Pain Management Guideline for Adults with Cancer

National Cancer Control Programme
Ministry of Health, Nutrition & Indigenous Medicine

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First Edition November 2017

Statement of Intent

The main purpose of this guideline is to improve the quality of clinical care provided in health institutions. This guideline is not intended to be construed (understood) or to serve as a standard of medical care. Standards of medical care are determined on the basis of all clinical data available for an individual case and are subject to change as scientific knowledge and technology advance and patterns evolve.

These parameters of practice should be considered recommendations only. Adherence to them will not ensure a successful outcome in every case, nor should they be construed as including all proper methods of care or excluding other acceptable methods of care aimed at the same results. The ultimate judgment regarding a particular clinical procedure or treatment plan must be made by the doctor in light of the clinical data presented by the patient and diagnostic and treatment options available

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Message from the Director General of Health Services

It is with great pleasure I send the message to the first edition of 'Pain Management Guideline for Adults with Cancer'. Pain among adult cancer patients is a common symptom throughout the disease. According to a systematic review pain prevalence among cancer patients varies from 33% - 64% in global context. Another alarming finding of cancer pain management is that nearly half of the cancer patients with pain are not adequately treated. Therefore, optimal pain management among cancer patients is a timely need in Sri Lankan setting too.

To overcome this issue of under treatment of cancer pain, availability of clinical management guidelines, regular education of health care staff on cancer pain management and availability of pain management drugs are important interventions. Therefore, developing a pain management guideline for adult cancer patients is a timely need.

I have confidence that this publication will be helpful in minimizing the burden of pain among adult cancer patients through evidence based approach. As the next move of this initiative, a monitoring mechanism of pain management at hospital & community setting will be established. I would like to thank the National Cancer Control Programme for coordinating this activity and the resource personnel who contributed in the development of the guideline.

Dr. J. M. W. Jayasundara Bandara
Director General of Health Services

Message from Deputy Director General (NCD)

I am pleased to provide this message to the first edition of 'Pain Management Guideline for Adults with Cancer'. Pain is one of the most frequent symptom experienced by the patients with cancer throughout the course of disease. Suffering from pain may be intolerable physically and emotionally. Therefore health professionals attending to cancer patients at any level of care should adequately concentrate on releiving their sufferings in a holistic manner.

Developing a guideline on pain management is a timely need. This guideline will be made available at all levels of care. It is necessary that health professionals adhere to the guidelines while conducting regular reviews at institutional, regional and national level to assess the clinical effectiveness of these guidelines in the management of pain among the adult cancer patients. According to the latest evidence, best clinical experience and patient perspectives, the guideline may be modified at regular intervals.

I would like to appreciate the contributions of resource personnel in developing this guideline and the coordinating role of the National Cancer Control Programme.

Dr. (Mrs.) S. C. Wickramasingha
Deputy Director General (Non-Communicable Diseases Bureau)

Preface

Improving the quality of life of cancer patients irrespective of stage of the disease is one of the aims of care for cancer patients. Ministry of Health allocates major proportion of human and physical resources for caring cancer patients throughout the country.

To further enhance the optimal patient management, availability and practice of evidence based clinical management guideline is a timely need. This pain management guidelines for adult cancer patients at all levels of care, developed in collaboration with clinicians and other resource personnel is an outcome of this felt need. This is one of the several initiatives that the National Cancer Control Programme has taken in the direction of service development for cancer patients including palliative care.

While developing the guideline, National Cancer Control Programme has liaised with the Ministry of Health to streamline the availability of pain medications at each level of care through circular instructions and monitoring of distribution of morphine. In addition healthcare personnel were trained on cancer pain management.

I hope that this guideline will contribute to deliver quality assured best of the care in pain management at different care levels. With the lessons learned, this guideline needs to be further developed and revised in future. Therefore the sharing observations and experiences by practicing clinicians are mostly welcome.

I will make this an opportunity to keep in record the immense volume of work done by Dr. Suraj Perera, Consultant Community Physician of the National Cancer Control Programme and his team. Without their untiring effort, this guideline would not have been published at this juncture. As well as I would like to extend the great appreciation on behalf of the National Cancer Control Programme and the Ministry of Health to all clinicians, nursing sisters, nursing officers and other professionals who have contributed in developing and reviewing this guideline.

Dr. Sudath Samaraweera
Director, National Cancer Control Programme

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Pain Management Guideline for Adults with Cancer

1. Objectives of the guideline

1. To optimize pain control among adult cancer patients at all levels of care
2. To provide a simple guideline to medical officers and other health care staff on cancer pain management
3. To encourage multidisciplinary management of cancer pain
4. To minimize adverse outcomes due to pain medications
5. To enhance the quality of life for cancer patients
6. To promote collection of data, conducting audits and implement quality improvement programmes in management of cancer pain

2. Definition of pain

The International Association for the Study of Pain (IASP) has defined:

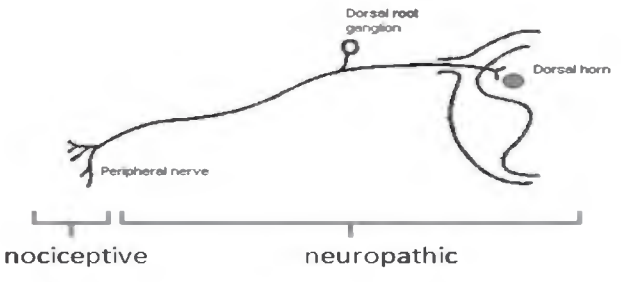
> *"Pain is an unpleasant, subjective, sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage"*

For routine practice, pain is considered as 'what patient complains as pain or hurt'.

Pain perception and pain experience are profoundly influenced by the patient's mood (depression, anxiety and delirium), past pain experience, other symptoms (eg. insomnia, nausea) and the meaning of pain for the individual patient. Experience of pain is always subjective.

Pain is considered as the fifth vital sign. It also needs assessment like other vital signs such as pulse, blood pressure, respiration and temperature.

3. CLASSIFICATION OF PAIN



3.1 Nociceptive pain

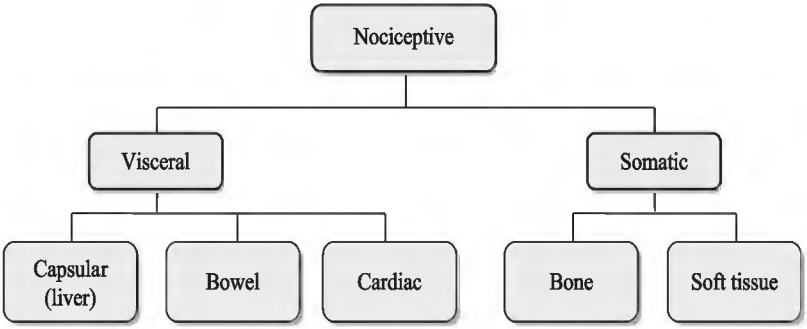
Nociceptive pain is usually described as sharp, aching, or throbbing. This results from stimulation of peripheral nerves through nociceptors in somatic or visceral structures.

Nociceptive pain is caused by tissue damage due to benign or malignant pathology. Tissue damage leads to migration of white blood cells which release substances such as cytokines, prostaglandins and bradykinins. These stimulate receptors on peripheral sensory

nerves to convey the sensation of pain and activate previously quiescent nociceptors. Nociceptive pain may also be caused by the blockage of an organ or blood vessel due to the cancer spreading to the bones, muscles or joints.

Pain impulses enter the spinal cord through the dorsal horn, where they ascend to higher centres in the brain. There are descending inhibitory pathways that modulate the degree of transmission at different levels of the pain pathway and the final pain perception is a balance of these inputs.

Types of nociceptive pain



3.2 Neuropathic pain

Neuropathic pain refers to pain arising from injury or functional derangement in the peripheral or central nervous system. Clinically it may present with sensations such as burning or stabbing in areas of sensory loss.

Neuropathic pain has been defined as, "initiated or caused by a primary lesion or dysfunction in the nervous system" and alternatively as "pain caused by a lesion of the peripheral or central

nervous system (or both) manifesting with sensory symptoms and signs."

