

Clinical audit to measure compliance with co-prescription of laxative with Opioids for patients undergoing palliative care treatment: Results of process analysis

Cancer diagnosis is usually associated with different forms of pain and the prevalence of pain is even higher in patients receiving palliative care. Opioids, often-in escalating doses are the most commonly prescribed analgesia to alleviate cancer pain¹ and are indeed most effective class of medicines. However, this effectiveness comes with side effects and opioids induced constipation (OIC) is one of that prevalent side effect, which distresses patients' quality of life. Literature has identified that approximately 60 to 90% of patients receiving opioids suffer from constipation.² The mechanism through which opioids causes constipation is multifaceted and the most common pathophysiological mechanism is decreasing gastric emptying by stimulating certain receptors. Constipation may lead to the other GI-related symptoms, which include nausea, vomiting anorexia and bloating.³ Nevertheless, Cancer patients usually suffer from weight loss and OIC along with other GI-related symptoms subsequently worsen the patient's condition. The most novel and practical recommendation to avoid constipation associated with opioids is routine prescription of laxative.¹ Considering these facts from literature, the palliative medicine department at Shaukat Khanum Memorial Cancer Hospital and Research Center (SKMCH&RC) initially formulated a clinical guideline to ensure that all the patient receiving opioids should be prescribed laxative. Later on, an audit was performed to see whether the patients who were prescribed opioid therapy were given laxative treatment at the same time or not and if not given, the reason of nor prescribing was documented or not.

Methodology

All those patients who were on palliative care treatment, and were receiving opioids through outdoor clinics were included in the study. A retrospective data collection from Hospital Information System (HIS) was done over the periods of five months from January to May 2021. A total of N (298) patients were made part of the audit analysis.

Results

The results of this study showed that N=270 patients received laxative along with opioids and the compliance rate was 90.6%. In the other 28(9.4%) cases, laxative was not prescribed and the reasons for not prescribing was documented in the HIS. Some common reasons for not prescribing the medicines were continent bowel, loose stools and on patients request. The non-compliance ratio was only 3.3% where neither laxative was prescribe nor the reason for not prescribing was mentioned by the physicians. The details of the audit along with frequency of compliance is given in the Table 1.

Discussion

The results of the above audit showed that the compliance with laxative prescription along with opioids is quite convincing. Up to 90.6% of the patients were given laxative; senna along with

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Irum Ghafoor,¹ Farhat Naz,² Hafiz Muhammad Usman,³ Harroon Hafeez⁴

¹FCPS Internal Medicine, Senior Instructor Palliative Care, Department of Internal Medicine Shaukat Khanum Memorial Cancer Hospital and Research Center (SKMH& RC), Pakistan

²Nurse Instructor Practitioner, Nursing Division, Shaukat Khanum Memorial Cancer Hospital and Research Center (SKMH& RC), Pakistan

³Clinical Pharmacist, Shaukat Khanum Memorial Cancer Hospital and Research Center (SKMH& RC), Pakistan

⁴Dip Pall Med (Cardiff), Consultant Physician Internal/Palliative Medicine, Associate Medical Director Shaukat Khanum Memorial Cancer Hospital and Research Center (SKMH& RC), Pakistan

Correspondence: Irum Ghafoor, FCPS Internal Medicine, Senior Instructor Palliative Care, Department of Internal Medicine Shaukat Khanum Memorial Cancer Hospital and Research Center (SKMH& RC), Email irum.ghafoor@skm.org.pk

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Table 1 Details of laxative prescription and reasons for not giving the laxative therapy for patients on opioids therapy

Drug prescription	Frequency	Percentage
Senna Prescribed	270	90.6%
Senna Not prescribed	28	9.4%
Reasons for not prescribing laxative		
Patients already on laxative therapy	8	2.7%
Patient with history of loose stool and continent bowel	8	2.7%
Other reasons	2	0.6%
Reason no documented for not prescribing laxative		
Reason not documented	10	3.3%

the morphine, which prevent patients from having the common adverse reaction to narcotics. Studies have shown that medication related adverse can lead to many complications and one of them is unplanned hospital admission. An observational study conducted in the Netherland identified that OIC was a major reason of unplanned

hospital admissions, which is a preventable side effect.⁵ Considering the situation of Pakistan where the availability hospital beds is quite challenging, and the patients access to treatment is also difficult. The physician should co- prescribe any form of laxative along with opioids. Another research study identified that if these side effects are not treated timely, this may result in cessations of treatment.⁶ Therefore the prescribing physician should be sensitive to patient's needs and suffering. A systemic review conducted by Ahmedzai, S. H., & Boland, J. (2010) stated that constipation occur among 52% of patients with malignancy and this figure goes up to 87% when patient are receiving opioids for advanced metastatic disease. The research study also identified different form of laxative therapy which include arachis oil enemas, bisacodyl, co-danthrusate/co-danthramer, docusate, glycerol suppositories, ispaghula husk, lactulose, liquid paraffin, macrogols plus electrolyte solutions, magnesium salts, methylcellulose, opioid antagonists, phosphate enemas, senna, sodium citrate micro-enema, sodium picosulfate which can be prescribed to the patient avoid any adverse side effects.⁷ However, the knowledge of the healthcare provider about different available forms of laxative drugs and their significance is also important. Many researches have also identified that physicians don't prescribe laxative until patient suffer from complications. A cross sectional study where Eighty-one pharmacists collected data from 460 opioid initiators and it was identified that 1 in four opioid prescribers did not disposed laxative because they didn't not consider it as important drug. The research also identified that quit many numbers of patient suffered from constipation due to non-sensitivity of the physician. Therefore, the primary responsibility lies on the physician and other healthcare provider to address this common non-compliance around opioid therapy.

Conclusion

Opioids are widely used drug to treat chronic pain, however, there are many adverse side effects associated with this category of drugs.⁴ The most common side effects are gastrointestinal in nature specifically constipation. Researches have proved that under treatment of OIC is commonly associated with the discontinuation of the therapy. This also causes anxiety among patients, increase the rates of re-admission

to the hospital and prolong patient's suffering. Routine use of laxative therapy along with other non- pharmacological intervention can prevent these side effects. Nonetheless, it is the accountability of the all the physicians and other medical staffs to ensure that patients and family members are adequately educated about the OIC management plan during their visit to the hospital. Such measures will not only enhance the quality of life of the chronically ill patients but will also reduce the burden on health care setting.

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Conflicts of interest

Authors declare that there is no conflicts of interest.

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