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Narcotic Abuse and it is Management in Palliative Care: A Literature Review

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Abstract

Narcotics have been used for the elimination of moderate and severe degrees of pain. The recent development in the era of cancer therapy has increased the expectancy of life of cancer patients and therefore the use of narcotics to decrease the perception of pain among those patients in palliative care units. For that, ee performed an extensive literature search of the Medline, Cochrane, and EMBASE databases on 15 November 2019 using the medical subject headings (MeSH) (abuse, narcotic [MeSH Terms] AND palliative care [MeSH Terms]. Papers discussing narcotic abuse in palliative care were screened for relevant information. There were no limits on date, language, age of participants or publication type. Management of narcotic abuse comprises a major issue among palliative care physicians in particular high-risk patients. Stoppage of treatment whenever available, usage of alternative approaches and application of psychological support are considered the main compartments in narcotic abuse management in palliative care units.

Keywords: *Narcotics; Opioids; Abuse; Palliative Care*

Introduction

The "opioid crisis" or "opioid epidemic" has increased lately to the degree that it was declared as a public health emergency by the United States (US) government [1]. Devastating outcomes for many patients have been caused by the liberal prescription of opioids for different chronic pain of a non-cancer origin [2]. Moreover, the number of patients, diagnosed with early-stage non-curable tumors, is widely increasing; hence, expanding the need for adequate pain management [3]. Furthermore, palliative care specialists are expecting a higher lifespan for cancer patients, especially with the current era of emerging treatment such as immunotherapy [4]. Accordingly, the need for more pain control medication with being steadily increasing with the associated urge to controlling measures for their use.

In the same context, patients with advanced pain-associated (moderate to severe) diseases have access to opioid use in case of moderate to severe pain; however, many physicians have a deficient knowledge regarding the optimal methodology of pain management dilemma [5,6]. Noteworthy, the US has no change in overall pain reports by different patients, although opioid sales have quadrupled lately [7]. Another problem is the liberal opioid prescription by some physicians; conflicting many harms especially in patients with a higher risk of addiction or those with a higher life expectancy [1,2]. For instance, 18.7% of the Canadian patients are receiving morphine in doses higher than 400 mg for non-cancer pain and in a non-palliative care setting [8]. In parallel, in US, a high dose of morphine (mean = 324.9 mg/day) was prescribed to 8.4% of non-cancer patients, as reported by a cohort study of non-palliative care patients [9]. The same study has shown a prescription of benzodiazepines (non-sustained effect) in 30% of the patients; hence, higher side effects, diversion, and deaths have been reported [9].

Therefore, palliative care specialists and cancer physicians find themselves in a dilemma of swinging from opiophobia to opiophilia [10]. On the one hand, there is an increasing demand for strong opioids to help patients with pain conditions [10]. On the other hand, there are many potential harms of these treatments, especially for patients requiring treatment for a long time [10]. For that, we have conducted the current study to give a concise overview of the narcotic abuse and possible management of this issue.

Methods

We performed an extensive literature search of the Medline, Cochrane, and EMBASE databases on 15 November 2019 using the medical subject headings (MeSH) (abuse, narcotic [MeSH Terms] AND palliative care [MeSH Terms]. Papers discussing narcotic abuse in palliative care were screened for relevant information. There were no limits on date, language, age of participants or publication type.

Narcotics use in cancer patients

Chronic pain is one of the most complaints in cancer patients, which is usually a negative prognostic indicator for survival in cancer patients [11,12]. Thus, narcotics are a very essential component of cancer treatment, especially in non-curable cancers [13]. However, many serious side effects are associated with narcotics use in terminally ill patients [14]. As mentioned before, physicians are in the midst of a dilemma to use or not to use narcotics in pain management [10]. Furthermore, patients and their relatives may also feel concerned about using narcotics in cancer patients for the same reasons [15]. Accordingly, all of these factors and the fear of stigma may have a significant effect on giving the optimal medical care [16].

Acutely ill patients and terminally ill patients have a lower risk of developing drug abuse on treating them with narcotics for pain management [15]. Nevertheless, long term use in a palliative care setting, patients with chronic pain conditions, and those with a history of drug abuse have a much higher risk of drug abuse [15,17]. The risk of drug abuse in cancer patients ranges between 8% and 17% among those receiving opioids for management of chronic pain [18]. To get rid of these prejudiced beliefs, proper education and training of physicians involved in pain management is a must for better practice [19]. Table 1 summarizes common pain syndromes among cancer patients that would require a systemic narcotic treatment [20].

