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Research Article

**MANAGEMENT OF OPIOID INDUCED POSTOPERATIVE  
ILEUS: THE CURRENT SCENARIO**<sup>1</sup>Dr Hafsa Fayyaz, <sup>2</sup>Dr. Hussain Bilal Malik, <sup>3</sup>Dr Muhammad Umer Khalid<sup>1</sup>Sir Ganga Raam Hospital, <sup>2</sup>Medical officer, Bhu Kakargill District Sheikhpura, <sup>3</sup>Shiekh Zayed Hospital, Rahim Yar Khan.**Article Received:** August 2019**Accepted:** September 2019**Published:** October 2019**Abstract:**

*A surgical patient feels uneasiness due to persistent postoperative ileus. It enhance the hospital duration of the patients, again need to go to hospital, more expenses of cure and deaths in some cases. There exists no drug or treatment yet for its cure. The approach has to be multimodal. Some approaches like entreat feeds, vigorous ambulation, physiotherapy, use of austerely persistent surgical technique were applied together on patients who show better results. Opioid opponent can be utilized for the management which shows better results but this method is very expensive. The use of preoperative intravenous idocaine infusion in addition to other procedures of treatment was found hopeful.*

**Keywords:** *Opioid analgesics, ileus, colorectal surgery, postoperative, morphine, lidocaine, alvimopan, methylalntrexone, oliceridine.*

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**INTRODUCTION:**

After the surgeries of gastrointestinal tract, genitourinary tract etc the common issue observed in patients is the postoperative ileus. POI causes the uneasiness in the patients. Patients face the long duration of hospital stay, more expenses of treatment, deep vein thrombosis and additional infections from the hospitals. POI is the malfactorial article. The cause of the POI among patients is the bowel handing, removal of swelling arbitrator; unevenness of electrolyte, late enteral feeds etc. The recovery of the patients can be done by persistent surgical procedures, utilization of untimely enteral feeds, epidermal analgesia, improvement of ions unevenness untimely recruitment, and ambulation. None of these methods is effective individually. But if these are used together in patients they showed better results. [1] They patients who went laparoscopic showed better results with preoperative intravenous lidcaine infusion. The patients who were managed in the absence of idocaine showed bowel activity. USFDA permitted the acting opioid receptors. They act on opioid receptors efficiently which are present in the intestines. They do not provoke the innermost upshot. Two drugs have been used in this respect. These are alvimopan and methyl naltrexone. At the start of surgery opioid induced PI can be tackled. Other perfunctory and metabolic factors are necessary to tackle with the overturning mediators [2].

**LIDOCAINE, A PRMISING DRUG IN ILEUS:**

Lidocaine is an arrhythmic opponent drug. It can be worn in gastrointestinal cases productively. It has been noticed that less pain after the operation, initial revival of bowel occupation and abridged hospital stay was possible when intravenous concoction of lidcaine has been used as an infusion preoperatively. [3] The drugs which shows significantly better results are the 1.5 mg/kg at some stage in instruction, a continuation dose of 2 mg/kg intraoperatively and 1 mg/kg after surgery. Meta analysis was determined by Ventham and his coworker. They identified lidocain a multidimensional drug. It lessens the pain after surgery, reduced opiate usage, reduced nausea and vomiting. It as recover bowel function spontaneously. [4] Again the role of this drug in reducing the pain after surgery and early recovery of the patient was performed by Kranke. The consequences of this observation were shown in Cochrane systematic review. In this observation 45 experiments were performed in which 2802 patients were involved. They found normal or less role of lidocain in reducing the pain after operation. The role of lidocain in encouraging in untimely gastrointestinal mending, less duration of time in

clinics and opioid needs after operation. [5]

**THE PERIPHERALLY ACTING OPIOID ANTAGONISTS:**

Alvimopan is a drug used preoperatively after bowel reaction and anastomosis. It can be used orally. It plays its role as  $\mu$  receptor contender. It is permitted by US-FDA. It shows resemblance towards tangential opioid receptors. It cannot cross the boundary of blood and brain like naloxone. Therefore it shows no affect on  $\mu$  agonists like fontanel, morphine, remifentanil. [6] 12 doses of alvimopan were advised by FDA. 12 mg dose before operation orally consumed and 12 mg for seven days 2 times in a day. Until 2007 this medicine has also be used for the constipation management. If we use this drug in excessive amount it can cause serious issues like myocardial infarction. Due to this reason the use of drug for constipation was not permitted. It was awed to use only for the treatment of perioperative. Some other drugs like prokinetics were also found to reduce perioperative pain when used in regular basis. It was pointed out by Traut and his fellows. They concluded 6 experiments which show better results by using alvimopan before operation. [7]

The issue is with the security of alvimopan which can be saved by those clinics which are registered in EASE program after that drug can be secured by REMS f US-FDA. This is serious issue. The drugs which were procured were an expensive. [8] The use of drugs for pediatric surgical pertains were not allowed.

For the subcutaneous use the drug available was Methylnaltrexone. It acts as opioid receptor antagonist. It can be consumed by cancer patients at dose f 12 mg one time everyday or 0.15 mg one time every day in patients having weight fewer than 40 kg. It showed successful consequences. The treatment was carried out until patient is completely recovered by constipation. [9] Boundary of blood and brain is as not crossed by methylnaltrexone as like alvimopan. The pediatric patients suffered from opoid can be treated by taking 0.15 mg dose every day. [10] It is assumed as protected and successful drug by Siemens for the treatment of opioid tempted constipation.

**THE ONGING RESEARCH:**

Experiments and researches have been carried out in these days to recognize an opioid which gives systemic analgesia, having no adverse effects like constipation and reliance. B-arrestin-2 type of receptors gets recruited when we use  $\mu$ -agonist drug. B-arrestin-2 type causes the various side effects f opioid. [12] An idea which is still under

consideration is used to develop TRV130. Its chemical composition is  $\mu$ -receptor G protein pathway selective modulator. [13] Once it gets permission to use in clinics it can be used in opioid therapy because of its  $\beta$ -arrestin-2 inhibitory characteristics. [14]

### CONCLUSION:

Peripherally acting opioid receptors antagonists shows hopeful and flourishing consequences but they are very expensive. Due to its high costs it cannot be used on daily basis. So the other option is the lidocaine which is protected, less expensive and other required affects. It as has no side effects. Multimodal precautionary policies can be used. Multimodal postoperative analgesia, early enteral feeds, epidural analgesia and cautious, improvement of electrolyte unevenness, untimely immobilization and ambulation, fewer management of gut during operation by using a minimally persistent in addition to opioid contenders and lidocaine in elected patients can make easy untimely bowel motion, untimely liberation and an in general smaller expenses of management.

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