**Introduction**

“**Medicine is not about conquering disease and death, but about alleviation of suffering, minimising harm, and smoothing the journey of man.”** – Strabanek

We can be proud of our country’s progress in the field of Medicine. With tremendous advances in medical technology in both diagnostics and treatment, we are at par with the western world. But, for the same reason, longevity of life has increased bringing with it, an increasing incidence of ‘Non Communicable Diseases’ and an increase in morbidity.

A classic example of such a disease is Cancer. About a million patients are diagnosed with cancer every year in our country. Although we have the state-of-the-art treatment for cancer, the sad truth is that more than 75% are in the advanced stage when they first see the doctor. The most common symptom that these patients suffer from in the advanced stage is severe pain. Unfortunately, less than 2% get adequate relief from pain in India!

**Why this Pathetic Figure?**

Lack of education in the treatment of chronic pain is the most important reason. We are taught how to treat cancer but not how to manage cancer *pain*! Apart from pain they also suffer from many other physical symptoms and emotional distress. Needless to say, the family suffers too, altogether causing a vast deterioration in the quality of life.

One of the biggest challenges clinical professionals face is caring for patients with long-term illnesses and progressive life-limiting diseases. Medical knowledge is developing so rapidly with
ever more opportunities for curative treatment that medical education and training has been increasingly laying emphasis on curing the disease rather than caring for the person with the disease.

‘A Physician’s duty is not only to cure but also ‘to relieve suffering and comfort always’ – a 16th century saying. Although health is defined as ‘a state of physical, mental and social (and spiritual) well being’, we tend to address only issues which can be easily treated. It is time we inculcated the art of medicine along with the science in the form of palliative care in our everyday medical practice.

Palliative Medicine evolved out of necessity to bridge the gap between cure and care. Palliative medicine asserts boldly that even in the face of overwhelming illness, suffering can and must be relieved. It involves the treatment of pain and other distressing symptoms in those suffering from chronic diseases, with the sole aim of relieving suffering and improving quality of life.

Why the Anaesthesiologist?

The fact that anaesthesiologists could play a role in alleviating pain and suffering was recognised many years ago:

“...Pain and suffering are another issue altogether. We, as professionals are clearly doing a poor job caring for and comforting patients, especially when end-of-life issues predominate. Research studies abound showing that oncologists are likely to under-treat cancer pain....40% of all cancer patients.....die in unrelieved pain....”


The anaesthesiologist is devoted primarily to the relief of pain. He has mastery in relief of acute pain and a good knowledge of analgesics and nerve blocks. Severe uncontrolled pain is one of the most common problems in cancer. Despite optimised use of systemic analgesics, 10-30% of those with advanced cancer still have inadequate pain control and require further treatment. Interventional pain therapies have marked analgesic efficacy for otherwise intractable pain but these therapies are often underutilised or withheld till the end-of-life. The anaesthesiologist has the ability to widen his knowledge and skills in pain management more easily than other physicians. With some training, one can relieve the patients’ physical suffering and respond more professionally to their emotional needs with competence and confidence.
Essential components of Palliative Medicine are:

- Treatment of physical symptoms
- Addressing psychological issues
- Disease modifying options
  - all done with an interdisciplinary approach.

*Management of chronic pain alone will be discussed, touching on communication skills.*

All types of pain are undertreated and pain at the end-of-life is the major reason for referral to the palliative care team. Adequate pain control can be achieved in most of these patients by using a comprehensive approach – following the WHO analgesic ladder, education, support and monitoring.

**Management of Chronic Pain**

Chronic pain is NOT a temporal extension of acute pain! Chronic pain is a complex biopsychosocial event. The first step in the effective control of a chronic symptom is impeccable assessment. Pain is a subjective sensation; there is no objective method for measuring pain and to understand the multidimensional nature, one should assess both the symptom as well as the distress caused by the symptom. Assessment includes the

- **Physical domain** – location, radiation, quality, intensity, relieving and aggravating factors, treatment and analgesic history
- **Psychological domain** – anxiety, depression, fears – of progressing disease an opioid use, anger, denial, loss of body image
- **Social domain** –financial issues, guilt, family discord, stigma

Add to this, poor day to day function, disruption of sleep, loss of appetite, loss of job, disinterest in life and the spiritual distress.
Principles of Pain Management

*Educate the patient and family*
Explain to the patient and family the origin of the pain, the initial management plan, and expected adverse effects. Fears concerning opioid use should also be addressed.

*Prevent and minimise side effects*
Common adverse effects such as constipation and nausea in patients for whom opioids are prescribed should be anticipated and prevented.

*Match pain severity to analgesic potency*
Analgesic selection depends on the severity of the pain and the ‘WHO analgesic ladder’ provides the guidelines. It advocates three basic steps of analgesics and with appropriate dosing, this approach is capable of providing pain relief for 70-90% of patients. For management of cancer pain, this is combined with other treatment options such as interventions, surgery, radiotherapy, chemotherapy, hormone therapy and other non pharmacological methods and psychosocial therapies.

*Pharmacologic Options for Cancer Pain*
Continuous pain requires continuous treatment. Analgesics should be prescribed round the clock at regular intervals to suppress the pain, by the mouth, and by the ladder.

