

**Open Access** 

# General principles of cancer pain management

# Evangelia Michail Michailidou<sup>1,2,3,4\*</sup>

<sup>1</sup>Consultant Anesthesiologist-Intensivist, Intensive Medicine Department, Hippokration General Hospital, Greece <sup>2</sup>Masters Degree, International Medicine-Health Crisis Management, Greece <sup>3</sup>Member of Health Response team to Crisis Situations of G.H.T.Hippokration <sup>4</sup>Medical doctor volunteer (pain management) at Doctors of the World Greece

Cancer pain is due either to the disease itself or to the treatment given to the patient (chemotherapy, radiotherapy, hormone therapy). Cancer causes pain either by infiltrating or pressing on organs, bones, nerve elements or other structures of the body as it spreads.

At the same time, chemotherapy is blamed for peripheral neuropathy and muscle pain, radiotherapy for osteonecrosis, myelopathy, neuropathy, nerve plexus and metastatic fibrosis, and immunotherapy for muscle and joint pain. 30% of cancer patients suffer from pain during the diagnosis phase and 63-84% experience severe pain in more advanced stages of the disease. According to Cleeland et al., 69% of outpatients treated for their disease have outpatient pain resulting in moderate to poor quality of life and limited activity.

#### Paroxysmal cancer pain:

Paroxysmal pain is a transient exacerbation of cancer pain in the setting of persistent persistent pain, effectively controlled by systemic opioid intake. It is characterized by rapid onset (1-3 min, relatively short duration (average about 30 min), varying intensity (severe to unbearable), and frequency (1-4 times per day). Occurs at the end of the dose.

Occasional pain occurs under predicted conditions (movement, cough, chewing, swallowing, defecation). Spontaneous pain occurs suddenly regardless of activity. Possible causes are a spasm or dilation of the hollow viscera. Pain at the end of a dose is due to insufficient analgesic dosage or long intervals between doses. Paroxysmal pain occurs in 68% of patients. It is a negative prognostic point, leading to reduced physical activity, higher levels of stress-depression, less patient satisfaction, more hospital visits and more unscheduled doctor visits.

#### The causes of cancer pain:

The frequency of cancer pain depends on the focus and stage of the disease. Bone, pancreas and esophageal new treatments have the highest incidence of pain (>83%). They are followed by cancer of the lung, stomach, bile, prostate, ovaries, uterus and breast (73-81%). Less often (61-70%) cancers of the mouth, intestine, kidney, bladder and brain show painful symptoms. Finally, in 49-63% of lymphomas, leukemias and soft tissue sarcomas, cancer pain occurs.

Causes of cancer pain are the disease itself (60-70%), the treatments of the disease (20%), causes directly or indirectly related to the disease and its treatments (10%) as well as causes unrelated to the disease and its her treatments (10%)

## General principles of cancer pain management:

Pain treatment is an integral part of a multifaceted, holistic care plan and should be proportionate to the course of the disease. A key factor is the acceptance of the description made by the patient. It is necessary to carefully examine and take into account all the data (history, physical examination, laboratory tests). All factors should be evaluated: physical, psychological, social, cultural, spiritual. Periodic reassessment of the patient is also necessary, while each type of pain must be evaluated separately

## CHEMOTHERAPY PAIN SYNDROME:

Painful polyneuropathy/ aseptic necrosis of the head of the femur or arm/Arthralgia and myalgia after reducing the dose of steroids/Painful oral mucositis

# PAIN SYNDROME AFTER RADIATION TREATMENT:

Metastatic fibrosis of the humerus or lumbar spine/Metastatic myelopathy/Osteonecrosis/Oral mucositis, proctitis

\*Address for Correspondence: Evangelia Michail Michailidou, Consultant Anesthesiologist-Intensivist, Intensive Medicine Department, Hippokration General Hospital, Greece

**Copyright:** © 2021 Michailidou EM, This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received January 01, 2020; Accepted January 22, 2020; Published February 27, 2020

#### PAIN AFTER SURGERY ONCOLOGY:

Pain after thoracotomy/Pain after mastectomy/Pain after cervical surgery to exclude tumor (neck)/Stump pain after amputation

Therapeutic options available include treatment of the underlying disease, pharmacological approach, invasive approach (anesthesiology, neurosurgery), non-pharmacological-non-invasive approach (acupuncture, TENS, physiotherapy, psychotherapy, etc.), palliative care).

### Medicines:

Simple analgesics such as paracetamol and anti-inflammatory/Mild opioids (tramadol, codeine)/Strong opioids (morphine, fentanyl, methadone)/Antiepileptics/Antidepressants/Corticosteroids/Skin patches (capsaicin,lidocaine)

The choice of medication is made depending on the type of pain, the intensity and the side effects that occur. In most cases a combination of drugs from different categories is needed. It is necessary to increase the doses slowly and observe the result, for this it is necessary the frequent communication between the therapist and the patient.

#### INTERVENTIONAL TECHNIQUES:

Continuous nerve block with local anesthetic Neurolysis with alcohol or phenol Radiofrequency neurolysis of nerves, sympathetic ganglia and plexuses (visceral nerve neurolysis, upper abdominal mesh neurolysis, Impar ganglion neurolysis, etc.)

Application of pulsed or classical radio frequency in the ganglion of the posterior spinal root (treatment of rhizitis etc) Continuous epidural pumps injection of active drugs through an external catheter. (Life expectancy about 4-6 weeks) Continuous epidural pump injection of active drugs through implanted subcutaneous, catheter and port. (Life expectancy up to three months) Continuous subarachnoid infusion of active drugs fully implanted pump and catheter system. (Life expectancy over three months. Invasive techniques are chosen depending on the type and location of the pain and it is correct to apply them before using strong opioids in an effort to avoid and / or limit their dose.

When the pain is resistant to treatment or the patient cannot tolerate the side effects of drugs then techniques are applied that aim to administer opioids and / or other active drugs from the central nervous system. The choice of route and method of administration depends on the patient's survival expectancy.

The cause of inadequate treatment of cancer pain lies in the fact that not properly evaluated, diagnosed the type of pain and the management of the painful condition by a specialized pain clinic. Cancer patients usually arrive at pain clinics as they are now exhausted psychologically, physically and financially wondering why no one informed them about their ability and right to receive specialized pain treatment.

It is a complex pain, which can be analgesic, neuropathic or psychogenic. Only 20% of patients experience some type of pain. They usually present two or more species at the same time. Cancer pain can be acute, chronic or chronic with exacerbations (the most common form). Unresolved cancer pain, reduces quality of life, functionality, activity, appetite, productivity and willingness to continue treatment. It also increases the costs of the patient and his family, the cost of hospitalization, the number of hospital admissions, the duration of hospitalization, misery and depression.

**How to cite this article:** Michailidou , Evangelia Michail. "General principles of cancer pain management" Integr Oncol 9:2(2021).