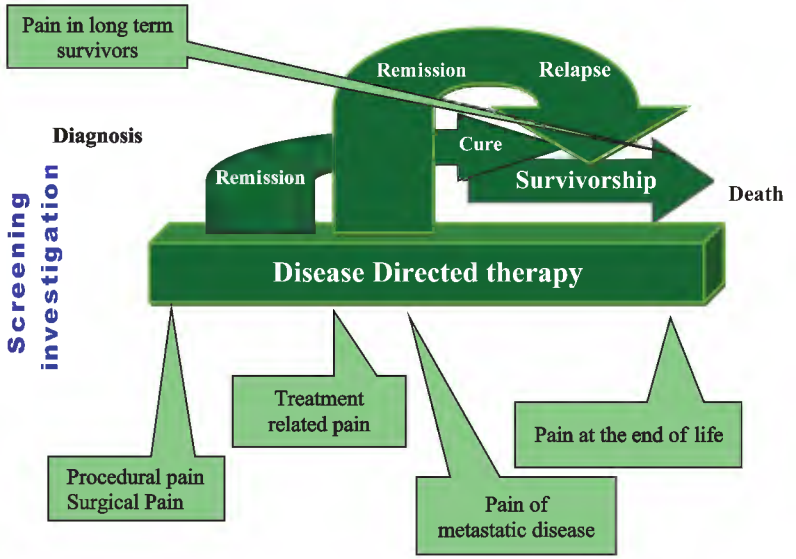
Patients may present with pain and varying degrees of distress from tingling of peripheral neuropathy to excruciating pain from a compressive radiculopathy.

4. Cancer Pain

Cancer is a progressive disease with a mixture of all types of pain. [i.e. the acute, chronic, acute on chronic, cancer related as well as non-cancer related]

4.1 Prevalence of cancer pain

Pain may appear at any point during the illness trajectory as shown in the Figure 1.



(The British Pain Society, 2010)

Figure 1: Distribution of pain according to illness trajectory.

The prevalence of cancer pain may vary according to the type of cancer as shown in table 1.

Table 1: Prevalence of pain according to the site of cancer

Site of Cancer	Prevalence of Pain
Head and neck	70% (51% - 88%)
Gastrointestinal	59% (44% -74%)
Lung/bronchus	55% (44% - 67%)
Breast	54% (44% - 64%)
Urogenital	52% (40% -60%)
Gynaecological	60% (50% - 71%)

(van den Beuken-van Everdingen et al, 2007)

4.2 Common causes of cancer pain

(a) Cancer related

- Infiltration of soft tissue, viscera, bone
- Nerve compression/infiltration
- Muscle spasm
- Lymphoedema
- Raised intracranial pressure
- Inflammation
- Ischemia

(b) Treatment related

- Surgical Pain
    - Acute surgical pain
    - Chronic post surgical pain (if acute pain is not treated properly)
    - Post-operative scars/adhesions
- Radiotherapy – tissue injury, fibrosis, radiation induced neuritis or plexopathy
- Chemotherapy- peripheral neuropathy

(c) Paraneoplastic phenomena

Due to the production of anti-bodies like anti-Hu and anti-Yo neuronal antibodies causing peripheral neuropathy or mono or polyneuritis.

(d) Associated factors - Cancer and debility

- Constipation
- Pressure sores
- Bladder spasm
- Stiff joints
- Post herpetic neuralgia (Immune suppression induced herpetic reactivation)
- Hypercalcaemia & osteoporosis due to prolonged immobility

(e) Unfavourable psychosocial factors

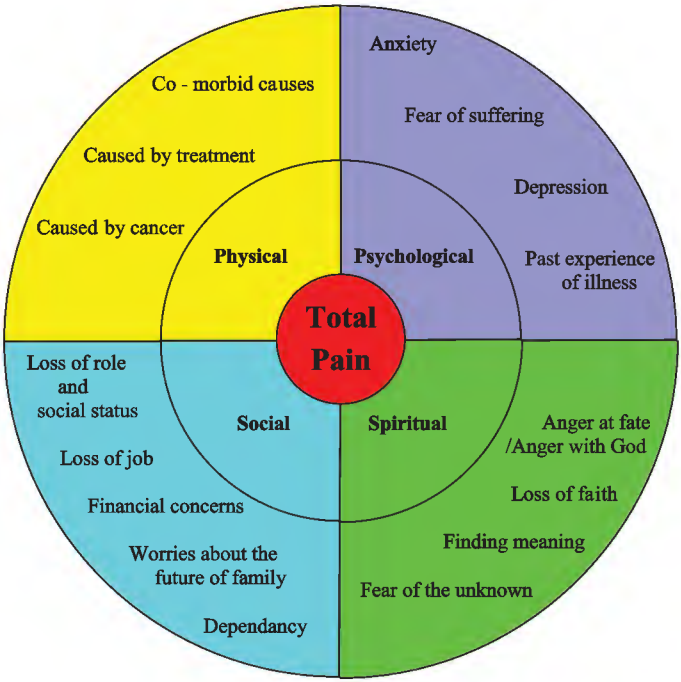
Conditions like anxiety, depression, social withdrawal, lack of recognition, unemployment etc. will further aggravate the pain as the final pain perception is highly affected by psychosocial factors.

(f) Unrelated (Incidental)

- Low back pain
- Arthritis
- Angina
- Trauma

4.3 Concept of total pain among the cancer patients

Total pain is described as the physical, psychological, social (including financial) and spiritual components to distress and suffering.



(International Association for the Study of Pain, 2009)

Figure 2: Concept of total pain

4.4 Secondary effects of pain

- Chronic persisting pain
- Depression- self harm, suicidal ideas
- Anxiety
- Interference with social performance
- Negative impact on physical capability- Activities of Daily Living
- Prevents working
- Decreases income
- Encourages isolation
- Impairs the quality of relationships
- Creates family disharmony and stress
- Challenges existential belief

5. PRINCIPLES OF CANCER PAIN MANAGEMENT

- Listening to the patient
- Understanding the patient's experience
- Patients' preference of the type of pain management
- Accepting the patient's perception of pain
- Accepting the meaning the patient ascribes to pain
- Making an accurate diagnosis of the mechanism(s) of the pain(s) and planning management accordingly
- Prioritizing the management of most troublesome pain, when there are several types of pain.
- Discussing with the patient and getting consent and compliance
- Preventing pain (where possible), ordering regular and rescue medication (when necessary)
- Starting with analgesics using the World Health Organization (WHO) 3-step ladder for the treatment of cancer pain in adults.
- Helping the patient to share responsibility for their pain management.
- Re-evaluating regularly as the patient's needs change as the illness progresses
- Knowing about the role of surgery, radiotherapy and chemotherapy for management of cancer pain
- Setting short term and long term treatment goals based on patient's expectation
- Setting realistic goals for cancer pain management
- Encouraging family support- Educate family on pain management

RAT APPROACH

The approach to recognize (R), assess (A) & treat (T) pain is called RAT approach. Application of RAT can be used as a simple guide to practice all those principles mentioned above in a more robust manner.

6. Recognition of pain (R)

The pain may not be obvious at all the time. Therefore inquiring and observation are to be very helpful (Does the patient have pain?). The pain should be assessed at rest as well as with the movements.

The family members / caregivers of the patients should also be informed and educated regarding the pain status of the patient (Do other people know the patient has pain?)

7. Assessment of pain (A)

Both the clinician & the patient should actively involve in assessment of pain. Failure to assess the pain properly is a critical factor leading to under treatment of pain.

Purpose of assessing pain

- To identify the type, site, quality, frequency & intensity of pain
- To define the pain mechanism
- To make a diagnosis
- To identify a treatable cause
- To guide choice of treatment
- To assess effect of treatment (outcome measurement)
- To monitor the progress

7.1 Pain History

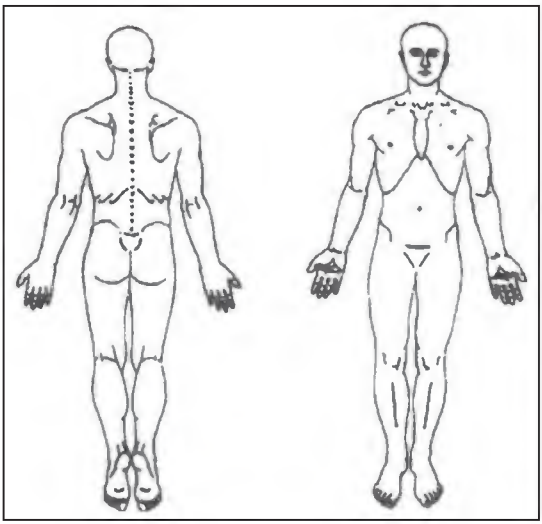
Most patients have more than one pain, and different pains are due to different causes.

Self-reporting of pain may not be possible when there is a cognitive impairment, extreme old age or during the terminal phase of life. During those situations presence of pain can be evaluated through

the observations of facial expression, body movements, verbalization or vocalizations, changes in interpersonal interactions, changes in routine activity etc.

(1) Site of pain

Ask the patient to show the exact body site/s of pain
Documenting the site/s of pain in a diagram will be helpful for follow up.



