheless, however realistic we are being, there is always room for hope and support.

The importance of review

When any medication is changed for pain it is important to plan a review. This may be open ended, for example 'this should start to help within one week, if not we need to meet again' or more definite with a set review date. Regular review may be appropriate for patient support even if there is no planned intervention. There also needs to be a safety net so that the patient knows what to expect and what to do if things are worse, if they have side effects or if something unexpected happens.

Caring for the carers

Carers provide an essential and usually large part of the patient's support and care. Treating them as part of the social and healthcare team, with the patient's permission, has potential to improve the patient's care and reduce unnecessary social and healthcare interventions. Research evidence suggests carers have certain needs, which if addressed, help them to cope and to continue in the caring role:

- A voice
- Full information
- Time off
- Emotional support
- Recognition of their own health and well-being
- A life of their own
- Training and support to care
- Financial Security

What is pain?

The International Association for the Study of Pain defines pain thus:

Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.

Although brief, this definition takes into account the physical and behavioural response to an individual's pain. However, it takes no account of the psychosocial ramifications of pain, i.e.

- its limitation of a patient's 'work, rest and play'
- the consequences of these limitations, eg. loss of independence
- its effect on a patient's relatives and carers, eg. disruption of future plans
- the reminder of our own mortality - 'the harbinger of doom'.

These consequences can all be described in everyday speech, as "pains". Healthcare professionals would consider them as aspects of "suffering".

Biomedical pains may be Nociceptive:

- tissue damage with stimulation of nociceptors
- somatic (musculo-skeletal)
- visceral (autonomic afferents)

or Neuropathic:

- nerve damage
- altered functioning (peripheral and/or central sensitisation)

It is these aspects of pain at which medical and surgical therapies should be aimed, whereas suffering requires different strategies such as cognitive and supportive therapies.

Pain myths and barriers to pain assessment

The key to successful pain management is thorough and appropriate pain assessment. However, there are often commonly identifiable barriers to such assessment:

- Discrepancies between the patient's and clinician's views of pain
- The patient's education, beliefs and fears
- The patient's culture, previous pain experience and gender
- The assessor's knowledge of pain assessment and attitude towards pain presentations
- The low profile of chronic pain in healthcare strategies and patient management
- A lack of awareness and usage of assessment tools
- A lack of time and resources

What can be done?

With reference to these Pain Management Guidelines, clinicians can ask of themselves:

- What are the areas where pain assessment may be improved?
- How may this be done (with existing or improved resources)?
- What are the constraints?

In order for pain assessment to be improved, the patient and their pain must be viewed in a holistic, patient-centred way and reviewed often. 'Pain is what the patient says it is, existing when he says it does' (McCaffery 1999) so self-report is the most reliable method of assessing an individual's pain. However not all patients are able to self-report their pain, so functional assessment, observation of behaviour and vital signs may have to be used.

Aims of the initial assessment

The aim of an initial assessment is to triage patients with pain as "acute", "chronic" or "acute on chronic" in order to allow appropriate subsequent management.

Acute Pain

Most doctors and nurses investigate and treat patients on the basis that "pain means injury or disease", or "pain is Nature's warning". This is appropriate for recent onset acute pain, and current algorithms for investigation and treatment should be followed.

Chronic Pain

Pain lasting more than 6 to 8 weeks gives rise to changes in the functioning of the nervous system, i.e. sensitisation.

This may be the result of:

- continuance of the peripheral sensitisation of an acute injury
- development of central sensitisation at spinal cord level, or above
- both peripheral and central sensitisation.

The assessment process

All patients reporting pain need to be asked for a pain history, however obvious or urgent the situation appears. "Where? when? and how?" would be an absolute minimum.

With chronic pain, it can be helpful first to determine where pain lies on the list of a patient's other problems. People in severe pain may well have difficulty in answering questions and some patients may get tired with prolonged talking, in which case assessment may be best completed over a number of consultations. It may also be helpful for the patient to complete a pre-assessment questionnaire, such as an anxiety and depression scale.

The pain history:

- site(s) of pain eg. main site and radiation
- severity (see pain scoring section)
- onset and duration i.e. how and when pain started
- verbal descriptors eg. aching, burning, terrible, sickly etc. (use patient's own words)

- exacerbating and relieving factors
- variability throughout the day, week, month etc. as appropriate
- interference with sleep, activities of daily living, mood and emotions, social and family life as appropriate (see questionnaires section)
- therapies - current and past (remember to ask about "herbals", alcohol and complementary therapies)
- what the patient (and family) think the pain means

The pain examination:

- be aware that preconceived ideas from the pain history can influence your interpretation of your examination findings
- remember to record those "odd things which do not fit in"
- perform usual examinations for inflammation, trauma, neurology etc. as appropriate
- record pain sites with altered, diminished or no sensations
- record increased sensitivity to mechanical stimulation eg. to touch, palpation, pin prick
- record any neuropathic element to the pain suggested by allodynia (normal touch evoking pain) and by hyperalgesia (excessive pain from a noxious stimulus) - (see questionnaires section)
- tenderness:
  - present or absent at pain sites
  - present elsewhere
  - try to determine which "structure" is tender eg. skin, musculo-skeletal, neural or visceral
- other observations:
  - how the patient moves eg. slowly, guardedly, sprightly
  - vocalisations eg. sighing on moving
  - reactions of any accompanying persons

Pain scoring:

- is inevitably subjective
- observers tend to underscore, especially professionals
- in cancer pain, relatives and carers can overscore (pain as suffering)
- present pain intensity (how bad now) is most useful, especially for acute pain

NB. Examples of some of the following pain assessment tools (marked with an asterisk *) can be found in the full Guidelines on the CD-ROM.

Numerical rating scales (NRS) for pain:

- 4 point scale of "none, mild, moderate, severe"
- some scales add a fifth point of "very severe"
- note that the scale is non-linear, i.e. the difference between mild and moderate pain need not be the same as between moderate and severe
- advantages of being quick and easy to administer, and providing a record of change of pain over time (but limited by the observer proviso)
- should be recorded as a matter of routine on the "TPR" chart (the level 0 chart) * for all inpatients with pain
- (also 11 point scale - see questionnaires section)
- the "faces" pain scale * should be used for those unable to understand "mild, moderate and severe", such as adults with learning difficulties (and children)
- for adults with cognitive difficulties, there are specialised scoring systems using observable proxies for distress and presumed pain eg. The Abbey Pain Scale * (see section H)

Other pain scores:

- Pain relief scoring measures other things besides changes in pain intensity with treatment (eg. gratitude for receiving comfort or care)
- Visual Analogue Scales (VAS) are good but require more patient education than the Numerical Rating Scales
- A Pain Assessment Chart (for Chronic Pain) * - a quick visual aid for the patient notes

Questionnaires:

- are used mainly for chronic pain
- the LANSS Pain Scale * : the Leeds Assessment of Neuropathic Symptoms and Signs gives a score indicating the likelihood of neuropathic pain playing a part
- a pre-consultation patient questionnaire (such as in A Practical Guide to the provision of Chronic Pain Services for adults in Primary Care *) gives an indication of the extent of the patient's problems.
- the Brief Pain Inventory *: a series of 11 point Numerical Rating Scales covering four aspects of pain intensity, and seven aspects of interference of pain with life. Reasonably easy to complete and repeat over time.
- the Short Form McGill Pain Questionnaire and Pain Diagram * - a valid and comprehensive, multi-dimensional pain assessment tool, but less useful for repeated use.

The evaluation:

- Decide "what the pain means" and "what is happening" (ideally diagnosis and aetiology).
- Explain fully to the patient (and relatives) without being too dogmatic, eg. the most likely explanation at the moment.
- Consider whether further investigations may be helpful or not.
- Consider "medical" treatments for identified biomedical causes.
- Consider appropriate strategies for psychosocial suffering.

A number of clues may help to distinguish chronic or acute on chronic pain from acute pain:

- Duration: similar pain for more than 2 months. Check for previous records, investigations etc.
- Variation in intensity: bouts of worse pains (acute on chronic) are often related to relatively minor over-exertion or injury. This is understandable once the sensitisation process is appreciated.
- Associated autonomic symptoms such as pallor, sweating, fainting: these are concomitant with any severe pain, and can occur occasionally with acute on chronic pain, but are usually absent with chronic pains.
- Associated distress with chronic pain:
  - emotionally charged descriptive words such as "horrible" or "killing" pain
  - social disruption, involving work, rest and play.

Special Cases:

Patients with cancer can also have a pre-existing chronic pain which can be mistakenly attributed to the cancer or can have acute on chronic cancer pain, which was previously controlled; consider

- advancement of the cancer
- changes to the drug regime (concordance etc.)
- psychosocial changes (bad news, carer fatigue etc.)

