

Per-rectal Diclofenac Sodium an Effective Way of Postoperative Pain Relief

S N MALIK A AHMAD A AHAD W AHMED

Department of Surgery, K. E. Medical College/Mayo Hospital, Lahore

Correspondence to: Dr. Sohail Noor Malik, Senior Registrar Surgery

Reduction of post operative pain is important part of post operative care. Per rectal route for analgesia is becoming popular day by day. Sixty patients divided into two groups. One received 100mg diclofenac sodium in form of rectal suppository and other group received sos intramuscular analgesia post operatively. All patients included in this study had the operation where oral analgesia can be started after 6 hours postoperatively. In order to reduce postoperative pain and to avoid intravenous or intramuscular analgesia rectal diclofenac sodium is effective way of management.

Key Words: Rectal diclofenac sodium, postoperative pain.

Pain is a subjective experience usually due to an underlying organic lesion. It varies from person to person and within any given individual as a result of the interplay of biological, psychological and environmental factors. Reduction of postoperative pain is an important part of postoperative care and different methods are in use, to overcome this problem. Different routes are in use to administer these medication i.e., intramuscular, intravenous and perrectal. Rectal analgesia not only reduce pain but also avoids intravenous or intramuscular injection particularly in those patients where oral medication can be given after 6 hours, postoperative.

Patients and methods

Sixty patients were studied in a period of six months (January 2000 to June 2000). These were divided into two groups (A&B). Each group consists of 30 patients. In Group A there were 19 male and 11 females. Group B had 18 male and 12 female patients. Mean age for Group A was 37 years (range 18-59 years) and for Group B it was 32 years (range 21-47 years). All the patients of Group A were consented for per rectal analgesia and Group B received intramuscular analgesia on their demand. All those patients who were suffering from acid peptic disease were excluded from this study. All patients received general anaesthesia and all patients had the operation where oral feeding could be started 6 hours post operatively.

Different operation performed were as follows:

	Group A	Group B
Haemorrhoidectomy	10	09
Internal sphinceterotomy	06	03
I/D of abscess	10	12
Herniotomy and herniorrhaphy	04	06

Group A patients received rectal analgesia in the form of suppositories Diclofenac Sodium (Voren) 100mg. All patients were observed for 12 hours. All started oral fluids 6 hours postoperatively.

Results

In this comparative study only 3 patients out of 30 (Group A) asked for analgesia. Another 5 required analgesia (oral form) between 6-12 hours postoperatively. In Group B 22 out of 30 asked for analgesia within 6 hours and all other required oral analgesia in next 6 hours. None of the patient from Group A complained of any rectal discomfort apart from the patients who had anal or perianal surgery.

Discussion

Several methods has been instituted to reduce postoperative pain. Rectal route is now one of the effective methods for analgesia. Paracetamol is a mild analgesia. A higher plasma paracetamol concentration of 25mg/L is known to give satisfactory analgesia to 60% of children after tonsillectomy¹.

Rectal acetaminophen is often administered during operation to provide supplemental analgesia or antipyresis in children².

Tramadol has been shown to provide effective analgesia after both intramuscular and intravenous administration for the treatment of postoperative pain. The drug is available in formulations suitable for oral, rectal and parenteral administration³.

Sixty two patients undergoing total abdominal hysterectomy with or without salpingo-oophorectomy were randomly allocated to receive either 100mg rectally of diclofenac (n=31) or a placebo (n=31) at the end of the operation and 12 hourly for 72 hours postoperatively. The analgesic effect of the diclofenac was measured by a visual analogue pain score and morphine usage. Patients receiving Diclofenac showed a morphine requirement of 50% of the patients receiving placebo (P<0.0001). There was no statistical evidence of any reduction in incidence of nausea and vomiting with the use of diclofenac⁴.

In our comparative study, per rectal diclofenac sodium proven to be very effective.

Per-rectal Diclofenac Sodium an Effective Way of Postoperative Pain Relief

Conclusion

In order to reduce postoperative pain and to avoid intravenous or intramuscular analgesia in patients where we can start oral feeding after 6 hours postoperatively per rectal route for analgesia (Diclofenac sodium) is equally effective.

References

1. Anderson BG, Holford NH: Rectal paracetamol dosing regimens: determination by computer stimulation. *Paediatric Anaesthesia* 1997; 7(6): 451-5.

2. Bermingham PK, Tobin MJ: Twenty four hour pharmacokinetics of rectal acetaminophen in children: an old drug with new recommendations. *Anesthesiology* 1977 Aug; 87(2): 244-52.
3. Lehmann KA: Tramadol in acute pain. *Drugs* 1997; 53 Suppl 2: 25-33.
4. Scott RM, Jennings PN: Rectal diclofenac analgesia after abdominal hystrectomy. *Aust N-Z-J-Obstet-Gynae* 1999 Feb; 37(1): 112-4.