Comparative Study of Omeprazole and Cisapride V/s Conventional Preparation (Soap Water Enema) For Gynaecological Surgery

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Summary

This study was done as a prospective study in 50 test group and 50 control group. We have used Cisapride Omeprazole 3 days pre-operatively instead of soap water enema for pelvic surgery.

We have demonstrated that Intra operatively and post-operatively the incidence of GI complications/ morbidity was statistically and clinically far less in test group as compared to control group.

Incidence of post-operative nausea, vomiting and abdominal distension were less in test group & the most important parameter i.e., return of Bowel activity was very much earlier in test group.

Introduction

Soap water enema though effective and useful tool in pre-operative preparation for surgery, subjects the patients to a varying degree of physical and psychological distress. So there is a definite need to avoid this procedure if feasible and possible.

In such a scenario, cisapride and omeprazole regime is welcome, absolutely as it is patient friendly and also ensures optimal operating conditions during laparotomies.

Aims and objectives of Study

- To evaluate the protocol of omeprazole and cisapride in the routine preparation of gynaecological surgery v/s conventional preparation(Soap water enema)
- 2. To compare the effect of this protocol on the different parameters of Recovery and Anaesthesia in Gyn. Surgery and to implement this protocol in the routine preparation for Gyn. Surgery.

Material and Methods

1. 100 Patients posted for elective Gynaecological surgery at C.K.M. Hospital, Warangal were selected for this study.

2. Patients have been divided into 2 groups – Test Group/Control Group Comprising of 50 patients each.

Control Group

Protocol were prepared by conventional method by double Soap water enema twice (at bed time prior to surgery and on the day of surgery). No drugs are given in this group.

Test Group

+

Protocol was started 3 days prior to elective surgery.

Patients were given the following medication prior to surgery.

- a) Cap omeprazole 20 mg. Bd.
- b) Tab cisapride 10mg. Bd.
- c) Last dose of Omeprazole is given 4hrs prior to surgery (at 6a.m on the day of surgery)
- d) Last dose of cisapride should be preferably given 8-10 hrs. before surgery. (at bed time)
- e) No cisapride dose should be given just before surgery

A. Vivekanand et al

Patients were Observed and Monitored for the Following Parameters

- 1) Condition of the bowel during surgery.
- 2) Soiling of the operating table.
- 3) Nausea, Vomiting in the post-operative period.
- 4) Post-Operative abdominal distension.
- 5) Return of Bowel activity.

Special Note: Patients with a definitive pre-op. history of peptic ulcer and other organic diseases like migraine, HTN. motion sickness and reflux oesophagitis were excluded from this study.

Discussion

The present study evaluates the efficacy of omeprazole and cisapride together in comparison to soap water enema in the pre-op preparation of patients. Cisapride is a pro-kinetic drug which enhances the motility of the Bowel, reduces the size of the bowel and does not have any extra pyramidal side effects and can be given as a convenient Bid dosage. It is available as 10mg. tablets and as syrup/suspension in a strength of 1 mg./ml with or without MPS

Omeprazole is a proton pump inhibitor used to reduce Gastric acidity in the treatment of gastic and duodenal ulcer & ZE syndrome reflux oesophagitis, Hiatus hernia.

Cisapride if used alone can increase hunger in an already fasting patients for laparotomy and can convert occult peptic ulcer into manifest peptic ulcer. Concomitant use of omeprazole significantly eliminates this risk.

Cisapride if given just before surgery may increase the bowel motility as evidence by soiling of operating table. So it is avoided just before surgery.

Priming of patients with omeprazole reduces the resting acid levels in the stomach of patient fasting any-where from 6 to 12 hours prior to surgery and reduces the discomfort due to any hyper acidity.

It is observed by the results in foregoing charts that by adopting this new method it has given clinically & statistically significant results with regards to intraop and post-op parameters with respect to GI system.

The main benefit of this regime is that we can

cut short the traditional double S/W enema with its attendant complications and offer the patient a friendly regime which makes pelvic surgery more comfortable. The patient is ambulant more quickly and respiratory complications there by prevented.

We have not observed complications like paralytic ileus, intestinal obstruction and burst abdomen in the groups.

Observations

Table I

In the test group condition of the Bowel was very much favourable for conducting pelvic surgery. 25% of control group showed minimal Bowel distension which interefered with surgery and prolonged it.

	Test	Control
Condition of the	All Cases	25% of the
Bowel during	Bowel was	cases Minimal
Surgery	collapsed &	distension +
	Empty	

Table II

Soiling is more in control group which may influence the morbidity of the patient and also the asepsis of the theatre.

	Test	Control
Soiling of operating		
table	10%	20%

Table III

Post-op Nausea and vomiting in test group is less due to gastrokinetic drugs like cisapride which improves Bowel motility, tone of pyloric sphincter, enhances gastric emptying and prevents GE reflux.

	Test	Control
Post-operative		
Nausea, Vomiting	5%	15%

Table IV

Post op Nausea and vomiting in test group is less due to gastrokinetic drugs like cisapride which improves Bowel motility, tone of pyloric sphincter, enhances gastric emptying and prevents GE reflux

	Test	Control
Abdominal		
Distension in Post-	2%	10%
operative period		

Table V

Return of Bowel activity as observed by auscultation is very rapid in test group as cisapride is a prokinetic drug which also prevents electrolyte imbalance.

	Test	Control
Return of Bowel		
Activity	6 to 8 Hours	12 to 16 Hours

Conclusions

Regular use of cisapride omeprazole in the preoperative period with good patient compliance can and should replace the traditional double soap water enema because it is patient friendly and ensures practically negligible intra and post operative GI morbidity and early return of Bowel activity as evidenced by the patient taking oral fluids on the same night of surgery. Thorough review of literature has shown that studies have not been conducted in any other institute for comparing the efficacy and short comings of this regime.

But with our experience we can conclude that this regime can be incorporated in all institutes with very good results.

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