

Prophylactic anti-emetic use to counter opioid adverse effects in the emergency department: Is it doing more harm than good?

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Madam, Pain is a subjective and multifaceted issue in the ER that presents in both acute and chronic versions. Patients often present in the ER with complaints of pain and are assessed by physicians and hospital staff immediately for pain-relief medication. In recent studies it was proved that complaints of pain have an emerging high prevalence. In a study comprising of 1665 patients, 61.2% had pain mentioned and recorded on the chart, 34.1% did not have pain, and 4.7% were procedures. The Pain was a chief complaint for 52.2% of the visits¹.

The most common manner of treatment in the ER for pain management is the use of analgesic medicine, especially in the category of opioids. The most common parenteral opioids administered in trauma centres and emergency departments are meperidine, fentanyl, morphine, and hydromorphone. Although opioids serve a very integral and pivotal role in alleviating the pain in patients, it has certain adverse effects, including respiratory depression, drowsiness, pruritis, nausea and vomiting², of which nausea and vomiting tend to be the most recurrent and frequent concerns. Patients feel that the severity of these side effects is more important than controlling the pain itself. For this reason, physicians routinely prescribe anti-emetic prophylaxis along with opioid medication. Anti-emetic categories used to prevent these side effects include Serotonin receptor antagonists (Ondansetron), Dopamine receptor antagonists (Metoclopramide) and Neurokinin receptor antagonists (aprepitant)³. Conversely, these anti-emetics have drastic adverse effects including, constipation or diarrhoea, headache, fatigue, blurred vision and dry mouth. However, serotonin and neurokinin inhibitors' side effects of headaches and constipation are more pronounced⁴.

Recently, a study on 3785 individuals and after removing duplicate copies, 3157 were not aligned with the scope of

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the review, so they were removed during the preliminary screening stage. Eight articles were reviewed and three studies were selected for inclusion. This meta-analysis did not exhibit positive findings for anti-emetics having prophylactic effects on patients given opioid pain management. Hence, this analysis showed that antiemetic treatment with opioids did not affect the risk of nausea or vomiting⁵.

Conclusively, as a result of the above mentioned meta-analysis, it is imperative to understand that anti-emetics gives little benefit to the patient and do not alleviate side effects. Instead, they outweigh the analgesic benefits of giving opioids altogether, not just by causing discomfort but also by eliminating the cost-effectiveness of the medical treatment regimen.

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