SECTION D

Medicines Management

Healthcare professionals should abide by their professional code of conduct at all times and adhere to the principles of safe administration and prescription of medicines.

Record Keeping

The keeping of contemporaneous records is vital for both safety and audit purposes. Errors can occur at the prescribing, dispensing and administration stage, particularly the latter. It is therefore of great importance that all prescribing is recorded, preferably electronically

- in the patients record on the prescribing system,
- in the Patient Medication Record (PMR) of the dispensing system,
- on the administration chart.

Details recorded should include:

- Patient's full name and address
- Age if under 12 years (and state the patient's date of birth)
- Name, strength and quantity of prescribed item
- Dosage
- Frequency
- Total amount to be supplied or total duration of treatment
- Directions for use
- Identification of administering practitioner
- Any medication not given due to refusal, wastage or lack of availability
- Identification, where a second practitioner checks the administration.

A simple, patient held drug chart is particularly helpful for people on multiple medications. An example can be found in the full Guidelines.

Role of the Pharmacist

Primary care based pharmacists can play a key role in addressing the effective management of pain, especially in the elderly by:

- appraising all current medications in relation to the patient's clinical history and morbidities
- agreeing and removing any unnecessary medication
- agreeing and ensuring optimum dosage
- educating patients in how to use analgesia to control their pain
- exploring patients' beliefs about their medications.

Accredited pharmacists can arrange such Medication Use Reviews (MURs) face-to-face with patients for action by the GP.

Controlled Drugs

Following the report of the Shipman Inquiry, many changes are taking place with regard to the prescribing, dispensing and administration of controlled drugs. From November 2005, the requirement for prescriptions for controlled drugs to be written by hand by the prescribing doctor was removed. Prescriptions for Controlled Drugs may now be computer-generated, but must conform to the legal requirements whereby the formulation, quantity in words and figures, and dosage must be present. Healthcare professionals should keep updated with changes in legislation involving controlled drugs.

"A guide to good practice in the management of controlled drugs in primary care (England)" has been published by the National Prescribing Centre and is available at www.npc.co.uk.

The Royal Pharmaceutical Society of Great Britain (RPSGB) has guidance on the "Changes in the management of CDs affecting pharmacists (England)" available from the Information Resources section of their website at www.rpsgb.org.

In addition the Department of Health has issued guidance documents on record keeping, prescribing and dispensing of Controlled Drugs available at www.dh.gov.uk/controlleddrugs.

Brand name prescribing

The RPSGB recommended in Feb 2006 that sustained release morphine preparations and opioid patches should be prescribed by brand name. This is safer than generic prescribing since it guarantees patients receive the same brand each time a prescription is dispensed, thus avoiding the potential problem of the small but significant differences in release rates of the various sustained release preparations. This is particularly important for Fentanyl where there are both matrix and reservoir patches available.

SECTION E

Acute, Chronic and Cancer Pain Management

E1. Acute pain management

Acute pain is of sudden onset and has a meaning and purpose. It usually has a predictable and limited duration and is often accompanied by fight or flight features such as pupil dilatation and increased sweating, pulse and respiratory rate. Patients in acute pain are often encountered in Accident & Emergency Departments, Surgical Wards and Critical Care Areas.

For recent onset of severe acute pain of unknown cause, medical advice should be sought. Some episodes of acute pain can also be self-managed at home without the need to seek medical help. Pharmacological agents can be purchased and advice sought from the local Pharmacy. Non-pharmacological pain management can be as effective, on occasions, as pharmacological pain management (for psychological approaches see section E2 Chronic Pain).

The WHO Analgesic ladder

The analgesic ladder can be used as a guide for the treatment of acute pain (see p.22-23). Patients are normally given regular non-opioids and weak opioids (steps 1 and 2), with an immediate release strong opioid as 'if and when required' analgesia ('PRN') which can be titrated up to suit the needs of the patient.

If the episode of acute pain is short lived, the analgesia is stepped down. If the episode of acute pain is severe and protracted the analgesia may be increased to step 3, and once pain is controlled a slow release strong opioid may be used. PRN analgesia would continue at an appropriate dose. When the acute phase is over, analgesia should be stepped down slowly to avoid withdrawal symptoms. Withdrawal can occur in patients who have been on Tramadol for a long time and who suddenly stop taking it, so again, slow step down is advised.

If pain is mild or as pain decreases in intensity, step 1 non-opioids may be given - paracetamol or NSAIDs regularly or as needed.

Indeed, NSAIDs and paracetamol can be used at all 3 steps, unless contraindicated.

Discharge medication

Many patients will require 'To Take Out' (TTO) medication of analgesics. The directions for taking the medication should be clearly written on the container and the discharging nurse has a duty of care to ensure that the patient / carer understands the instructions. If the patient has any problems at home despite taking their prescribed analgesia they are advised to contact their general practitioner.

E2. Chronic pain management

It is important to view chronic pain from all aspects - biological, social or psychological - in order to have an appropriate overview, ideally through a multidisciplinary approach (as used by the Hull community based Chronic Pain Management Service). Also the economic context of the experience is important for patients and their carers. The focus is on symptom management, as in many instances no cause for the chronic pain is found or the cause is untreatable.

Definition and understanding of chronic pain

Chronic pain is defined as an unpleasant sensory and emotional experience associated with actual or potential tissue damage. Chronic pain either persists beyond the point that healing would be expected to be complete (usually taken as 3-6 months) or occurs in disease processes in which healing does not take place. The pain may be continuous or intermittent. Nearly 1 in 7 people suffer from chronic pain and 20% of these have suffered it for more than 20 years. Studies of chronic pain show that it is often persistent and seldom totally resolves, even with treatment.

Pain can occur from neuropathic pain, musculoskeletal conditions, underlying disease, or from complicated surgery. It may be experienced by those who do not have evidence of tissue damage. If no structural cause can be found, this does not mean pain is imagined or exaggerated. Untreated pain can have an enormous impact on mood and morale and can affect the quality of life both for sufferers and carers, resulting in helplessness, isolation, depression and family breakdown.

The 3 - Step WHO Analgesic Ladder

MILD PAIN

Pain Score 1

NON-OPIOIDS

Regular
Paracetamol

PRN
NSAIDS
(if not prescribed regularly)
eg. low dose Ibuprofen initially

MODERATE PAIN

Pain Score 2

WEAK OPIOIDS
for mild to moderate pain

Regular
Paracetamol
+/-
Codeine
OR
Dihydrocodeine
OR
Tramadol
(Do NOT use two
weak opioids together)

PRN
Morphine sulphate
immediate release
(Sevredol tablets or Oramorph liquid)

SEVERE PAIN

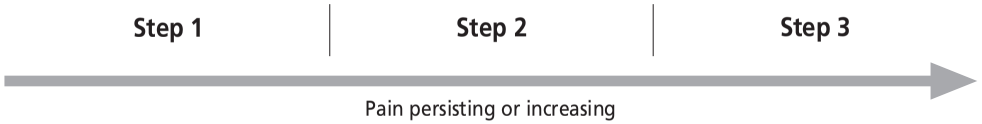
Pain Score 3

STRONG OPIOIDS
for moderate to severe pain

Regular
Morphine
sulphate
S/R Tablets or
S/R Capsules
(12 hourly)
OR
Morphine
sulphate
S/R Capsules
(24 hourly)
OR
Oxycodone S/R
Tablets
(Oxycontin)
(12 hourly)
OR
*Fentanyl S/R
transdermal patch
(72 hourly)

PRN
Morphine
sulphate
immediate release
(Sevredol tablets
or oramorph
liquid)
OR
Oxycodone
immediate release
caps/liquid
(Oxynorm)

Paracetamol +/- NSAID - See Analgesia Table



Notes:

* Fentanyl patches are NOT to be used for acute pain as this is not a licensed indication and the onset of action is too long.

1 SEE ANALGESIA TABLE (in full guidelines) FOR ADULT DRUG DOSES

2 DO NOT CHANGE LONG -TERM ANALGESIA UNLESS OTHERWISE INDICATED

3 For chronic pain consider ADJUVANT analgesic therapy: eg amitriptyline or gabapentin

4 For patients who are nil by mouth, please see Flow Chart for Intermittent IV Opioid Administration (in full guidelines)

Abbreviations:

NSAID = Non-Steroidal Anti-Inflammatory Drug
S/R = Slow Release
PRN = When Required

See Adult Analgesia Table in full guidelines for details of recommended adult dosages, frequencies and routes of administration.