(2) Characteristics of pain (Quality of pain)

- Aching, throbbing, pressure: Often associated with somatic pain in skin, muscle and bone
- Aching, cramping, gnawing, sharp: Often associated with visceral pain in organs or viscera
- Shooting, sharp, stabbing, burning, tingling, ringing: Often associated with neuropathic pain caused by nerve damage

Assessment of quality of pain allows for a clinical diagnosis of the type of pain and subsequently an appropriate treatment plan

(3) Severity (intensity) of the pain & Variations in severity (static or gradual increase / gradual decrease/ fluctuating)

Pain assessment scales can be used to assess the severity of pain.

(i) Verbal Rating Scale (VRS)

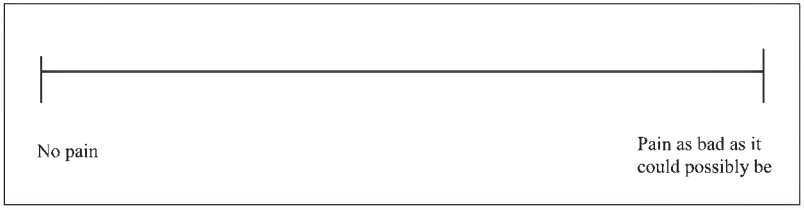
0 No pain

1 Mild pain

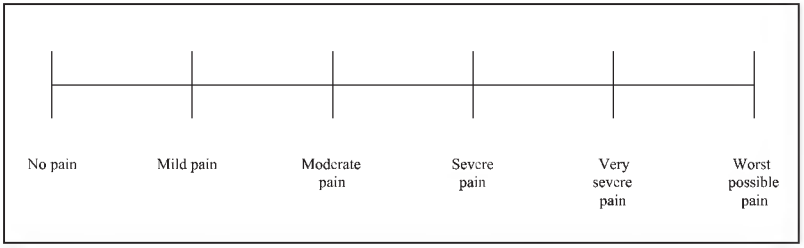
2 Moderate pain

3 Severe pain

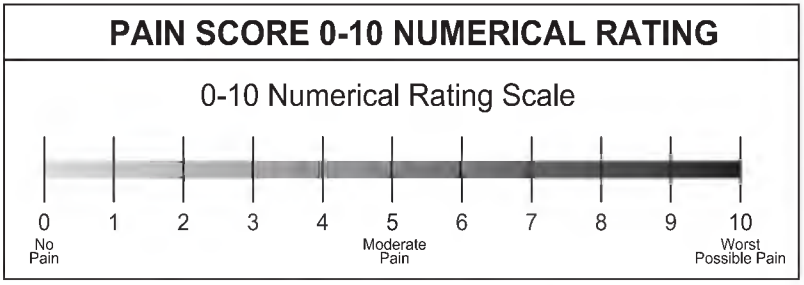
(ii) Visual Analogue Scale (VAS)



(iii) Simple descriptive pain intensity scale



(iv) Numerical Rating Scale (NRS)



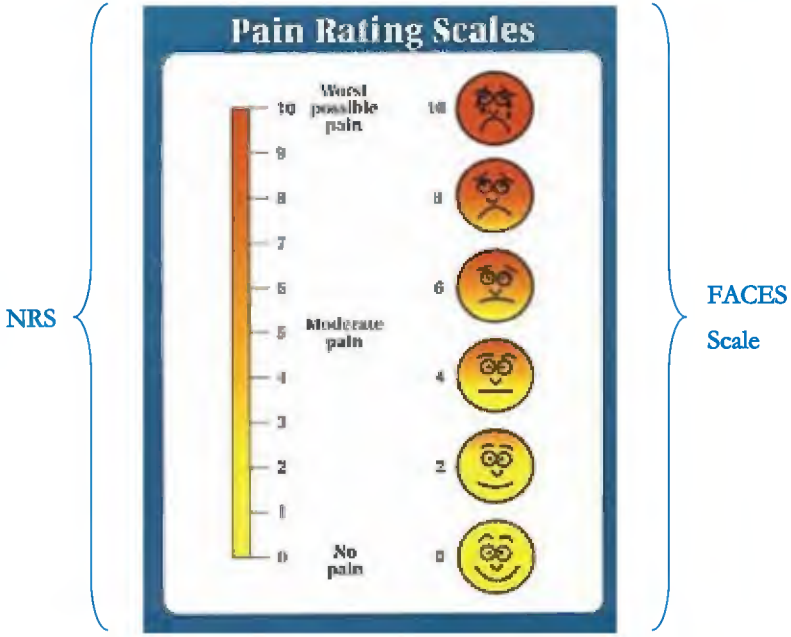
(v) Wong Baker FACES pain rating scale

This scale is used;

- In paediatric practice
- For those who do not understand the numbers

(Wong-Baker FACES Foundation n.d.)

(vi) Combined pain rating scale



Record the pain score

(4) Onset & frequency of the pain (Specific time of the day, night, early morning)

(5) Duration of pain

(6) Temporal nature

(7) Radiation of pain

(8) Any aggravating factors – with movements & rest

(9) Any relieving factors.

Assessment of the effect of pain

- The impact on quality of life
- The impact on activities of daily living and physical wellbeing
- The impact on psychological well-being
- Social impact
- Spiritual impact

Assessment of the impact of pain helps the practitioner to determine an appropriate plan to minimize its effects.

Patient's understanding of pain

- The meaning of the symptom to the patient, including beliefs about the symptom and concerns of the patient.
- Expectations / satisfaction of the patient.

Assessment of how a person is managing pain

- It helps to determine treatment preferences and develop an appropriate plan for involving the patient in managing the pain.

Medication history

- Current and previous analgesics
- Allergies, intolerance, addiction
- Symptoms suggestive of opioid toxicity (refer page 29)

7.2 Clinical examination

It is essential to conduct a comprehensive clinical examination including a neurological assessment. Clinical examination includes sensory assessment – areas of hyperesthesia, allodynia and analgesia. Preferably indicate these areas on a sketch of a man for future assessment. Record all clinical findings.

7.3 Investigations

There may be relevant investigations required especially for 'difficult' pains, such as bone scans, MRI, CT and electrophysiological testing.

8. TREATMENT OF CANCER PAIN (T)

It is very important to manage the cancer pain in a holistic manner with a multidisciplinary input.

Treatment of cancer pain can be broadly divided into pharmacological & non-pharmacological aspects.

In Sri Lanka, treatment of cancer pain can happen in different settings. (Refer flow chart - Page 19)

1. Treatment of cancer pain at an oncological setting

At the oncological setting, in addition to the pharmacological treatment, facilities for surgery, radiotherapy and chemotherapy are available. Therefore surgery, chemotherapy and radiotherapy could be offered for management of pain according to the indications. In addition, other non-pharmacological interventions could also be offered.

2. Treatment of cancer pain at other specialist setting

Cancer pain could be managed at non-oncological specialist care settings such as District General Hospitals, Base Hospitals or Private Sector Hospitals. In these settings, pharmacological and non-pharmacological interventions could be offered with the advanced pain management plan of a Consultant (Consultant Oncologist, Consultant Physician, Consultant Anaesthetist, Consultant Family Physician etc). If the pain does not get controlled or there are indications for radiotherapy or chemotherapy, those patients need to be referred to an oncological setting where there are chemotherapy and radiotherapy facilities.

3. Treatment of cancer pain at primary care setting (Non-specialist setting)

Primary care setting includes all Divisional Hospitals and Primary Medical Care Units (PMCU), full time and part time private family practice settings and hospices. In these settings, patient management is under care of non-specialist medical officers. Some patients may present with a shared care plan from a specialist unit. Others may not have an advance care plan from a specialist setting.

Pharmacological treatment of cancer pain can be initiated at primary care setting. All medical officers have to be aware about the indications for surgery, radiotherapy and chemotherapy and other advanced pain management options as the patients may be referred for advanced pain management to centres where such facilities are available.

8.1 Non-pharmacological treatment of cancer pain

Indications for surgery in treatment of cancer pain

Palliative surgery can relieve pain from obstruction of hollow organs or from pathological fractures.

Table 2: Indications for surgery in treatment of cancer pain

Pain	Cause	Surgery
Bone pain	Pathological fracture	Internal fixation
Headache	Obstructive hydrocephalus	Shunt
	Tumour bulk	Debulking surgery
Dysphagia	Oesophageal tumour	Stent
Abdominal distension	Ascites	Drain & shunt
Soft tissue pain	Necrotic tumour	Toilet resection

(The British Pain Society, 2010)

Indications for radiotherapy in treatment of cancer pain

For management of pain, palliative radiotherapy is offered at oncological settings with radiotherapy facilities.

