



SAFETY AND EFICACY OF TRAMADOL AND PENTAZOCIN IN CONTROL OF INTRA-OPERATIVE SHIVERING DURING EMERGENCY CESEARIAN SECTION.

Anaesthesiology

Dilip Kumar

Md Jawed Akhtar

Dr Pramod Kumar

Sinha*

*Corresponding Author

Gaurav Kumar

ABSTRACT

Background :- The present study was undertaken to compare the effect of 100 mg intramuscular tramadol to 30 mg intramuscular Pentazocine for control of intraoperative shivering during cesarean section. **Methods:** A total of 60 cases with 37-40 weeks pregnancy in labour undergoing emergency cesarean section without any foetal or maternal complications were selected. Out of them Inj. Tramadol was given to 30 cases (Group A) while rest of the 30 patients received pentazocin (Group B). **Results:-** In patients receiving tramadol 100mg intramuscular, shivering relief is early and prolonged, also associated with less maternal complications. In another group receiving pentazocin 30 mg intramuscular shivering is only slightly controlled. **Conclusion :-** Tramadol is more effective in controlling shivering intraoperatively, than Pentazocin, also is associated with less complications.

KEYWORDS

Tramadol, Pentazocin, Intraoperative, Shivering.

INTRODUCTION

Tramadol and pentazocin being both act on the opoid receptor, both act differently [1]. Tramadol is μ receptor agonist, while pentazocin agonist-antagonist acting on the κ (kappa) receptors [2]. Intraoperative pain and shivering is one of the common problems faced day-to-day during cesarean section leads to sympathetic nervous system activation of mother intraoperatively leading to many complications like high BP, Pulse rate and Cardiac output [3]. Present study is carried on the intra-operative shivering which is one of the most commonly seen during Cesarean section.

OBJECTIVE:-

The present study was conducted for safety and efficacy of Tramadol 100mg intramuscular and Pentazocin 30mg intramuscular for:-

- To compare the efficacy in controlling the intra-operative shivering during cesarean section.
- To compare the safety profile of Tramadol 100mg intramuscular and Pentazocin 30mg intramuscular intra-operatively during cesarean section.

MATERIAL AND METHODOLOGY

After obtaining ethical clearance from institutional ethical committee, the present study was conducted at Anugrah Narayan Magadh Medical College, Gaya among 60 selected patients of 37-40 weeks pregnancy who were posted for emergency cesarean section at the college itself, having an episode of intraoperative shivering. Patients were divided into two groups:-

- Group A:- Receiving Tramadol 100mg intramuscular.
Group B:- Receiving Pentazocin 30mg intramuscular.

Duration of drug action is noted from time of giving the drug up to the control of shivering. Incidence of shivering relieved is recorded in labour OT after giving the drug.

Inclusion Criteria:-

- 1) Patient willing to sign the written & informed consent
- 2) Patients belonging to American Society of anesthesiologists grade I and II
- 3) Patients with no history of allergy to this group will be selected for the study.

Exclusion Criteria:-

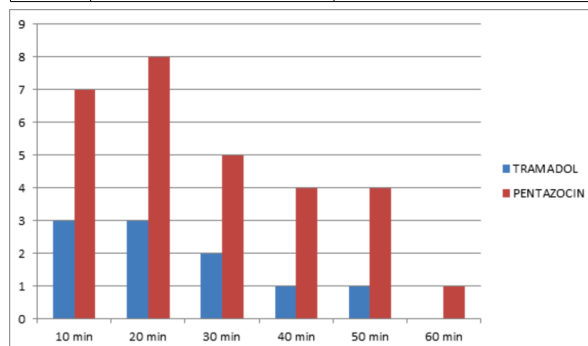
- 1) Patient's refusal from taking part in the study.
- 2) Patients having history of drug abuse in the past.
- 3) Patient who have history of allergic reactions in the past.

Efficacy And Safety Evaluation:-

Efficacy of the two drugs is measured intra-operatively in undergoing cesarean section having an episode of shivering intra-operatively

after giving the drug at 0, 10, 20 and 30, 40, 50 and 60 min. Side by side safety profile of the two were also noted in the same time and presented in a table form:-

INCIDENCE OF SHIVERING		
TIME	TRAMADOL (N=30)	PENTAZOCIN (N=30)
10 min	3	7
20 min	3	8
30 min	2	5
40 min	1	4
50 min	1	4
60 min	0	1



Graphical Presentation Of Intra-operative Shivering

RESULT AND CONCLUSION:-

To conclude that inj tramadol is better than inj pentazocin in controlling intraoperative shivering,

On the risk assessment tramadol has more potency of intraoperative vomiting and on the other hand pentazocin has more potency of respiratory depression, but these effects are almost negligible comparing to the benefit of tramadol in controlling intraoperative shivering.

Conflict of Interest : NONE

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4. Post graduate student, Department of Anaesthesiology at Anugrah Narayan Magadh Medical College, Gaya. Email:- dilipdmch@gmail.com

5. Post graduate student, Department of Anaesthesiology at Anugrah Narayan Magdh Medical College, Gaya. Email:- jawedskmc06@gmail.com
6. Associate Professor and H.O.D, Department of Anaesthesiology at Anugrah Narayan Magdh Medical College, Gaya. Email:- dr.pramodksinha@gmail.com
7. Post graduate student, Department of Anaesthesiology at Anugrah Narayan Magdh Medical College, Gaya. Email:- gauravraj.100@gmail.com