Chronic pain management techniques

Previous experience, current mood, alertness and expectations all play a part in our response to pain. Whether we feel we have control over an event is an important determinant of how we respond. We can use our brain to influence our experience of pain.

Behavioural approaches

These consider how pain behaviours may be learned and maintained or strengthened through conditioning. Interventions involve changing pain thresholds and pain tolerance, and altering learned helplessness and sick role behaviour, either individually or by involving the family. Various behavioural approaches to pain management are outlined below.

- Self-help - instructions should be given to patients on how to self manage their pain in the first instance. Non-pharmacological options such as TENS and physiotherapy can be considered.
- Problem solving - involves shifting the attention away from pain being the sole problem and seeing the impact it has on other areas of life. The six steps of problem solving are problem identification, goal selection, generation of alternatives, decision making, implementation and evaluation.
- Relaxation - Relaxation techniques have been shown to decrease anxiety, stress, muscle tension and pain levels whilst increasing abilities in pain management and improving sleep. It can therefore prevent major exacerbations of pain and reduce fear and muscle spasms when tackling new goals.
- Biofeedback - involves the use of equipment to teach patients to change their physiological responses by providing them with immediate feedback from their responses.
- Contingency management - aims to increase the frequencies of well behaviours and decrease that of pain behaviours. Whatever the initial underlying cause of the pain problem, pain behaviours such as complaining of pain, inactivity or taking medication may be maintained by their reinforcing consequences.

No attention is given to pain behaviours or requests for analgesics, but social reinforcement is provided for increased patient activity levels.

- Pacing and goal setting - Patients with chronic pain may find they have good days and bad days. As time goes on they may find themselves having more bad days than good days. When suffering from chronic pain, it is very easy to become trapped in the inactivity / overactivity cycle. Pacing is about breaking this pattern and gradually increasing what they do, and is the key to learning how to manage pain effectively. Tasks that cause pain when done all at once need to be split into more manageable chunks.

Social approaches

Interventions include developing improved pain assessment techniques, paying attention to subtle cues from body language, providing appropriate role models and setting up group therapy sessions and support groups.

Cognitive approaches

Based on health belief models and include models of confronting and avoiding attitudes to pain. People are helped to examine their beliefs, memories and expectations about their pain and their ability to manage it. Strategies include the use of distraction, imagery, information giving and the facilitation of self efficacy.

The cognitive behavioural perspective on pain management focuses on modifying sensory, affective, cognitive and behavioural aspects of the experience. It helps patients to gain a sense of control over the effects of pain on their lives. Specific cognitive techniques include the following: cognitive restructuring, somatisation, attention & distraction and coping skills training.

Psychodynamic approaches

These encourage exploration of repressed memories and conflict, relating to early experiences and the way in which defensive behaviour may have developed. The aim is to improve insight and work towards more effective management of the pain.

Humanistic approaches

These aim to empower the patient, allowing them control over the amount of analgesic to be given, and their involvement in care and planning. Any approach which interrupts a habitual cycle of pain and distress can help the patient towards more positive pain management. Multimodal pain management may include complementary therapies such as Alexander technique to teach beneficial posture and movement, hypnosis, exercise, relaxation, acupuncture, massage, aromatherapy, shiatsu, yoga and similar techniques to improve muscle tone and reduce tension and pain, chiropractic and osteopathy to promote healthy movement of bones and muscles. Faith healing may be used.

The Expert Patients Programme and other Chronic Disease Management services

Patient support groups may be of benefit to some patients with chronic pain. However their content and style vary considerably, rarely improving function, but they may help mood. Expert Patients Programmes bring about a fundamental shift which may empower and liberate patients to play a central role in decisions about their illness in partnership with care providers. Patients can achieve greater control over their lives. Various cognitive techniques are used to encourage people to manage their pain using their own skills and knowledge. These techniques include understanding of the pain-symptom cycle, action planning, problem solving, relaxation and confidence building.

Chronic pain management options in Primary Care

Where available, chronic pain services in primary care use a range of drug and non-drug therapies including CBT and group work to support the management of chronic pain. The local community chronic pain management service operates from Marfleet Healthcare Centre (Monday-Friday, Tel: 01482 344294) led by a GP with input from a specialist nurse and 2 pharmacists, with future plans to employ a psychologist, physiotherapist and occupational therapist. Currently the majority of referrals are from Eastern Hull, although it is anticipated that after the formation of the single Hull PCT the community chronic pain management service will expand.

Readiness to change and motivational interviewing

This model of supporting positive changes in behaviour can be used in a range of situations including smoking cessation and drug/alcohol treatment and can also be of use in chronic pain management. The model of change and motivational interviewing techniques are described in more detail in the full guidelines.

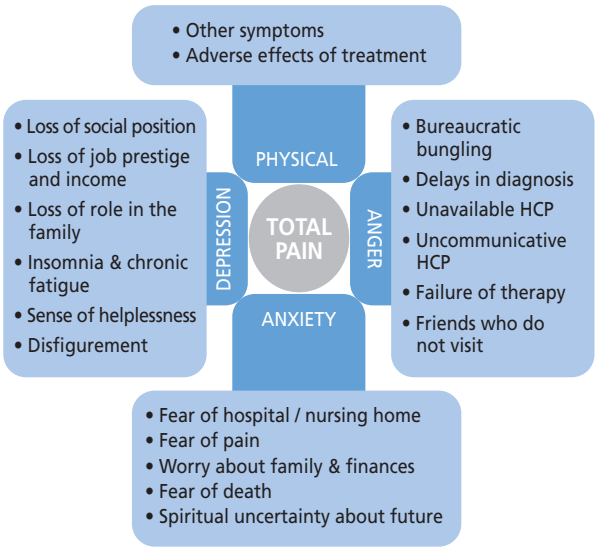
There is a range of techniques that may be used in the assessment of chronic pain, including measures of coping mechanisms, the affective component of pain and the impact on quality of life. These are detailed in the full guidelines.

Use of adjuvant analgesia in chronic neuropathic pain

For advice on the use of specific drug therapies in chronic neuropathic pain, see Section G of this booklet.

E3. Cancer pain management

Evidence suggests that most cancer pain can be controlled with appropriate intervention. The aim of this section, therefore, is to provide information and guidance to healthcare professionals on the safe management of patients with cancer pain. If symptoms prove difficult to control further guidance should be sought eg. from the Specialist Palliative Care Team. Bear in mind that there are many factors that can influence a patient's perception of pain:

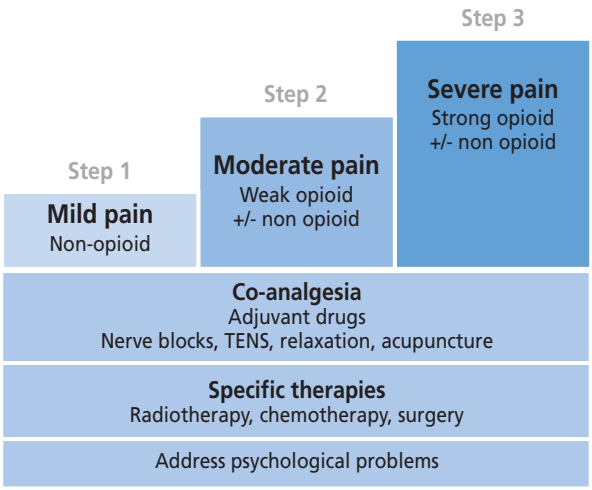


HCP = healthcare professional

In cancer patients several different pains often co-exist. Each pain should be assessed separately and treatment considered. When managing cancer pain consider using an appropriate pain assessment tool, of which there a number of examples in the full guidelines. (Examples of frequently used tools may be printed off and laminated if required). Regular and frequent review to ensure optimal pain control is paramount.

Mild and moderate pain can be managed using the WHO analgesic ladder and non-drug therapies such as relaxation and distraction are also very effective in cancer pain.

Drug therapies for cancer pain - The WHO Analgesic Ladder



Strong opioids

The Expert Working Group of the European Association for Palliative Care 1996 and 2001 recommended the use of strong opioids for patients who have been assessed to be in moderate to severe pain i.e. Step 3 of the WHO Analgesic Ladder. Initial titration should be with immediate release morphine. Depending on circumstances modified release morphine may provide a more convenient option for both patient, carer and healthcare team but early review is essential.

Immediate release opioids

Immediate release Morphine preparations have an onset of action of about 20 minutes and reach a peak around 60 minutes. The rapid onset of analgesia makes these preparations suitable for use in initiating therapy for severe pain and for breakthrough pain. Foley (1998) defines breakthrough pain as 'an unexpected increase in pain to greater than moderate intensity, occurring on a baseline pain of moderate intensity or less'.