Table 3: Indications for radiotherapy in treatment of cancer pain

Pain	Cause
Bone pain	Metastases, Pathological fracture (non-surgical e.g. rib / pelvis)
Headache	Primary cerebral tumour Brain metastases
Chest pain	Primary lung cancer Mesothelioma
Abdominal pain	Hepatomegaly
Pelvic pain	Local tumour infiltration
Soft tissue pain	Local tumour infiltration

(The British Pain Society, 2010)

Radiotherapy may also be indicated in following situations; (i) Pain during swallowing (Advanced oesophageal cancer) (ii) Painful defecation (Local tumour infiltration of rectal cancer).

In addition to the indications for radiotherapy in cancer pain management, decision to offer the palliative radiotherapy depends on a number of conditions that include, the performance status of the patient, life expectancy of the patient, site of the body to be irradiated, workload at the radiotherapy centre and the patient's convenience for the frequency of visits for radiotherapy.

Radiotherapy preferably be given within 48 hours for the tumors compressing neural structures (e.g. spinal nerve roots) to relieve the pain and to retain neurologic function (before paresis and bowel/ bladder dysfunction become permanent)

Indications for chemotherapy in treatment of cancer pain

If the pain is caused by a chemosensitive tumor, there may be a place for chemotherapy in cancer pain management.

Table 4: Indications for chemotherapy in treatment of cancer pain

Pain	Cause	Primary tumour type
Bone pain	Bone metastases	Breast cancer Lung cancer Myeloma
Headache	Brain metastases	Germ cell tumours Lymphoma Leukaemia Breast cancer Small cell lung cancer
Abdominal pain	Ascites Subacute obstruction	Ovary Colorectal Stomach
	Pancreatic pain	Pancreas
Pelvic pain	Local tumour infiltration	Colorectal Ovary Cervix
Chest pain	Local tumour infiltration	Lung cancer (small and non-small cell) Mesothelioma Metastases from - breast, colorectal cancer

(The British Pain Society, 2010)

Flow Chart of Cancer Pain Management in Sri Lankan Setting

Management by Consultant Psychiatrist
or
Intervention by Psychologist, Physiotherapist, Occupational therapist... etc

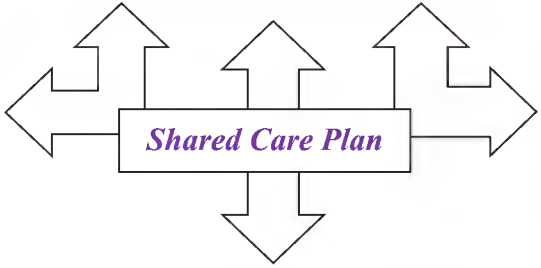
⇔

Oncology Clinic
Teaching / Provincial General / District General Hospital
or
Cancer Out-Reach Clinic

⇔

Pain Clinic
Conducted by Consultant Anaesthetist, Consultant Neurologist, Consultant Rheumatologist or Consultant General Physician

Out Patient Departments (OPD) of Secondary Care Hospitals
(District General / Base Hospitals)
(Morphine is available in these settings)



Hospice
(Morphine may be available in these settings)

OPD of Divisional Hospitals (District Hospital, Peripheral Units, Rural Hospital)
OPD of Private Hospitals
Full time / Part time General Practitioners

(Oral morphine may not be available routinely in these settings)

8.2 Principles of pharmacological treatment

In 1986, the World Health Organization introduced the WHO Three –Step Analgesic Ladder (the stepwise approach) which is the backbone for treatment of pain. It is based on intensity of pain reported by the patient rather than its specific aetiology.

In the WHO ladder starting point could be anywhere from step one to three depending on the intensity of pain. According to the patient's response can go up or down the ladder.

By the mouth – If possible, analgesics should be given by mouth. Rectal suppositories are useful in patients with dysphagia, uncontrolled vomiting or gastro-intestinal obstruction. Continuous subcutaneous infusion offers an alternative route.

By the clock – Analgesics are more effective in preventing pain than relieving established pain and therefore doses should be given at fixed time intervals and titrated against the patient's pain; if pain occurs between doses, a rescue dose should be given and the next dose increased.

By the ladder – The first step of WHO analgesic ladder is to give a non-opioid analgesic such as paracetamol or ibuprofen, if necessary with an adjuvant drug. If this does not relieve the pain, an opioid for mild to moderate pain such as codeine should be added. When this combination fails to relieve pain an opioid for moderate to severe pain, such as immediate release morphine (IR) should be substituted.

For the individual – There are no standard starting dose or ceiling dose for opioid drugs. The range for oral morphine (IR) is from as little as 2.5 mg to more than 100 mg every 4 hours. Controlled release morphine (MST) is also available to enable oral dosing every 12 hours.

With attention to the detail - The first and last doses of the day should be linked to the patient's waking time and bedtime. Ideally the drug regimen should be written out in full for the patient and his or her family. Also, the patient should be warned about possible adverse effects.

(World Health Organization, 2017)

Figure 3: WHO three step analgesic ladder

STEP 1 (Mild pain) Non-Opioid ± adjuvant

- The non-opioids include paracetamol and the non-steroidal anti-inflammatory drugs (NSAIDs).
- Start treatment with paracetamol 500mg – 1g 4-6 hourly

- Maximum 4g in 24 hours
- 15mg/kg in a patient with body weight less than 50kg

- Commonly used adjuvants (e.g. Amitryptaline Carbamazepine, Gabapentin) could also be added. (refer page 32)
- If step 1 medications are not adequate in 24 hours, proceed to step 2.

STEP 2 (Moderate pain) Weak Opioid ± Step 1 medications ± adjuvant

- Start treatment with a weak opioid
  - tramadol 50mg 6 hourly
    or
  - paracetamol + codeine 2 tablets (500mg + 8mg) 6 hourly
- If step 2 medications are not adequate in 24 hours, proceed to step3.

STEP 3 (Severe pain) Strong Opioid ± Step 1 medications ± adjuvant

- Consider starting oral morphine (IR) 4 hourly.
- May be required to refer to a clinic where morphine is available.
- On presentation if the pain is already severe, may have to consider starting with step 3 drugs.
- Once the patient is started on the analgesic ladder it is very important that they are reviewed regularly to titrate the exact dose requirements and to assess for side effects, change of pain quality etc.
- Stop weak opioids (eg.Tramadol, Codeine)

Guidelines for starting oral morphine

- Start with regular dose of oral morphine **(IR) 2.5mg - 5mg** four hourly and titrate according to the number of rescue (breakthrough pain) doses needed to keep the patient comfortable.
- Rescue dose is calculated $^1/_6$ of total daily dose.
- **Depending on the number of rescue doses given within previous 24 hours, next day regular dose has to be titrated. The next day regular dose should be calculated by adding the sum of previous day all morphine doses and dividing by 6 as shown in the below mentioned example.**

Regular opioid dose	Frequency of dose	Breakthrough dose	Frequency of breakthrough episodes	Total opioid in 24 hours	New titrated dose
Morphine 10mg (IR)	4 hourly	Morphine 10mg (IR)	Three times	(10x 6)+ (10x 3)=90	Morphine 15mg (IR) , four hourly

- When four **hourly** dose is stable, replace with **morphine (MST)** 12 hourly preparations
- **Even with 12 hourly doses, rescue morphine (IR) doses may be given according to the need.**

Breakthrough pain

Breakthrough pain is defined as a transient flare of pain of moderate to severe intensity arising on a background of otherwise controlled pain.

Breakthrough pain is characteristically;

- of rapid onset (peaks within one to three minutes)
- of moderate to severe intensity
- of short duration (median 30 minutes, range 1-240 minutes)
- associated with worse psychological outcomes
- associated with poor functional outcome
- associated with a worse response to regular opioids
- associated with negative social and economic consequences.

Breakthrough pain (BTP) can be spontaneous or incidental. Spontaneous pain is sudden and unexpected. Incident pain is associated with an action such as breathing, body movement or micturition and can be anticipated. This distinction is important for therapeutic management. For example, breakthrough pain medication may be taken in anticipation of an episode that is likely to precipitate incident pain, such as walking or having a wound dressing changed.

- Immediate release formulation of morphine must be used to treat exacerbations of controlled background pain.
- Immediate release oral morphine is appropriate to treat predictable episodes of breakthrough pain (i.e. pain on moving, on swallowing, etc.) when administered at least 20 minutes before such potential pain triggers.

Intravenous opioids; buccal, sublingual and intranasal fentanyl, drug delivery have a shorter onset of analgesic activity in treating BTP episodes in respect to oral morphine.