**WHO Analgesic Ladder**

- **Step-1**: ± Non-opioid ± adjuvants
- **Step-2**: Weak opioid ± Non-opioid ± adjuvants
- **Step-3**: Weak opioid ± Non-opioid ± adjuvants
- **Step-4**: Strong opioid ± Non-opioid + adjuvants

Interventions
Analgesics can be classified as non opioid analgesics, opioid analgesics and adjuvant drugs.

Non opioids are appropriate as single agents for mild pain:
Paracetamol is the most common over-the-counter analgesic drug. It has both peripheral and central actions. Dosage is limited to 4g/day. It is also effective as an adjuvant when added to strong opioids.
Non steroidal anti-inflammatory drugs – have peripheral and central actions related to inhibition of cyclo oxygenase enzymes. Gastrointestinal and renal side effects may be a problem. Gastric protection may be considered for high-risk patients. NSAIDs should be discontinued if there is no obvious response.

Tramadol - a unique, synthetic, centrally acting analgesic with both opioid and non opioid properties. The ceiling recommended dose is 400mg/day.

Opioids
Opioids are the mainstay of pain management in palliative care. Morphine, codeine, and fentanyl are some examples. We have learnt about injectable morphine but not about oral morphine which is the opioid of choice for severe pain. Oral morphine (combined with adjuvants) provides pain relief in 70-90% of cancer patients; it is a pure agonist; oral morphine has an absorption of 30-50%; the common side effects are constipation, nausea, vomiting, and sedation.
Some tips while prescribing oral morphine: The starting dose for opioid-naïve patients is 5-10mg every four hours. Dosage is initiated with immediate release preparations to allow for titration and then switched over to sustained-release preparations. If the patient is elderly or frail, the initial dose should be smaller and titration should be done more slowly. Breakthrough doses are 10-15% of the total daily dose. Adjuvant analgesics may be required in patients in whom pain is poorly controlled and there are signs of toxicity.

Adjuvant analgesics
Certain drugs can be used as adjuvants in combination with opioids for relieving certain kinds of pain. These include corticosteroids, tricyclic and other anti depressants, anticonvulsants, bisphosphonates, muscle relaxants, anaesthetic agents and antiarrhythmic drugs. These adjuvants, when used with opioids complement pain relief. For example, corticosteroids are
used to reduce pain from increased intracranial pressure; tricyclic antidepressants are used in neuropathic pain.

**Interventional Anaesthetic Pain Therapies**

Intervention is the fourth step of the ladder. According to WHO, only 15-20% of patients with cancer require invasive methods of pain relief. Indications for interventional pain therapies include:

- Pain not controlled with systemic analgesics
- Unacceptable adverse effects from systemic analgesics

Interventional therapies range from the simple to the complex – intramuscular injections, trigger point injection, neural blockade, spinal injections and sympathetic nervous system blockade. Local anaesthetics, steroid injections, and neurolytic agents like phenol are used. Special training and expertise are required and for the anaesthesiologists, it is just an extension of their practice.

**The Role of Communication in Palliative Care**

Palliative care is about relief of suffering. The symptoms experienced by the patients are complex entities. It is through appropriate communication that one can assess how the patient is feeling and whether the interventions for symptom control are effective. In addition to assessing patient symptoms and the effects of therapy, the art of communication is an important part of therapy in its widest sense; occasionally it is the only constituent and requires greater thought and planning than a drug prescription but unfortunately administered in sub therapeutic doses. *Chronic pain is a complex biopsychosocial event* and with some training one can learn the skills for appropriate communication to be able to provide total care for the patient.

**Conclusion**

The anaesthesiologist has knowledge of the pathophysiology of pain and methods of providing pain relief. With an understanding of the multidimensional aspects of chronic pain, acquiring skills in invasive procedures, a knowledge of basics of palliative care including symptom control and good communication skills, the anaesthesiologist can play a big role in relieving pain and suffering and improving quality of life of patients and their family.
References


Palliative care is a crucial part of integrated, people-centred health services (IPCHS). Nothing is more people-centred than relieving their suffering, be it physical, psychological, social, or spiritual. Thus, whether the cause of suffering is cancer or major organ failure, drug-resistant tuberculosis or severe burns, end-stage chronic illness or acute trauma, extreme birth prematurity or extreme frailty of old age, palliative care may be needed and integrated at all levels of care. Thus, whether the cause of suffering is cardiovascular disease, cancer, major organ failure, drug-resistant tuberculosis, severe burns, end-stage chronic illness, acute trauma, extreme birth prematurity or extreme frailty of old age, palliative care may be needed and has to be available at all levels of care. The BC Palliative Care Drug Plan covers laxatives written on a prescription for eligible patients. For patients with opioid-induced constipation, after a trial of first-line recommended stimulant laxatives and osmotic laxatives, methylnaltrexone (or nalaxegol) may be helpful. Cancer, GI malignancy, GI ulcer, Ogilvie’s syndrome and concomitant use of certain medications (e.g., NSAIDs, steroids and bevacizumab) may increase the risk of GI perforation in patients receiving methylnaltrexone. Pain and symptom control challenges are common in palliative care, and the search for other therapeutic strategies is ongoing. Unfortunately, patients and their caregivers are receiving little information or support from healthcare providers regarding the increasingly popular cannabinoid-based medicines (CBM). Clinicians, meanwhile, feel understandably perplexed by the discrepancy between the available evidence and the rapid interest in which patients and their families have demonstrated for CBM. There is an urgent need to address the many challenges that are delaying the appropriate integrati