Titration chart

(for breakthrough pain see p.33)

DRUG	DOSE	COMMENTS
Sevredol Available as: • 10mg • 20mg • 50mg **Oramorph** Available as: • 2mg/ml • 20mg/ml (Concentrate) (N.B. Unit dose vials are also available)	Prescribe immediate release oral Morphine using Sevredol or Oramorph 4 hourly **and** 'as required' Starting dose: Sevredol 10mgs 4 hourly **and** 'as required' Or Oramorph 10mgs 4 hourly **and** 'as required' (For frail or elderly a lower starting dose may be considered eg. 2.5 - 5mgs 4 hourly and 'as required') Continue for 24 - 48 hours to titrate to individual opioid requirements in 24-hour period (NCHSPCS 1998).	*Additional doses can be administered 'as required' for breakthrough pain. Leave a minimum period of 1 hour between doses Calculate the total amount of oral morphine used in 24 hours. Divide by 6 to get the new 4 hourly and 'as required' dose of Morphine. **Pain not controlled** Consider adjuvants and other factors i.e. not all pains are opioid responsive.

Converting from immediate release morphine to modified release morphine

Once suitable pain control is achieved by the use of immediate release morphine, conversion to the same total daily dose of modified release morphine should be considered (SIGN publication Number 44 2000). Examples of modified release morphine preparations are:-

- MST Continus
- Zomorph Capsules

Conversion to modified release preparation

Calculate the total amount of immediate release oral morphine administered in a 24-hour period and divide by 2 to convert to 12-hourly, modified release. The total amount of morphine administered over the 24-hour period should include any additional doses given for breakthrough pain.

Example of calculation:

- Patient received 10mgs oral morphine 4-hourly over 24 hours. This equals 60mgs in total.
- Divide this by 2 to obtain twice daily dose for modified release oral morphine.
- 60mgs divided by 2 = 30mgs twice daily of modified release oral morphine

If patient received additional doses for breakthrough pain:

- Add total of any additional doses for breakthrough pain to total of 4-hourly doses received in 24 hours

For example:

- Patient received 4 additional doses of 10mgs for breakthrough pain during 24 hours
- The total amount of morphine given over 24 hours would therefore be 60mgs plus 40mgs = 100mgs
- Divide 100mgs by 2 to calculate twice daily dose of modified release oral morphine = 50mgs bd

Starting a patient on modified release oral morphine

If it is preferred to start a patient directly on modified release oral morphine:

- If the patient was previously receiving full dose weak opioid regularly give 20 - 30mg modified release morphine twice daily
- If the patient is frail and elderly, a lower dose helps to reduce initial drowsiness, confusion and unsteadiness eg. 15mg modified release morphine twice daily

Breakthrough pain

Once the dose of modified release morphine has been calculated, a dose equal to one sixth of the total daily morphine to be taken should be prescribed as immediate release morphine 'as required' for any breakthrough pain. This is established practice when using morphine for cancer pain according to the Expert Working Group of the European Association for Palliative Care.

Examples of how to calculate dose for breakthrough pain:

Example 1:

- Patient receives 30mgs bd modified release morphine = total of 60mgs in 24 hours
- Dose for breakthrough pain = 60mgs divided by 6
- Dose for breakthrough pain = 10mgs immediate release oral morphine 'as required'

Example 2:

- Patient receives 150mgs bd modified release morphine = total of 300mgs in 24 hours
- Dose for breakthrough pain = 300mgs divided by 6
- Dose for breakthrough pain = 50mgs immediate release oral morphine 'as required'

How to increase the modified release morphine dose

For patients who require breakthrough analgesia on a frequent basis, the dose of modified release oral morphine should be increased in order to achieve pain control. The new total daily dose of modified release oral morphine should be calculated by adding the total of any breakthrough doses of immediate release morphine in a 24-hour period, to the existing daily dose of modified release oral morphine.

Example of calculation:

	Total in 24 hours
• Patient takes modified release morphine 30mgs twice daily	**60mgs**
• Patient required six doses of 10mgs immediate release morphine for breakthrough pain	**+** **60mgs**
Total	**120mgs**

- Divide total by 2 to obtain new modified release dose
- New dose = 120mgs divided by 2
- New dose = 60mgs twice daily modified release morphine

To calculate the new dose for breakthrough pain:

Prescribe one sixth of the total daily dose as a rescue dose for breakthrough pain. In the example above this would be 120mgs divided by 6 to obtain a breakthrough dose of 20mgs immediate release oral morphine 'as required'.

NB: Recommendations for patients unable or unwilling to use rescue facility for breakthrough pain

Some patients may experience breakthrough pain, but be unwilling or unable to use the breakthrough pain facility. Reasons for this include opioid phobia, the patient not being lucid enough or simply

reluctant to request additional analgesia. In such circumstances it is not possible to calculate the true opioid requirement of the patient based on the amount of 'as required' doses administered for breakthrough pain. It is recognised practice in such cases to increase the dose of sustained release oral morphine by one third or one half.

Examples:

For a patient taking 120mgs modified release oral morphine in 24 hours (in 2 equal doses of 60mgs)

To increase this dose by one third:

- Calculate one third of 120mgs = 40 mgs
- Increase the total 24 hour dose by 40mgs to 160mgs, to be given in 2 equal doses
- New dose is 80mgs modified release oral morphine twice daily

To increase this dose by one half:

- Calculate one half of 120mgs = 60mgs
- Increase the total 24 hour dose by 60mgs to 180mgs, to be given in 2 equal doses
- New dose is 90mgs modified release oral morphine twice daily

Patients unable to take oral opioids

When patients with moderate to severe pain are unable to take oral opioids, alternative routes of administration must be considered. Subcutaneous continuous infusion is the preferred route, however, transdermal patches may also be considered.

- Pethidine is not a suitable opioid for patients with cancer pain due to its short duration of action and the necessity for repeated injections. It may also contribute to epilepsy and renal failure.
- The intramuscular route is not suitable.

Subcutaneous route

Indications for subcutaneous administration of opioids:

- Inability to take oral medication
- Nausea and/or vomiting
- Gastrointestinal obstruction
- Any pathology limiting gastrointestinal absorption

For more information on the use of Syringe Drivers for symptom control in patients with cancer please refer to the 'Prescribing in palliative care' section in the British National Formulary or seek specialist advice.
www.bnf.org/bnf/bnf/current/index.htm

Conversion from oral morphine to subcutaneous diamorphine:

From clinical practice, subcutaneous diamorphine is approximately three times as potent as oral morphine. To convert from oral to the subcutaneous route, add up the total oral morphine requirement for the previous 24 hours (both regular and any breakthrough doses). Divide this amount by three to calculate subcutaneous dose and prescribe as a subcutaneous infusion over 24 hours (Expert Working Group of the European Association for Palliative Care BMJ 1996). Oral analgesia should be discontinued once the syringe driver is commenced.

Example 1:

Patient received 60mgs modified release oral morphine in 24 hours (30mgs bd). Divide by three to calculate subcutaneous diamorphine dose. Subcutaneous dose = 20mgs diamorphine via syringe driver over 24 hours

Rescue dose for breakthrough pain: One sixth of the total daily dose (to be given at any time by bolus subcutaneous injection) should be prescribed for breakthrough pain. 20mgs divided by 6 = 3.3mgs. The breakthrough dose would therefore be 5mgs (rounded up to the nearest practical dose)

Example 2:

Patient received 200mgs modified release oral morphine in 24 hours (100mgs bd). Divide by three. Subcutaneous dose = 60mgs diamorphine via syringe driver over 24 hours

Rescue dose for breakthrough pain: One sixth of the total daily dose = 10mgs diamorphine by subcutaneous injection prn.

Other opioids

To date most experience in palliative care has been gained in the use of oral morphine, subcutaneous diamorphine and Fentanyl patches. Other opioids are available but it is recommended that you seek further specialist advice when considering their use.

Guidelines for the use of transdermal Fentanyl

It is recommended that Fentanyl patches are prescribed by brand name (see p19).

Indications for use

Fentanyl is a strong opioid, which has been shown to have similar clinical efficacy in pain relief as morphine. It is indicated in patients with stable pain who have difficulty with morphine or with the oral route of administration. It is formulated in a patch delivery system and the patch is generally replaced every 72 hours. It has a time lag of 6-12 hours to onset of action, hence its use for stable pain only. Specifically, use of transdermal Fentanyl should be considered in patients with:-

- Dysphagia or difficulty swallowing oral medication
- Vomiting or gastrointestinal obstruction
- Patients unable to take oral medication appropriately
- Unacceptable toxicity from morphine

Contraindications

- Transdermal Fentanyl is not a suitable analgesic for uncontrolled pain
- Transdermal Fentanyl is not suitable for patients with fever or excessive perspiration, as this can affect absorption

Starting transdermal Fentanyl

a) patients previously on maximum regular dose of weak opioids

Transdermal Fentanyl is only indicated as a first line strong opioid in patients with the indications noted above. It should be initiated with caution and only in patients tolerant of Codeine or Dihydrocodeine ≥ 240mg/day or Tramadol ≥ 400mg/day.