Side effects of opioids

1. Constipation
   - Constipation is the most commonly occurring adverse effect of chronic opioid therapy.
   - Transdermal fentanyl may produce less constipation and daytime drowsiness than oral morphine.
   - Regular use of a prophylactic laxative is recommended.
   - Constipation should be prevented through regular administration of laxatives;

     Bisacodyl - oral 5 mg to 20 mg at night or twice a day,
     rectal suppository - 10 mg twice a day
     Liquid paraffin - oral 10ml - 20ml at night
     Lactulose - oral 15ml - 20ml twice a day
     Senna - oral 15 mg at night

Methylnaltrexone (oral 150mg - 450mg once daily morning) is licensed for the treatment of opioid induced constipation in patients receiving palliative care when response to other laxatives is inadequate.

- Promote drinking an adequate amount of water and eating leafy vegetables and fruits.
- If constipation is not resolved consider manual evacuation of faeces.

2. Nausea and vomiting
   - Gradual dose titration may forestall the occurrence of nausea.
   - Symptoms often subside with long term therapy.
   - Commonly, with initial opioid dosing, nausea is caused by stimulation of the chemoreceptor trigger zone.
   - Metoclopromide (dose 10 – 20 mg three to four times a day) or domperidone (oral dose 10-20 mg three to four times a day, per rectal dose 30 – 60 mg; 30 mg suppositories are available.) and haloperidol (initial dose of 0.75 mg once or twice daily and can be increased if necessary up to 5 mg -10 mg daily in divided doses) can be prescribed as treatment options of nausea & vomiting.
   - Prochlorperazine is not indicated for opioid induced nausea and vomiting.
   - Untreated pain itself can induce nausea.

3. Sedation

- Level of sedation should be monitored carefully.

Table 5: Assessment of sedation

Grade	Status
0	Crying, Shouting, Restless
1	Fully awake, Eating & drinking
2	Drowsy, Awake to touch
3	Sleeping, Awake to shouting or forceful snap on the body
4	Somnolence

- More than 2 - Unsafe, risk of respiratory depression
- 2 or less than 2 - Safe
- Respiratory rate needs to be monitored.

Increased sedation is noticed before the appearance of respiratory depression. Therefore, measuring sedation level takes priority to predict the respiratory depression

4. Delirium

- Delirium is a syndrome characterised by a disturbance of consciousness (often fluctuating), cognition and perception.
- Delirium may occur among palliative care patients due to multiple reversible & irreversible causes. Opioids may also induce delirium.
- Since delirium commonly occurs in terminally ill patients, it may complicate the assessment of drowsiness caused by opioids.

- Reversible causes of delirium should be looked for and treated if appropriate. E.g. Hypercalcaemia, renal failure, infection etc.
- Opioid rotation is commonly used to alleviate opioid induced delirium.

5. Respiratory depression
   - Respiratory depression is a potentially fatal side effect, but tolerance usually occurs rapidly and not a common adverse effect.
   - If respiratory rate <8 / minute, patient barely rousable / unconscious and /or cyanosed;
     Stop the opioid
     Administer oxygen by face mask
     Give opioid antagonist naloxone - As standard naloxone ampoule contains 400 microgram, dilute with 10 ml 0.9% sodium chloride and administer 0.5ml (20 microgram) IV every 2 minutes until the patient's respiratory status is satisfactory. (North England Clinical Networks, 2016)
   - Nalaxone can cause acute abstinence syndrome with elevation of heart rate and blood pressure and reversal of analgesia.
   - Since respiratory depression may occur due to other causes, it is necessary to actively look for those causes (e.g. pulmonary embolus, respiratory infection etc).

6. Physical dependence
   - Physical dependence is the physiological adaptation of the body to the presence of an opioid. It is defined by the development of withdrawal symptoms when opioids are discontinued, when the dose is reduced abruptly or when an

antagonist (e.g. naloxone) or an agonist-antagonist (e.g. pentazocine) is administered.

- Physical dependence is a normal and expected response to continuous opioid therapy. Physical dependence may occur within a few days of dosing with opioids, although it varies among patients. Physical dependence (indicated by withdrawal symptoms) does not mean that the patient is addicted.

7. Psychological dependence
   - Psychological dependence is an emotional need for an opioid that has no underlying physical need.

8. Tolerance
   - Tolerance is a physiological state characterized by a decrease in the effects of a drug (e.g. analgesia, nausea or sedation) with chronic administration.
   - Tolerance usually develops to many of the side effects of opioids (sedation, nausea, itch) in a few days. Tolerance almost never develops to constipation. Constipation should always be anticipated and treated. If a patient does not tolerate the side effects of one opioid, another opioid should be tried.

In addition, following side effects may also be experienced by the patient: Light headedness, dizziness, sweating, dysphoria, euphoria, dry mouth, anorexia, spasm of urinary and biliary tract, pruritus, rash, palpitations, bradycardia, postural hypotension, meiosis, syndrome of antidiuretic hormone secretion, anaphylaxis.

Opioid rotation (Opioid switch)

Opioid rotation is defined as "a change in opioid drug or route of administration with the goal of improving outcomes." Switching from one opioid to another is often necessary to realize the most favourable balance of therapeutic effects and side effects in patients who require opioid analgesic therapy as a component of overall pain management. (Refer table 6 - page 30)

Symptoms and signs of opioid toxicity

- Drowsiness
- Confusion
- Hallucination (auditory or visceral)
- Vomiting
- Myoclonus
- Pin point pupils
- Urinary retention

Controlled release opioid preparations

1. Controlled release Morphine (MST)

Controlled release morphine preparations must not be crushed or chewed.

Use of controlled release tablets and capsules of opioids should only be commenced in when the four hourly immediate release morphine dose is stable. Administration of these preparations to opioid naive patients may cause fatal respiratory depression.

2. Fentanyl

Fentanyl is 100 times potent than morphine (1:100). Therefore should only be used among patients tolerant to morphine. (Refer table 7 - page 31) Unsuitable for unstable pain. Available as sustained release transdermal patch (strength 12mcg/hr, 25mcg/hr, 50mcg/hr). Can start with 12 micrograms/hr

Takes about 8-12 hours for action. Therefore may need extra analgesia upto 24 hours. Action persists for 72 hours.

Also residual action will be there for 8-12 hours after removal of the patch.

Need to apply to a fleshy (non-bony) region of the body. Skin needs to be shaved if it is hairy.

Table 6: Opioid conversions

Current Opioid (Converting from)	**New opioid and / or new route of administration (converting to)**	**Divide by 24 hour dose of current opioid (column 1) by relevant figure below to calculate initial twenty four hour dose of new opioid and / or new route (column 2)**
Oral to oral route conversions		
Oral codeine	Oral morphine	Divide by 10
Oral tramadol	Oral morphine	Divide by 5
Oral to transdermal route conversions		
Oral morphine	Transdermal fentanyl	May vary according to manufacturer
Oral to subcutaneous/intramuscular / intra venous route conversions		
Oral morphine	Subcutaneous morphine	Divide by 2
Oral morphine	Intramuscular morphine	Divide by 2
Oral morphine	Intra venous route	Divide by 2
Other route conversions		
Subcutaneous / intramuscular morphine	Intra venous route conversions	No change
Intravenous morphine	Oral morphine	Multiply by 2

(Scottish Intercollegiate Guidelines Network ,2008)

Table 7: Conversion doses from daily oral morphine to 72 hour transdermal fentanyl patch

24hour oral morphine dose (mg/day)	72 hour transdermal fentanyl patch (mcg/h)
30	12
60	25
120	50
180	75
240	100

(British National Formulary, 2015)

Continuous IV infusion of opioids

- Continuous IV infusions could be initiated at the specialist units according to the need.
- For continuous IV infusion, dilute with glucose 5% - 10% or 0.9% sodium chloride.
- Dose: Until the pain controlled, boluses of 1mg IV at 2 minute interval followed by an infusion of 1-3 mg / hour titrate to analgesic response and side effects.

Reduction /discontinuation of opioid therapy

- After short term therapy with opioids (7 – 14 days) – reduce dose by 10% – 20% every 8 hours.
- After long term therapy with opioids – reduce dose by 10 % - 20 % every week.

Contraindications to opioids

- In the presence of reduced renal function & hepatic impairment all opioids should be used with caution and at reduced doses and/or frequency.
- Opioids are contraindicated in hypersensitivity to opioid agonists or any component of the formulation, acute respiratory depression, acute asthma, paralytic ileus, concomitant use or use within 14 days after ending monoamine oxidase inhibitors.