Narcotics Required Frequently	Narcotics Required Infrequently
Chronic pain due to advanced cancer	Peripheral neuropathy
Acute pain due to a cancer complication (e.g. pathologic fracture, bowel obstruction)	Chronic nonmalignant pain
	Acute muscular-skeletal pain syndromes (e.g. low back pain)
Postoperative pain	Minor dental/diagnostic procedures
Radiation-chemotherapy-induced mucositis	

Table 1: *Pain syndromes in patients with cancer.*

Management of opioid abuse in palliative care

Diagnosis of narcotic abuse in palliative care and identifying patients at risk

The cornerstone in the management of narcotic abuse passes through the appropriate diagnosis and the identifying of populations at risk for narcotic abuse which will affect the treatment strategy. In 2005, Webster., *et al.* have developed the opioid risk assessment tool (ORT) for determining patients at risk of opioid abuse in palliative care units [21]. The tool consists of 5 items: family history of substance abuse, personal history of substance abuse, history of preadolescent of sexual abuse, age and psychological diseases (depression, attention deficient disorder, obsessive-compulsive disorder, bipolar disorder, and schizophrenia). A score was given to each of the previous items and the risk of opioid abuse was stratified according to the following, low-risk patients (0 - 3) points, moderate-risk patients (4 - 7) points, and high-risk patients (≥ 8) points. Moreover, Bruera., *et al.* questionnaire may be useful in determining populations at risk of

opioid abusing. The questionnaire comprises of some behavioral disorders that may be associated with narcotic abusers such as frequent visit to emergency rooms for opioid prescription, increasing the dose without returning to the physician, consultation with different physicians seeking for more opioids, request for specific opioids, reporting of stolen opioids, requesting opioids from non-medical centers or stealing and discrepancy in opioid pills count [22]. Furthermore, urine analysis may be helpful to diagnose narcotic abuse [23]. Ketamine, heroin, and methamphetamine were the most commonly extracted drugs from illicit drug seizures through urine analysis and this indicates the importance of urine analysis in detecting narcotic abusers [24].

Prevention of narcotic abuse

Prevention of narcotic abuse is essential to decrease the prevalence among their users. Education of the patient about the dangerous consequences of narcotic abuse in palliative care units such as decreasing the compliance of the treatment of the original disease, increase the risk of overdosing, drug-drug interaction, psychological abnormalities and death constitute the key issue for limiting the phenomenon of drug abuse [25]. Moreover, patients who are taking narcotics for a fatal disease such as cancers should inform the physician if the patient currently receives psychiatric drugs to prevent drug-drug interactions, avoid taking large doses of narcotics prescribed by different physicians, proper disposal of unnecessary or out of date medications to avoid usage of drugs by other patients in palliative care settings and keeping narcotics in a safe and secure place [26]. In addition, frequent monitoring of opioid levels in relation to the degree of pain is mandated for the detection and prevention of narcotics addiction.

Stop treatment whenever possible

Prescription of narcotics in palliative care settings was mostly indicated for severe pain such as cancer pain [27]. The preliminary report of Kwon., *et al.* demonstrated that 63% and 33% of patients continued opioid therapy after 3 and 6 months of completion of radiotherapy doses required for head and neck cancers [28]. However, after cancer treatment and the associated elimination of pain, the stoppage of opioids is mandated to avoid drug abuse and it is negative consequences.

Monitoring and psycho-social support

Despite that medical treatment comprises a major role in the treatment of narcotics abuse, psychological and social support exhibit an adjuvant therapy for eliminating the symptoms of drug withdrawal. Patients who receive methadone for the treatment of their opioid withdrawal were more compliance with treatment when they received social support [29]. In addition, the meta-analysis of Powers., *et al.* reported that married or patients who have companions had better treatment outcomes from alcohol or drug abuse compared to individual-based treatment [30]. Furthermore, Best., *et al.* revealed that support from friends, support from a partner and having a job were important factors for sustaining abstinence [31].

Consider alternative interventions

Although the efficacy of opioid analgesics in diminishing pain sensation in patients with chronic illness, the dependency of opioids should be considered for decreasing their prescription unless indicated. The shift to alternative treatment when applicable may result in the reduction of opioid complications such as dependence. To our knowledge, several non-opioids such as cyclooxygenase inhibitors, intra-venous local anesthetic and anti-depressants can replace opioid treatment [32]. Pain in terminally ill patients usually originates from the pathological tissue damage; however psychological origin may play a role in pain perception. Patients exposed to rational-emotive behavior therapy had less pain perception compared to the control group, supporting the fact that eliminating the psychological origin of pain may reduce pain perception and limit the usage of opioids [33].

Conclusion

Narcotic abuse comprises a major health issue in palliative care units. More care should be applied towards narcotic abusers in particular high-risk patients.

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Conflicts of Interest

No conflicts related to this work.

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