- Start with a 25 microgram per hour over 72 hours patch.
- Continue pre-existing analgesic for first 12 hours after applying a patch.
- Dosage should be titrated for optimum pain relief only after 72 hours.
- There is evidence that in some patients, Fentanyl causes less constipation than morphine, however a stimulant laxative should still be prescribed

Breakthrough pain:

- Immediate release opioids, usually morphine, should be administered for any breakthrough pain (eg. Oramorph or Sevredol) at 4 hourly equivalent dose, see chart below.

b) patients previously on strong opioids

- Calculate the correct patch size using the conversion chart in Table 1 below, based on the patient's previous 24-hour morphine requirement.
- Converting from immediate release morphine: Continue to give 4-hourly morphine for the next 12 hours after applying the patch.
- Converting from modified release morphine: Apply the first patch at the same time as giving the last 12-hourly Morphine tablet.

Breakthrough pain:

- Immediate release opioids should be prescribed 'as required' for breakthrough pain.
- The initial dose prescribed for breakthrough pain should be one sixth of the previous total daily dose of oral morphine.
- Remember: If the patch strength is increased, the 'as required' rescue dose should also be increased accordingly.

- If, after 48 hrs on the same patch strength, patients require more than 2 rescue analgesic doses in a 24 hr period, the dose may be titrated upwards in increments of 12 - 25 micrograms/hr patches N.B. it takes 17-24 hrs to achieve stable plasma levels. Do not increase the patch strength at less than 48 hr intervals.

Calculating the appropriate breakthrough dose

We recommend using an appropriate conversion chart to calculate the correct dose of immediate release opioid. Oral morphine is usually used for breakthrough pain for patients using Fentanyl patches.

TABLE 1:
Oral Morphine to Transdermal Fentanyl Patch conversion chart

Breakthrough dose oral Morphine (mg)	Transdermal Fentanyl Patch Strength (micrograms/hr)*	24 Hourly Oral Morphine equivalent (mg per day)
<20	25	<90
20 - 25	37	90 - 134
25 - 35	50	135 - 189
35 - 40	62	190 - 224
40 - 50	75	225 - 314
55 - 65	100	315 - 404
70 - 80	125	405 - 494
85 - 95	150	495 - 584
100 - 110	175	585 - 674
115 - 125	200	675 - 764
130 - 140	225	765 - 854
145 - 155	250	855 - 944
160 - 170	275	945 - 1034
175 - 185	300	1035 - 1124

* NB This table includes the Fentanyl 12 patch available for titration purposes.

Application of transdermal Fentanyl patches

- Apply to normal skin on the chest or upper arm.
- If there is a need to wash the skin only use cold water and pat completely dry. Do not use soap or talcum powder.
- Patches are waterproof - patients can shower and bathe.
- But do not soak the patch site in the bath.
- Avoid applying the patches to lymphoedematous or recently irradiated areas.
- If the patient is particularly hairy, clip body hair close to the skin - do not shave.
- Apply the patch and press for 30 seconds lightly with a flat hand.
- Do not cut the patch.
- Micropore, Opsite or Tegaderm can be used around the edges of the patch to aid adhesion. Do not place over the whole patch site.
- Alternate the patch site every 72 hours.
- Ensure the used patch is removed and disposed of in a safe manner.

Dealing with uncontrolled pain

- Increasing the Fentanyl patch will not be effective immediately due to time lag to onset of analgesia.
- Check that the patches have been used correctly and are adherent to the skin.
- Reassess the patient to ascertain why the pain has worsened (eg. pathological fracture).
- Check that the dose for breakthrough pain is correct and that the pain is responsive to opioids.
- If the patient can take oral medication, supplement with immediate release morphine as required until pain is stabilised and then titrate the patches accordingly.

- If the patient cannot take oral medication, give a subcutaneous diamorphine injection (see table below). If two or more breakthrough doses are required in a 24 hour period consider a subcutaneous diamorphine infusion in addition to the patch, using the guidelines below.
- Whenever a diamorphine syringe driver is commenced subcutaneous diamorphine injections should also be prescribed 'as required' for breakthrough pain (See Table 2 for dosage).

TABLE 2 :
Initial dose of subcutaneous diamorphine in addition to a Fentanyl Patch

Transdermal Fentanyl Patch	24 Hourly dose / ADDITIONAL Diamorphine s.c. This represents an increase of 50% in the overall analgesic dose	Breakthrough/PRN Diamorphine s.c. dose
25	15mg	5mg
50	30mg	10mg
75	45mg	15mg
100	60mg	20mg
150	90mg	30mg
200	120mg	40mg
300	180mg	60mg

NB. If a patient is already on a Fentanyl patch and diamorphine in a syringe driver and still has pain seek specialist advice. (The calculation is complex)

Anti-Emetics, Laxatives and Adjuvant Analgesics

An anti-emetic and laxative should always be co-prescribed when commencing strong opioids.

Anti-emetics

In clinical practice it appears that in opioid naïve patients, 30-60% will develop nausea and/or vomiting. Tolerance in some of patients may occur within 5-10 days. Patients should therefore be prescribed an anti-emetic when first commencing opioids eg. low dose haloperidol 1.5mg orally at night or metoclopramide 10mg three times daily should be prescribed for one week. (see Wessex Palliative Care Handbook for more details). Consider an anti-emetic when increasing the opioid dose.

Laxatives

The majority of patients taking opioids will develop constipation. Little or no tolerance develops. It is recommended therefore to prescribe prophylactic stimulant and softening laxatives when commencing opioids.

- Always assess the patient and titrate laxative according to individual requirement
- Constipation can be prevented in the majority of patients
- Softening agent alone may be ineffective, consider using stimulant in conjunction eg. Co-danthramer strong (only for terminally ill patients as per BNF) or lactulose and senna or Movicol.
- When increasing opioids always titrate laxative accordingly
- In intestinal obstruction never use a stimulant laxative. In partial obstruction a softener may be used eg. Docusate
- About a third of patients also need rectal measures

Adjuvants

Adjuvant analgesics are a miscellaneous group of drugs that relieve pain in specific circumstances. They can be used in combination with opioids and may achieve synergistic effects producing better pain relief at lower doses of opioids, leading to fewer opioid side effects. It is important to choose the appropriate adjuvant according to the nature of the patient's pain.

Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)

Indications:

- NSAIDS are of particular benefit for pains associated with inflammation eg. soft tissue infiltration and bone metastases
- Also indicated for liver pain

Suggested drugs and dosage:

- Diclofenac 50mgs three times daily or
- Ibuprofen 200 - 400mgs three times daily

Cautions:

- Consider co-prescribing gastric protection.
- Extra caution should be exercised in patients with gastric problems, taking Warfarin, renal failure, dehydration and/or asthma.
- Extra caution should be exercised in patients with cardiac failure and the elderly

Poor pain relief and adverse effects may be overcome by changing to a NSAID in a different chemical group (seek Specialist Palliative Care advice)

Corticosteroids

The general anti-inflammatory effect of corticosteroids reduces total tumour mass, resulting in a reduction of pain. Steroids are often beneficial for pain associated with tumour pressure on structures sensitive to pain, for example: cerebral or liver metastases that are not as responsive to opioids.

Indications and dosage of dexamethasone:

- Nerve root / nerve trunk compression / Soft tissue infiltration e.g. 4 - 8mg
- Spinal cord compression / raised intra cranial pressure e.g. 8 - 16mg
- Liver pain e.g. 8 - 16mg (Wessex Palliative Physicians 2002)
- Bone pain - seek dosage advice from the patient's consultant or specialist nurse
- Inoperable intestinal obstruction 8 - 20mg

Directions:

- Dexamethasone should be taken once daily in a morning or in two equal doses
- Should not be given after 2pm (unless on first day of treatment) as it can cause insomnia

Cautions:

- Consider co-prescribing gastric protection.

It is usual to give a trial of seven days and stop if ineffective. If steroids are taken for longer the dose should tapered slowly.

Bisphosphonates

Indications and dosage:

Bone pain - IV infusions of bisphosphonates may reduce pain in patients with bone metastases, especially from breast and prostate cancer and myeloma:

- Pamidronate 60-90mg
- Sodium clodronate 1500mg every 3-4 weeks, depending on identified response. Expensive.