Adjuvant analgesics (Co-analgesics)

An adjuvant analgesic is a drug which is not an analgesic in its prime function but in combination with an analgesic can enhance pain control.

- Corticosteroids - pain caused by oedema, raised ICP
- Antidepressants - neuropathic pain
- Anticonvulsants - neuropathic pain
- Muscle relaxants - muscle cramps
- Antispasmodics - bowel colic
- Antibiotics - infection pain
- Bisphosphonates
- Psychotropic medication
- Night sedatives - when lack of sleep is decreasing pain threshold
- Anxiolytics - when anxiety is aggravating pain
- Antidepressants - when depressed mood is contributing to pain

Dosing regimens of commonly used adjuvants are mentioned below.

Amitriptyline	10mg -25mg daily at night; increased if necessary up to 75 mg a day
Carbamazepine	Initially 100 mg 1-2 times a day increased increased gradually according to response
Gabapentin	300 mg once daily on day 1 300mg twice daily on day 2 300 mg 3 times daily on day 3 up to 3.6 g daily
Baclofen	5-10 mg three times a day

Opioid resistant cancer pain

Opioid resistance is defined as unresponsiveness to IV morphine sulphate of at least 100 mg per hour (or equivalent dosing of another opioid). All pain is not equally responsive to opioid analgesics. It is useful to have a working classification of pain based on anticipated response to opioids.

Pseudo resistance

- Under dosing
- Poor absorption
- Poor intake of opioid
- Ignoring psychological aspects of cancer

Semi resistance

- Bone metastases
- Neuropathic (Some)
- Raised intracranial pressure
- Activity related

Resistant

- Neuropathic (some)
- Muscle spasm

Opioid resistant cancer pain should be referred to a specialist setting for advanced pain management including interventional pain management.

8.3 Non- invasive treatment options for cancer pain

In addition, every patient with cancer related pain have to be offered other aspects of care including the management of psychological, social and spiritual aspects of pain with the objective of having pain-free life with optimal function (Biopsychosocial approach.)

In summary, comprehensive management of cancer pain should encompass disease directed, patient directed and family directed approaches as described in Sheffield model of supportive care.

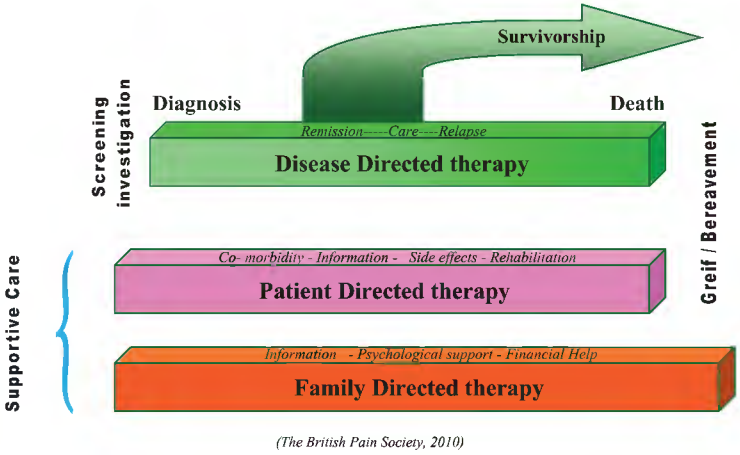


Figure 3: Sheffield model of supportive care treating the cancer patient and family

9. MONITORING OF CANCER PAIN MANAGEMENT AT HOME SETTING

- Patient and caregiver education at the oncology clinic about the usage of morphine for cancer pain is important.
- Involve the patient and main caregiver for monitoring of pain management at home using the 'home based pain monitoring chart' (page 38.)
- Identify a primary care medical officer for monitoring of morphine usage at community setting.
- Identify field primary healthcare staff for monitoring of drug usage at home setting (eg. Public Health Nursing Officer).

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Annex - I

Commonly used drugs in Cancer Pain Management

Name of the Drug	Route	*Dose	Frequency	Indication	Contra indication	Side effects
Paracetamol	Oral Rectal	500 mg-1000 mg Upper limit 4 g/day 500 mg -1000 mg	6 hrs 4 – 6 hrs	Mild to moderate pain Mild to moderate pain	Caution in liver and renal Impairment, Alcohol dependence, Chronic dehydration, Chronic malnutrition	Liver damage Skin reactions Steven Johnsons syndrome Asthma, Malaise
Ibuprofen	Oral	Starting - 400 mg increased upto 600 mg Maintenance (200 mg – 400 mg)	6 – 8 hrs 6 hrs 8 hrs	Mild to moderate pain	Active gastro-intestinal bleeding and ulceration, renal, cardiac or hepatic impairment, history of hypersensitivity to NSAIDs.	Alveolitis, hepatic damage, Renal failure, angiooedema Broncho-spasm, fluid retention
Codeine	Oral	30 mg – 60 mg Maximum 240 mg/day	4 – 6 hrs	Mild to moderate pain	Acute ulcerative colitis, antibiotic associated colitis, acute respirat--ory depression, head injury	Abdominal pain, malaise muscle fasciculations, Hypothermia, anorexia
Paracetamol + Codeine	Oral	500 mg + 8 mg	6 – 8 hrs	Mild to moderate pain		
Tramadol (Immediate release)	Oral	50 mg - 100 mg Maximum 400 mg/day	4 – 6 hrs	Mild to moderate pain	Acute respiratory depression Raised intracranial pressure, Acute intoxication with alcohol,	Malaise, diarrhoea flatulence, gastritis retching, anxiety,
Tramadol (Controlled release)	Oral	50 mg -100 mg increased if necessary 150 mg – 200 mg	12 hrs	Mild to moderate pain	analgesics & opioids, uncontrolled epilepsy	Bronchospasm, hypertension
Morphine IR (Immediate release)	Oral	Starting 2.5 mg – 5 mg, (tablet strength available 10mg/15mg/30mg)	4 hrs	Severe acute and Chronic pain	Renal failure Acute respiratory depression Raised intracranial pressure Acute abdomen, heart failure secondary to chronic lung disease, co-pulmonale, pheochromocytoma Delayed gastric emptying	Nausea, vomiting Abdominal cramps, Constipation Agitation, amenorrhoea Anorexia, Asthenia Bronchospasm, delirium Disorientation, dyspepsia Malaise, muscle fasciculations, hypertension
Morphine MST (Controlled release)	Oral	Only commence when patient stable with Morphine IR, tablet strength available 10mg/30mg/60mg	12 hrs	Severe acute and chronic pain		

Name of the Drug	Route	*Dose	Frequency	Indication	Contra indication	Side effects
Fentanyl	Dermal patch	12.5/25/50 microgram per hour patch	72 hrs	Chronic intractactable pain.	Same as Morphine. Caution in cerebral tumour, Diabetes mellitus, impaired consciousness.	Abdominal pain, anorexia, asthenia, dyspepsia, mouth ulcers, gastro-oesophageal reflux disease.
Amitriptyline	Oral	10 mg -25 mg, increased up to 75 mg	At night	Neuropathic pain	Recent myocardial infarction, Arrhythmias (heart block), Severe liver disease, Manic phase of bipolar disorder	Abdominal pain, fatigue, hypertension, oedema, mydriasis, restlessness, stomatitis, nausea
Carbamazepine	Oral	100 mg – 200 mg	12 hrs	Neuropathic pain	AV conduction abnormalities (unless paced), bone marrow depression, acute porphyrias	Allergic skin reactions, aplastic anaemia, blood disorders, blurred vision, dermatitis, dizziness, drowsiness, dry mouth
Gabapentin	Oral	300 mg once daily on day 1, 300 mg twice daily on day 2, 300 mg three times daily on day 3, (Considering patient tolerability may start with a lower dose) maximum 3.6 g/day	Daily 12 hrs 8 hrs	Neuropathic pain	Caution in renal impairment, diabetes mellitus, elderly, low body weight, history of psychotic illness, mixed seizures	Diarrhoea, dry mouth Dyspepsia, abnormal thoughts, acne, amnesia Constipation, abdominal pain, anorexia, gingivitis Abdominal reflexes
Pregabaline	Oral	Start with 50 mg, Increased upto 75 mg, Then 150 mg, Dose increased after 3 – 7 days	Daily 12 hrs 12 hrs	Neuropathic pain	Caution in severe congestive Heart failure, renal impairment, Conditions precipitating encepha--lopathy	Appetite changes, blurred vision, diplopia, dizziness Confusion, drowsiness, dry mouth, constipation flatulence, irritability
Baclofen	Oral	5 mg – 10 mg	8 hrs	Pain of muscle spasm in palliative care	Active peptic ulceration, caution in cerebrovascular disease, diabetes, elderly, epilepsy	Agitation, anxiety, ataxia, cardiovascular depression, confusion, depression, dizziness, drowsiness, dry mouth

** Doses given in the table are approximations for guidance only and should always be titrated to the individual patient's requirements.*

(British National Formulary, 2015), (Hum & Koh, 2013)

Annex - II

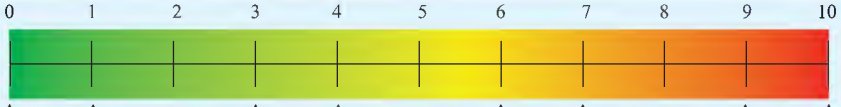
නිවසේදී වේදනාව ඇගයීමේ සටහන வீட்டில் வலியினை அளவிடும் அட்டவணை Home Based Pain Monitoring Chart

නම பெயர் Name .....

සායන අංකය சாய்சாலை இலக்கம் Clinic No .....

නියමිත මාත්‍රාව உரிய மருந்தின் அளவு Fixed Dose		අමතර මාත්‍රාව மேலதிக மருந்தின் அளவு Additional Dose	

වේදනාව ඇගයීමේ මානය
வலி அளவீட்டுக் கோல்
Pain Assessment Scale



වේදනාවක් නැත வலி இல்லை No Pain	සාමාන්‍ය වේදනාවක් சாதாரணவலி Mild Pain	තරමක වේදනාවක් கவனிக்கத்தக்கவலி Moderate Pain	තද වේදනාවක් கூடிய வலி Severe Pain	ඉවසිය නොහැකි ඉතාම දරුණුතම වේදනාවක් தாங்கமுடியாத அதிக வலி Worst Possible Pain

දිනය திகதி	වේදනාවේ අගය வலியின் அளவு						අමතර මෝපින් ලබා දීම மேலதிக மோபின் பெற்றுக் கொள்ளல்				අතුරු ආබාධ සිකල්කළ්			වෙනත් කරුණු வேறு விடயங்கள்	නිලධාරියාගේ අත්සන உத்தியோகத்தரின் கையொப்பம்
	පෙ.ව. மு.ப. 4	පෙ.ව. மு.ப. 8	ප.ව. பி.ப. 12	ප.ව. பி.ப. 4	ප.ව. பி.ப. 8	පෙ.ව. மு.ப. 12	1	2	3	4	නිදිමතබව தூக்கமயக்கம்	වමනය வாந்தி	මධ්‍යවේලීම மலச் சிக்கல்		
7/12	4 ✓	6 ✓	7 ✓	5 ✓	4 ✓	4 ✓	8 ~~6~~						✓		

නිවසේදී වේදනාව ඇගයීමේ සටහන

- ඔබට වේදනාවෙන් තොර ගුණාත්මක ජීවිතයක් ගත කිරීම සඳහා වේදනා නාශක ඖෂධ නියම කිරීමේදී මෙම සටහන ඉතා වැදගත් වේ.
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ඔබට නියම කරනු ලබන මෝෆීන් නියමිත මාත්‍රාව සහ අමතර මාත්‍රාව වෛද්‍යවරයා විසින් විශේෂ කොටුවක සඳහන් කර ඇත.

වේදනාව ඇගයීමේ මානය

- පවතින වේදනාව මැන බැලීමට මෙම සටහන යොදා ගනී.
- අංක වලින් සහ වර්ණ වලින් වේදනාවට අගයක් දීමට මෙමගින් පුළුවන.
- වේදනා ඇගයීමේ මානය අංක 0 – 10 දක්වා සටහන් කර ඇත.
- 0 - වේදනාව නැති අවස්ථාව (කොළ වර්ණය) පෙන්නුම් කරයි.
- වේදනාව වැඩි වන විට අංකයේ අගය වැඩි වේ.
- 10 - ඉවසිය නොහැකි ඉතාම දරුණුතම වේදනාව (රතු වර්ණය) පෙන්නුම් කරයි.

ඒ අනුව තමාට දැනෙන වේදනාවට ඊට ගැලපෙන අංකය උපයෝගී කරගෙන නිවැරදිව අගයක් දීමට පුළුවන.

මෙම සටහන පිරවීමේදී පහත උපදෙස් වැදගත් වේ.

ඔබගේ පහසුව සඳහා උදාහරණයක්ද දක්වා ඇත.

දිනය : මෙම තීරුවේ පිළිවෙලින් දිනය හා මාසය යොදන්න

වේදනාවේ අගය : මෝෆීන් ඖෂධය දිනකට දෙවරක් ලබාගන්නා රෝගීන් සඳහා අවම වශයෙන් දිනකට දෙවනාවක්වත් වේදනාවේ අගය අදාල වේලාවට අනුව සටහන් කරන්න. මෝෆීන් ඖෂධය පැය 4කට වරක් ලබා ගන්නා රෝගීන් එම ඖෂධය ලබා ගැනීමට පෙර වේදනාවේ අගය අදාළ වේලාවට අනුව සටහන් කරන්න. මෝෆීන් ඖෂධය ලබාගත් බව (✔) ලකුණ යොදා ඊට යටින් සටහන් කරන්න.

අමතර මෝෆීන් ලබාදීම : නියමිත ඖෂධ වාර දෙකක් අතර තුරදී තරමක වේදනාවක් හෝ තද වේදනාවක් (අගය 4ට වැඩි) ඇති වන්නේ නම් සායනයෙන් උපදෙස් දුන් පරිදි අමතර මෝෆීන් ඖෂධ මාත්‍රාව ලබා ගත හැකි අතර අදාල තීරුවේ වේදනාවේ අගය හා අමතර ඖෂධ මාත්‍රාව ලබාදුන් වේලාව සටහන් කරන්න.

(දිනකට දෙවරකට වැඩි වාර ගණනක් අමතර මෝෆීන් ලබා ගැනීම සිදුවේ නම් හැකි ඉක්මනින් ඔබේ සායනයෙන් උපදෙස් ගන්න.)

අතුරු ආබාධ : අදාල දිනය තුලදී නිදිමතබව, වමනය , බඩවෙලීම් ආදී අතුරු ආබාධ ඇතිවූයේ නම් එය අදාල තීරුවේ (✔) ලකුණින් සටහන් කරන්න. අතුරු ආබාධ දින දෙකකට වඩා පවතීනම් වහාම වෛද්‍ය උපදෙස් ලබා ගන්න.

වෙනත් කරුණු : මෝෆීන් ඖෂධය ලබාදීමට මූලික වූ වේදනාවට අමතරව වෙනත් ස්ථානයක වේදනාවක් හෝ වෙනත් විර්ගයක වේදනාවක් ඇතිවූයේ නම් ඒ බවද, ඊට අමතරව වෙනත් සඳහන් කලයුතු විශේෂ රෝග තත්වයන්ද මෙම තීරයේ සටහන් කරන්න.

නිලධාරියාගේ අත්සන : ඔබව නිවසේදී බැලීමට පැමිණෙන සෙංඛ්‍ය නිලධාරියාට හෝ ඔබ වෛද්‍ය ප්‍රතිකාර ලබා ගැනීමට ආසන්න වෛද්‍ය මධ්‍යස්ථානයට ගියවිටදී මෙම සටහන ඉදිරිපත්කර අදාල නිලධාරියාගේ අත්සනද ලබා ගන්න.

- ඔබ විසින් සටහන් පවත්වාගෙන ගිය මෙම වේදනාව ඇගයීම් සටහන ඊලඟ සායන දිනයේදී සායනයට ඉදිරිපත් කිරීම ඔබේ වේදනාව නිසි පරිදි පාලනය කිරීම සඳහා වැදගත් වේ.

வீட்டில் வலியினை அளவிடும் அட்டவணை

- நீங்கள் வலியில்லாத சிறந்ததொரு வாழ்வினை வாழ வலிநீக்கி மருந்துகளைப் பெற்றுக் கொள்ள இந்த அட்டவணை மிகவும் முக்கியமானது.
- வலியினை நீக்குவதற்காக மோபீன் மருந்தினைப் பெற்றுக்கொள்ளும் அனைவராலும் வீட்டில் ஒவ்வொரு நாளும் இந்த அட்டவணை நிரப்பப்படல் வேண்டும்.