Tricyclic Anti-depressants

Indications:

Neuropathic pain especially if of a constant aching or burning nature.

It is important when starting anti-depressants to explain the rationale for their use to the patient.

Drugs and dosage:

- Amitriptyline starting dose of 10mgs - 25mgs at night.
- Increase dose at weekly intervals by 25mgs up to a dose of 75mgs
- If no improvement at that dose, consider an alternative - seek specialist palliative care advice

Cautions:

- Because of potential sedative effects amitriptyline should be administered at night
- Caution should be taken with patients with cardiac arrhythmia

Neuropathic pain in cancer

Cancer patients may also suffer from chronic neuropathic pain - see Section G for appropriate drug therapies.

The neuropathic pain component can be assessed using the LANSS assessment tool, detailed in the full guidelines.

Anti-spasmodics

Colicky abdominal pain due to inoperable / intermittent intestinal obstruction (not constipation)

- Avoid or stop stimulant and bulking laxatives
- Avoid prokinetic anti-emetics (metoclopramide, domperidone)

Drugs and dosage:

- Hyoscine Butylbromide 20mg as required subcutaneously.
- Hyoscine Butylbromide 60 - 200mg via syringe driver over 24 hours

Muscle spasm:

- Consider diazepam 2 - 5mg up to three times daily

Palliative treatment options for bone pain

- Consider early referral for palliative radiotherapy - usually a single fraction is effective. Patients with multiple sclerotic metastases may benefit from radioactive strontium treatment.
- When pain in a long bone is of sudden onset or severe, consider the possibility of a pathological fracture: obtain x-ray and consider orthopaedic opinion.
- Spinal cord compression is an oncological emergency which can cause severe back pain and may respond to treatment - immediate referral is indicated.

Role of the Oncology Health Centres

An Oncology Health Centre was established in January 2000 at the Princess Royal Hospital, and a second Centre opened in 2002 at Castle Hill Hospital. They offer drop-in facilities for patients with cancer and their relatives (Mon-Fri 9am-5pm). In addition, healthcare professionals can refer patients and relatives who are experiencing clinically significant difficulties in coping with the diagnosis and/or the treatment of cancer. A clinical psychologist or a specialist behavioural oncology nurse can offer a range of evidence-based psychotherapeutic interventions, including adjunctive psychological therapy and hypnotherapy.

Staff at the Centres also offer information, support, practical help (including welfare rights) and the opportunity to discuss any matter of concern. In addition, patients are given the opportunity to learn various evidence-based, self-help techniques, in order to minimise treatment side effects and to enjoy as good a quality of life as possible during and after cancer treatment.

Role of the Hospital Macmillan Specialist Palliative Care Team

- Provide expert knowledge in the management of patients with specialist palliative care needs
- Provide specialist nursing advice
- Pain and symptom control advice
- Provide support for patients, family and staff
- Give patients and carers the opportunity to talk through information they have been given.
- Give further information and help patients / carers find the information they need.

The team also provides a rapid response palliative care clinic for outpatients each Friday morning at The Oncology Outpatients Dept at Princess Royal Hospital. Patients can be booked onto this clinic by telephoning 01482 676625.

Further advice & contacts

If in any doubt or if symptoms are difficult to control, seek specialist palliative care advice from the Macmillan nurse teams (hospital or community based) or the oncology health centres etc.

See Section I of this booklet for a list of useful contact numbers and the full Guidelines for details on sources of further information and advice.

SECTION F

Non-drug Therapies for Pain Management

Introduction

There is evidence for the effective use of a range of non-drug therapies in pain control. These include Cognitive Behavioural Therapy (CBT) and Complementary Therapies.

Complementary therapies for chronic and cancer pain

These include: Acupuncture, Aromatherapy, Therapeutic Hypnosis, Homoeopathy, Reflexology, Reiki, Therapeutic Touch and Therapeutic Massage.

Possible benefits of complementary therapies include:-

- An efficacy as good as a placebo;
- The focus of attention is directed away from pain and suffering, worry and anxiety;
- Patients report improvements in their quality of life.

Possible harmful effects of Complementary Therapy include:-

Physical damage from acupuncture, chemical damage from aromatherapy, and harmful psychological effects when CBT is used, (for example unrealistic expectations and over dependence on the therapist).

The aim of Complementary Therapy should be to minimise harm and to maximise benefit. Therapists should be appropriately trained and should have a current registration with a professional body.

Acupuncture

Introduction

This holistic Chinese medicine was first brought into Europe in the 17th Century. Controlled trials on chronic pain have proved that acupuncture helps from 55% to 85% of patients, while placebo controls benefit only 30% to 35% of cases. Acupuncture stimulates nerve fibres in the muscle, which sends impulses to the spinal cord and activates three centres namely the spinal cord, midbrain and hypothalamus-pituitary axis to cause analgesia.

Patient's Perspective

The Chinese doctors saw man as an integral part of nature and in a state of intensive interaction with his environment. They expressed the body vital energy i.e. life force that they called "Qi" (pronounced Chi) to be the main source of energy, if the Qi of an organ is weakened, the function of this organ will be incomplete or faulty, but if Qi is present in excess, the result is excessive function. Life force and vital energy flows through a system of conjectural channels called meridians that regulate the body function. It is possible to exert a direct beneficial effect on the channels and organs and thus, in turn on body functions through needling acupuncture points that are widely distributed along meridian pathways.

Clinician's Perspective

The important basis for a successful acupuncture treatment includes:- Comprehensive diagnosis; analysis of symptoms; examination; knowledge of the main meridian channels and awareness of the list of current indications and recommendations for the use of acupuncture according to the World Health Organisation (WHO).

Therapeutic Hypnosis

Introduction

Hypnosis has been described as a psychological state in which certain human capacities are heightened whilst others fade into the background. During hypnosis a person's critical faculty or logical mind is suspended or diminished, leading to an increase in the probability of the acceptance of therapeutic suggestions.

Hypnosis was recognised by the British and American Medical Associations as a legitimate medical procedure in the 1950s.

Patient's Perspectives

Hypnosis in clinical settings is usually associated with feelings of comfort and deep relaxation. Although it has been suggested that hypnosis is the art of using this dreamlike state to effectively communicate ideas that enhance motivation and change perceptions, as yet there is no universally accepted mechanism to explain all hypnotic phenomena.

Contraindications and Limitations

- Patients with a history of psychosis or personality disorder
- Epilepsy
- Children under five years
- Care should be taken with the phrasing and content of questions used in hypnosis due to the phenomenon of suggestibility and illusory memories in the therapeutic setting
- Individuals may vary in their response to hypnotic suggestions. For hypnosis to be effective, patients need to be receptive to the idea of hypnosis.

Evidence Base

Whilst studies are fairly limited there is strong anecdotal and sufficient clinical trial evidence to indicate that hypnotherapy can produce a significant reduction in acute pain.

With cancer care, therapeutic hypnosis may lead improvements in

self-esteem, involvement in self-care, return of locus of control, decrease in unpleasant side effects and continued efficacy as well as the management of anticipatory nausea and vomiting.

There are generally few randomised controlled trials for hypnosis in chronic pain management, which is a complex area of medicine involving factors at the psychological and physiological levels for which a single form of treatment is unlikely to be sufficient on its own. Hypnosis is consistently better than no treatment, but is probably most effective when combined with other treatments in a multi-disciplinary programme.

Accessing Therapeutic Hypnosis

All patients referred to the Centre for Pain Medicine at Castle Hill Hospital have access to therapeutic hypnosis on referral from the pain management consultant.

Physiotherapy

Physiotherapy is a science-based healthcare profession, which views human movement as central to the health and well-being of individuals. Physiotherapists identify and maximise movement potential through health promotion, preventive healthcare, treatment and rehabilitation.

Physiotherapy practice is characterised by reflective behaviour and systematic clinical reasoning, using a problem solving approach to patient-centred care.

Physiotherapy aims to optimise the patient's level of physical function taking a holistic approach, identifying achievable realistic goals. Physiotherapists aim to negotiate with patients, carers and multidisciplinary team (MDT) for a global patient benefit. They also conduct ongoing assessment of the needs of the patient and carers in order to apply skilled interventions which are vital for the patient's independence, function capacity and quality of life.

Physiotherapy and Chronic Pain

The core skills of the physiotherapist are the ability to use manual therapy, therapeutic exercises and electro physical modalities.

Physiotherapists contribute to pain management programmes by helping patients to:-

- Improve fitness, mobility and posture and counteract the effects of disuse
- Return to more normal and satisfying activities
- Counteract unhelpful beliefs and improve mood and confidence
- Avoid adverse drug effects and reduce unhelpful drugs
- Improve stress management and sleep
- Reduce effects of pain on family and improve social relationships
- Promote independence and maintenance of treatment gains

SECTION G

Specific Drug Therapies

It should be remembered that analgesics act at many different sites and therefore not all types of pain respond to all analgesics.

The Pain Management Task Group was asked to provide guidance on the following specific drug therapies where there was concern over the appropriateness of local prescribing practice:

Fentanyl

Careful thought should be given to initiation of Fentanyl and its use limited to those patients who cannot take oral preparations. Particular care should be taken when considering the use of Fentanyl in opiate naive patients. (see Cancer pain section for detailed guidance on the initiation and use of Fentanyl).

Paracetamol / codeine

The preferred formulation is to use separate prescriptions for paracetamol with codeine phosphate prescribed as required. However, after discussion with acute and primary care trust colleagues there was a clear wish to retain the option for use of combined preparations. The underlying principle is to use the lowest dose of codeine necessary to control pain.

Gabapentin

For gabapentin appropriate prescribing means an accurate assessment of the level of pain followed by a rapid progression to optimal therapeutic dose. A reassessment of pain relief should then follow and the therapy be discontinued if not proving beneficial. These principles are captured in the prescribing pathway for gabapentin (see p.56-58) developed by the Hull & East Riding Prescribing Committee (HERPC) in conjunction with local pain control specialists:

Pathway for the use of adjuvant analgesia in chronic neuropathic pain

The following offers guidance for primary care in the use of adjuvant analgesics and should be used in conjunction with the analgesic ladder. This information is intended to be used as a reference source for GPs in order to become familiar with the commonly used adjuvant analgesics. It should be noted that none of the tricyclic antidepressants are licensed for the treatment of neuropathic pain.

For information on interactions, cautions and side effects the latest BNF and summary of product characteristics should be consulted.
www.medicines.org.uk

Key Principles:

- Patients should be assessed before and during treatment to help monitor efficacy to treatment.
- Both drug and non-drug treatments should be considered.
- Generally start at a low dose and increase gradually.
- Always ensure the patient has had a fair trial of the medication before stopping failed therapy and starting a new therapy.

STEP 1
Tricyclic Antidepressants / Anticonvulsants

- Tricyclic antidepressants have been shown to be effective in neuropathic pain. If pain levels are reduced but side effects are problematic, another agent within the same class may be tried.
- Advise patient to take at about 8pm; if morning drowsiness is problematic the dose may taken earlier in the evening.
- Amitriptyline 25mg nocte (in frail patients consider 10mg nocte); this may be gradually increased by 25mg or smaller intervals according to response, to about 75mg nocte. (Side effects: dry mouth affects ~1 in 3 patients, drowsiness is also common. It is estimated 1 in 30 patients have to stop taking the amitriptyline because of unmanageable side effects)
- Nortryptiline: Usual starting dose is 10mg nocte, increasing to 75mg nocte as tolerated. Generally less sedating and fewer antimuscarinic side effects than amitriptyline.
- Dosulepin 25mg nocte increasing to 75mg nocte as tolerated.
- Carbamazepine may be used as an alternative at step one, starting at 100mg bd, the dose should be increased gradually as the incidence of side effects is high, refer to the BNF and data sheet.
- Please also be aware of the possible drug interactions with Carbamazepine, including contraceptives and anticoagulants

N.B. - Assess concordance to medication
- Some adjuvant analgesics may take up to 1 month for effects to be noticed

STEP 2
Gabapentin (remember to stop ineffective treatment)

- Gabapentin: Start at a low dose then gradually increase (300mg nocte, then bd then tds and after 1 week increase to 600mg tds). If no benefit after 2 weeks on gabapentin 600mg tds, increase to 900mg tds, then to 1200mg tds. If still no benefit tail off within 1 week. (In the U.K. the max licensed dose is 1.8g per day, although up to 3.6g per day may be used under specialist supervision)
- Side effects are usually minor and subside within 4 weeks; dose escalation is thought to aid tolerance to adverse effects.
- Patients on maintenance doses of gabapentin may benefit by reducing doses every 3 months to see if gabapentin is still needed. Readjust the maintenance dose as above.
- If gabapentin is discontinued, or the dose reduced or substituted with an alternative medication, this should be done gradually over a minimum of one week.

N.B. **- Assess concordance to medication**
- Some adjuvant analgesics may take up to 1 month for effects to be noticed

Refer patient to specialist pain assessment centre for further management strategies

STEP 3
Pregabalin (remember to stop ineffective treatment)

- Pregabalin is an amber drug therefore should be initiated by secondary care and after two months care passed to the GP.
- Starting dose is 150mg daily in 2 divided doses, based on patient response and tolerability the dose may be increased to 300mg per day after 3-7 days. After an additional 7 days the dose may be increased to a maximum daily dose of 600mg per day
- A trial of 2 to 4 weeks at the maximum dose attainable should be enough to show any benefits.
- If Pregabalin is discontinued, or the dose reduced or substituted with an alternative medication, this should be done gradually over a minimum of one week.

Review Date = March 2008

SECTION H

Pain Management in Special Groups

H-1 Elderly people with cognitive impairments

The challenge

Pain is common in older people because of painful medical conditions associated with ageing, but pain is often under-reported, under-recognised and under-treated, even more so in the elderly cognitively impaired. Indeed, the risk of under-treatment increases with severity of the dementia. Effective pain management depends on accurate pain assessment, which can be difficult in people who have cognitive or communication difficulties characterised by deterioration in memory, attention, visual spatial skills, language, or behaviour. Cognitive impairment may mask pain and may be exacerbated by the presence of pain. In older people with Alzheimer's disease, pain thresholds may be significantly increased due to damage to the pain message processing centres of the brain. Alzheimer's patients may not understand the meaning of the pain sensation and have difficulty placing it in context. Unmanaged pain may lead to depression and challenging behaviours including aggression and disruptive vocalisations.

Pain assessment

Over 80% of older people with a cognitive impairment can complete at least one pain assessment tool, and those who cannot, can usually identify the presence of pain. Direct questioning (using a variety of words for pain) and regular, documented, assessment is essential. The choice of pain assessment tool must be tailored to the individual's abilities and it is important to remember the following:

- Explore current pain experience (to overcome memory impairments)
- Take time and patience

- The environment should be well lit and calm
- Glasses, hearing aids and dentures should be in place
- Help the person to sit upright if using assessment tools and visual aids
- Use large print versions if needed
- Document any pre-existing pain conditions, physiological measures of pain, any self-reports of pain, facial expressions and behaviours
- Repeat the most appropriate simple assessment tool at intervals before and after any pain management interventions.

Patient checklist	Remedy
Comprehension?	Use observational tool
Verbal?	Adopt visual presentation and pointing response
Sight?	Ensure glasses, good light, large font, high contrast or Verbal response
Hearing?	Use visual tool
Manual dexterity?	Adopt verbal response
Memory?	Assess frequently; explain tool clearly each time
Stoicism?	Assess frequently; give reassurance

The tools with the highest completion rate in older people with a mild to moderate cognitive impairment are:

- the **Present Pain Index from the McGill Pain Questionnaire**

  0-No pain / 1-Mild / 2-Discomforting / 3-Distressing / 4-Horrible / 5-Excruiciating

- and the **Verbal Rating Scale**

  Slight / Mild / Moderate / Severe / Extreme / Pain as bad as it could be

Non-verbal signs of pain

Pain management remains difficult in severely cognitively impaired older people who cannot communicate verbally. Assessment focuses on the presence / absence of non-verbal signs of pain. Keen observational skills are required and it is important to work with the insight of carers & family members in the assessment process.

Four types of body movement have been identified to accompany pain:

- Immobilisation, rigid body position
- Purposeless movements (especially with acute pain)
- Protective guarding and rubbing
- Rhythmic movements

in addition to behaviours such as:

- Vocalisations ('ouch', whimpering, crying out on movement, swearing, gasping)
- Flinching
- Fidgeting and restlessness
- Aggressive behaviour
- Pulling at tubes, perhaps away from the painful body part
- Withdrawal or increased confusion
- Sleep disruption
- Change in appetite

Facial expressions may be the first or only sign of pain; common expressions are:

- Clenched teeth
- Grimacing
- Wrinkled forehead
- Biting lower lip
- Wide open or tightly shut eyes
- Clenched jaw

Recently, specific pain assessment tools have been developed for use in non-communicative older people, but none have yet been firmly established in routine use because behavioural interpretation remains subjective.