உங்களுக்குரிய மோபீன் மருந்தின் அளவு மற்றும் மேலதிக மோபீன் மருந்தின் அளவு வைத்தியரினால் விசேட கூட்டினுள் குறிப்பிடப்பட்டுள்ளது

<u>வலி அளவீட்டுக் கோல்</u>

- காணப்படும் வலியை அளவிடுவதற்கு இந்த அட்டவணை பயன்படும்
- இலக்கங்கள், நிறங்கள் மூலமாக வலியின் அளவுப் பெறுமானத்தை இதன் மூலம் கூறலாம்.
- வலி அளவீட்டுக் கோலில் இலக்கம் 0 -10 வரை காணப்படுகிறது.
- 0 என்பது வலி காணப்படாத நிலை (பச்சை நிறம்)
- வலி கூடும்போது இலக்கப் பெறுமானம் அதிகரிக்கும்.
- 10 – தாங்க முடியாத அதிக வலி. (சிவப்பு நிறம்) என்பதாக குறிக்கப்படும்.

➲ இதற்கமைய தம்மால் உணரப்படும் வலியிற்கு பொருத்தமான இலக்கத்தை உபயோகித்து சரியான பெறுமானத்தை வழங்க முடியும்.
➲ இந்த அட்டவணையை நிரப்பும் போது பின்வரும் விடயங்களைக் கருத்தில் கொள்ளவும்.
➲ உங்கள் விளக்கத்திற்காகப் பின்வரும் உதாரணத்தைப் பார்க்கவும்.

திகதி : இந்த நிரலில் முறையே திகதியையும் மாதத்தையும் குறிப்பிடுக.

வலியின் அளவுப் பெறுமானம்:

மோபீன் மருந்தினை ஒரு நாளைக்கு இருமுறை பெற்றுக் கொள்ளும் நோயாளிகள் குறைந்தது ஒரு நாளைக்கு இருமுறையேனும் வலியின் அளவுப் பெறுமானத்தை உரிய நேரத்திற்கு அமைய குறிப்பிடவும். மோபீன் மருந்தினை நான்கு மணித்தியாலங்களுக்கு ஒரு முறை பெற்றுக் கொள்ளும் நோயாளிகள் மருந்தினைப் பெற்றுக் கொள்ளும் முன்பதாக வலியின் அளவுப் பெறுமானத்தையும் நேரத்தையும் குறிப்பிடல் வேண்டும். மோபீன் மருந்தினைப் பெற்றுக் கொண்டதைக் குறிக்கும் முகமாக (✓) என்ற அடையாளத்தை அதன் கீழாக குறிப்பிடுக.

மேலதிக மோபீன் மருந்தை பெற்றுக்கொள்ளல்:

குறித்த மருந்து வேளை இரண்டிற்கு இடையில் ஓரளவு வலி அல்லது கூடிய வலி (பெறுமானம்-4 இலும் கூட) காணப்படுமாயின் கூறப்பட்ட வைத்திய ஆலோசனைப்படி மேலதிக மோபீன் மருந்து பெற்றுக் கொள்ள முடியும். அத்துடன் உரிய இடத்தில் வலியின் அளவுப் பெறுமானம், பெற்றுக் கொண்ட மருந்தின் அளவு, பெற்றுக் கொண்ட நேரம் என்பவை குறிக்கப்படல் வேண்டும்.

(ஒரு நாளைக்கு இரண்டு தடவைகளுக்கு மேல் மேலதிக மோபீன் மருந்து பெற்றுக் கொள்ள நேரிடுமாயின் உடனடியாக வைத்திய ஆலோசனையைப் பெறவும்.)

சிக்கல்கள் :

குறிப்பிட நாளில் தூக்கமயக்கம் வாந்தி, மலச்சிக்கல் போன்ற சிக்கல்கள் ஏற்படுமாயின் அவற்றையும் உரிய இடத்தில் (✓) என்ற குறியீட்டின் மூலம் குறிப்பிடவும். இரண்டு நாட்களுக்கு மேல் குறிப்பிட்ட சிக்கல்கள் காணப்படுமாயின் வைத்திய ஆலோசனையைப் பெற்றுக் கொள்ளவும்.

வேறுவிடயங்கள் :

மோபீன் மருந்து பெற்றுக் கொள்ள மூல காரணமாக இருந்த வலியிற்கு மேலதிகமாக வேறு இடத்தில் வலி அல்லது வேறு விதமான வலி ஏற்படுமாயின் அதனையும்.இதற்கு மேலதிகமாக வேறு குறிப்பிடப்பட வேண்டிய விசேட நோய் நிலைகள் பற்றியும் இந்தப் பகுதியில் குறிப்பிடவும்.

உத்தியோகத்தரின் கையொப்பம் :

உங்களை வீட்டில் பார்வையிட வரும் சுகாதார உத்தியோகத்தரிடமோ அல்லது நீங்கள் வைத்திய பராமரிப்பு பெறும் வைத்தியசாலையிலோ இதனைக் கொடுத்து உத்தியோகத்தரின் கையொப்பத்தைப் பெற்றுக் கொள்ளவும்.

- உங்களால் நிரப்பப்பட்ட இந்த வலி அளவிடும் அட்டவணையை அடுத்த முறை வைத்திய ஆலோசனை பெற வரும்போது சமர்ப்பித்து அதன் மூலம் உங்கள் வலியை உரிய முறையில் கட்டுப்படுத்த உதவி அளியுங்கள்.

Annex - III

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SUWASIRIPAYA

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சுகாதாரம் மற்றும் சுதேச வைத்திய அமைச்சு
Ministry of Health & Indigenous Medicine

General Circular No. : 01 - 14 /2015

Director / NHSL
All PDHS / RDHS
Director / NCI Maharagama
Directors of All Teaching / Provincial General Hospitals
Medical Supintendants of District General / Base Hospitals

Prescribing and Issuing of Morphine for Cancer Pain Management

Pain is a significant symptom among cancer patients. Causation of cancer pain is multifactorial including physical, mental, social & spiritual dimensions. According to scientific eveidence, pain prevalence ranges from 33% in cancer patients after curative treatment to 59% in patients on anticancer treatment and to 64% in patients with metastatic, advanced or terminal phase. Moreover, another systematic review of the literature showed that nearly half of cancer patients were under-treated for pain. Recent studies conducted showed that pain was not adequately treated in a significant percentage of patients, ranging from 56% to 82.3%. (*Ref. Annals of Oncology, 2012; Vol. 23: 139 -154*)

Morphine is an essential drug used for advanced cancer pain management. The Consultant Oncologists raised existing limitations on prescribing & issuing of morphine for advanced cancer pain management at hospitals on several occasions. This issue was discussed at the meeting of National Advisory Committee on Prevention & Control of Cancers held on 15.09.2014 and National Steering Committee on Palliative Care for Cancer Patients held on 16.12.2014.

Following decisions were made at the 'National Steering Committee on Palliative Care for Cancer Patients' meeting for prescribing and issuing of morphine for cancer pain management.

By virtue of the powers vested in me under section 66(1) of the Poison, Opium & Dangerous Drugs Ordinance as amended this circular is issued.

The schedule mentioned below should be adhered to when prescribing and issuing morphine at government hospitals giving due consideration for potential misuse. The patient and the caregiver have to be educated on the importance of morphine for cancer pain management, adverse effects and the precautions to be adopted for prevention of misuse.

Clinic setting	Officers in charge of prescribing	Duration
Cancer Clinics, Palliative Care & Pain Clinics	Consultant Oncologists, Consultant Physicians, Consultant Anaesthetists	Upto one month
Other clinics conducted by consultants	Consultant in Charge	Upto two weeks
Non specialist clinics	Grade medical officers (Under the guidance of a shared care plan of a consultant)	Upto one week

The following measures have to be adopted to prevent misuse of morphine.

1. Routine monitoring of morphine usage at the hospital level through a special prescription form filled by the prescribing consultant or medical officer (Draft of the prescription form is herewith attached. Annex:1)
2. Educate the caregiver to maintain the 'Home Based Monitoring of Management of Cancer Pain Management Chart' from the first instance of prescribing morphine (Annex:2)
3. Compliance of morphine use has to be documented by refering to the above chart when prescribing morphine at every subsequent clinic visit

(It is a good practice to follow the patients who are on morphine by the same medical team in subsequent clinic visits.)

4. Advice the care giver to inform the hospital and return the remaining stock of morphine in the event of death of the patient.

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Director General of Health Services

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Secretary / Ministry of Public Peace
Secretary / Ministry of Defence
Additional Secretary / Medical Services
Chairman, National Dangerous Drugs Control Board
All DDGs of Ministry of Health & Indigenous Medicine
Senior Legal Officer / Ministry of Health
Director / National Cancer Control Programme
Director / Medical Technology & Supplies
Director / Medical Supplies Division
Presidents of College of Oncologists, Physicians, Paediatricians, Anaesthetists, General Practitioners

Reference.

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