Refer to CD-ROM for details of available tools, eg. the Abbey Pain Scale.

In addition to analgesic medication the use of relaxation, TENS, physical activities, physiotherapy and massage could all be considered for use in elderly people with or without a cognitive impairment.

Summary

When assessing pain in cognitively impaired older people it is important to ask the patient, interview carers and family, review medical records, and as appropriate, perform a physical examination. Choose the most appropriate pain assessment tool for the individual and use it consistently.

H-2 Adults with learning disabilities

Learning disability includes a significantly reduced ability to understand new or complex information and to learn new skills (impaired intelligence), with a reduced ability to cope independently (impaired social functioning) which started before adulthood, with a lasting effect on development. This definition encompasses people with a broad range of disabilities.

Assessment of pain in people with profound learning and multiple disabilities is difficult and many of the considerations set out above on severely cognitively impaired older people, also apply to this client group. Assessment is made harder because visual and hearing impairments are common. Despite this patient group frequently experiencing severe health problems, many of which cause pain, or requiring surgical procedures that cause pain, guidance on pain assessment and management is sparse.

It must be emphasised that distress can be caused by many different factors including physical pain, psychological problems, social or spiritual issues. People with profound learning difficulties are typically non-verbal and carers have to rely on knowledge of the person, careful observation and clinical judgements to assess if the person is in pain. Intuition is key. A lack of awareness of how the person usually communicates may lead to a misinterpretation of some non-verbal signs, as behaviours typically indicating pain in the general population may be inconsistent and difficult to interpret in the profoundly learning disabled.

Pain Assessment Tools

Some people have suggested that the use of pain scoring tools with this client group is questionable, whereas other healthcare professionals have recommended either the Dis-DAT (Distress Assessment Tool) or the new Paediatric Pain Profile (PPP).

Refer to the full guidelines for further details on these tools.

The bases of these tools is that a group of relatives/carers who know the individual very well meet to pool and record information about how that particular person demonstrates contentment or distress. This enables carers to monitor distress over time, suggest likely causes of the distress, and take action to make things better.

Behavioural indicators caregivers use to determine pain in non-verbal, cognitively impaired individuals

Categories	Behavioural indicators
Vocal	Moaning, whining, whimpering (fairly soft), crying (moderately loud), screaming/yelling (very loud), a specific sound or vocalization for pain, a word, cry, type of laugh
Eating / sleeping	Eats less, not interested in food, increase in sleep, decrease in sleep
Social / personality	Not cooperating, cranky, irritable, unhappy, less interaction, withdrawn, seeks comfort or physical closeness, difficult to distract, not able to satisfy or pacify
Facial expression of pain	Crying, grimace, furrowed brow, change in eyes, including eyes closed tight, eyes opened wide, eyes as if frowning, turn down of mouth, not smiling, lips pucker up, tight pout or quiver, clenches teeth, grinds teeth, chews, thrusts tongue
Activity	Not moving, less active, quiet, jumping around, agitated, fidgety
Body and limbs	Floppy, stiff, spastic, tense, rigid, gestures to or touches part of body that hurts, protects, favours, or guards part of body that hurts, flinches or moves body part away, sensitive to touch, moves body in a specific way to show pain (eg. head back, arms down, curls up)
Physiological	Shivering, changes in colour, pallor, sweating, perspiring, tears, sharp intake of breath, gasping, breath-holding

H-3 Opiate dependent adults

Patients maintained on methadone because of their opiate addiction may require additional analgesia for pain depending on their medical condition or procedure. If indicated, opiate analgesia can be given and the patient carefully observed for signs of over-sedation.

For pre- and post-operative pain relief methadone may be given as per the patient's usual maintenance requirements up to 3 hours before surgery. Post-operatively methadone should be continued at the same dose (IM - intramuscular - in split doses if necessary). For post-operative pain relief the emphasis for this group of patients should be the optimisation of non-opiate analgesia. However, for moderate to severe post-operative pain other opiates can be prescribed for analgesia as if the patient was opiate naïve and the dose titrated according to the need for pain relief.

If in doubt, the Centre for Pain Medicine can be contacted for advice on 01482 624093.

SECTION I

Useful Websites & Contacts

Action on Pain	www.action-on-pain.co.uk Painline tel: 0845 603 1593
Arthritis Research Campaign	www.arc.org.uk/
BackCare	www.backcare.org.uk
British Pain Society	www.britishpainsociety.org
Cancerbackup	www.cancerbackup.org.uk/
Cancer Macmillan Relief	www.macmillan.org.uk Info Line tel: 0808 808 2020
Diabetes UK	www.diabetes.org.uk
DIPEx Chronic Pain website	www.dipex.org/chronicpain
Directory of UK complementary practitioners	www.drfoster.co.uk/cam/
Doctoronline	www.doctoronline.nhs.uk
Fibromyalgia Association UK	www.fibromyalgia-associationuk.org
Macmillan Cancer Relief	www.macmillan.org.uk
Marie Curie Cancer Care	www.mariecurie.org.uk
Neuropathy Trust	www.neuropathy-trust.org/
NHSDirect	www.nhsdirect.nhs.uk
The Oxford pain site	www.jr2.ox.ac.uk/bandolier/booth/painpag/
Pain Concern	www.painconcern.org.uk Helpline tel: 01620 822572
Pain.com	www.pain.com
Pain Relief Foundation	www.painrelieffoundation.org.uk
Pain Support	www.painsupport.co.uk
Pain Web	www.thepainweb.com
Patient UK	www.patient.co.uk
Patients Association	www.patients-association.com
Physiotherapy Pain Association	www.ppaonline.co.uk

Local Contacts

Centre for Pain Medicine, Castle Hill Hospital	01482 624093
Primary Care Chronic Pain Management Service	01482 344294
HEYHT Macmillan Specialist Palliative Care Team	01482 676739
Hull Community Macmillan Nurses	01482 336523
East Riding Community Macmillan Nurses	
Cottingham	01482 335161
Driffield	01377 208758

Hospitals

Macmillan Wolds GP Unit, Bridlington DGH	01262 423456
Alfred Bean Hospital	01377 241124
Withernsea Community Hospital	01964 614666
Hornsea Cottage Hospital	01964 533146
Hull Royal Infirmary	01482 328541
Princess Royal Hospital	01482 701151
PRH Oncology Health Centre	01482 676708
Castle Hill Hospital	01482 875875
CHH Oncology Health Centre	01482 622031

Hospices

Dove House Hospice	01482 784343
St Catherines Hospice	01723 351421
York St Leonards Hospice	01904 708553

Out Of Hours Contacts

Community Palliative Care Service (Hull)	01482 335495 / 336505
HEYHT Palliative Care Advice	07659 134008
Dove House Hospice	01482 784343

Hull District Nurses

Bransholme HC	01482 386046
Bilton Grange (Rank Ward)	01482 336539
Newington / Marmaduke HCs	01482 344215
Clarendon HC	01482 617884
Orchard Park HC	01482 855247
Morrill Street HC	01482 335893

East Riding District Nurses

Goole	01405 764755
Hessle	01482 335166
Beverley	01482 861802
Bridlington	01262 423114
Driffield	01377 208759
Pocklington	01759 304652
Holme-On-Spalding Moor	01430 861314
Market Weighton	01430 873986
Withernsea	01964 613425
Hedon (Rosedale)	01482 344450
Hornsea (switchboard)	01964 533146

Pain & Palliative Care Education

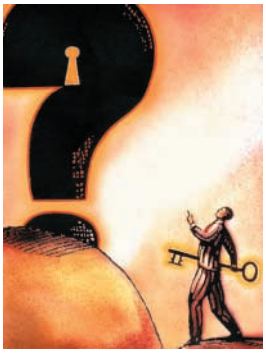
Macmillan GP Facilitators	01482 335825
Cancer Network Palliative Care Education Facilitator	01482 336270
Dove House Hospice Education Centre	01482 785783
St Catherine's Hospice Education Department	01723 356022
HEYHT Educational Co-ordinator	01482 676555

For Patients & Carers

HRI Chaplains	01482 674427
CHH Chaplains	01482 623091
Humber and Yorkshire Coast Cancer Network	01482 336270
HEYHT Patient Advice & Liaison Service (PALS)	01482 623065
Hull Carers Centre	01482 225078
East Riding Carers Support Service	0800 917 68 44

National Resources

Action on Pain - Painline	0845 603 1593
British Pain Society	020 7631 8870
Cancer BACUP	0808 800 1234
Cancer Macmillan Relief	0808 808 2020
NHSDirect	0845 4647



A full version of these guidelines is also available on a CD-ROM and local NHS intranet sites.