ORIGINAL ARTICLE

Efficacy of 100mgrectal Diclofenacin Females with Normal Vaginal Delivery

FARYAL AKHTAR[1], FARHANA HAIDER[2], NAZIR AHMED[3]
[1,2]Assistant Professor, Ibnesina Hospital and Research Institute, Multan
[3]Associate Professor, Ibnesina Hospital and Research Institute, Multan
Correspondence to: Dr. Faryal Akhtar, Cell: 03317126549, Email: fryal_akhtar@gmail.com

ABSTRACT

Objective: To compare the mean pain score with rectal diclofenac versus placebo in females undergoing vaginal delivery at term

Methodology: After approval from hospital ethical committee, 60 females fulfilling selection criteria were enrolled in the study from labor room. After taking informed consent their demographic profile i.e. name, age, gestational age, parity and BMI were noted. Then females underwent delivery by researcher herself. After delivery, all females were randomly divided in two groups by using lottery method. In group A, two 100mgdiclofenac was placed rectally after delivery. In group B, two 100mg placebo was placed rectally after delivery. Then females were shifted in post-delivery ward and followed-up there for 24 hours. After 24 hours, females were asked for presence of pain and VAS was used to assess the pain score.

Results: Comparison of mean pain score with Rectal Diclofenac versus Placebo in females undergoing vaginal delivery at term shows 2.47±0.51 in Group-A and 3.07±0.64 in Group-B, p value was 0.0002.

Conclusion: Mean pain score is significantly lower in rectal diclofenac group as compared to those without it.

Keywords: Term vaginal deliveries, rectal diclofenac, pain

INTRODUCTION

Post-natal pain after vaginal delivery is a common problem in females which disturbs the daily routine activities including various neonatal chores to be done by the reduces mother's comfort. It may cause unfriendly experience.[1]This postnatal vaginal pain arises because of contusion / lacerations in perineal region, inflammatory reaction, swelling of neighboring tissues.[2]

The factors involved in stimulating postnatal perineal pain include type of delivery (vaginal or instrumental), extent of perineal tears, nature of suture material and repair technique for perineal tear. In clinical practice, safe and effective management of pain of perineal tear and repair can be accomplished by using various treatment modalities including rectal analgesia.[3]

NSAIDS suppositories can be placed rectally or vaginally at 4-hour intervals to control postnatal pain.[4]The rectal method of placing diclofenac tablet has many benefits over other substitute methods. Rectal route may be rejected by many females instead of its well-known benefits. There is scarce literature available concerning the acceptance of rectal route of diclofenacsuppositories.[5]

Rationale of the study is to measure the mean pain score with rectal diclofenac versus placebo in females undergoing vaginal delivery at term. In routine, females who undergo vaginal delivery through episiotorny or had perineal repair complain of perineal pain. Such patients are given pain killer / analgesia. Literature review revealed that if diclofenac suppository is administered, it can reduce the perineal pain after 24 hours. But, there is no local evidence available in this regard and in some setups diclofenac is given after delivery of placenta and in some setups it is not practiced. So, I want to conduct this study to get local evidence and implement the results of this study in local population. So that in future, we can implement the use of rectal diclofenac prophylactically to cause less perinealpain after vaginal delivery. This may help us to achieve local evidence and can improve our practice.

METHODOLOGY

This randomized controlled trial was conducted at Nishter hospital, Multan. We enrolled a total of 90 cases (45 in two equal groups). The age of participant was between 18-40 years with term pregnancy undergoing normal vaginal delivery and episiotomy done in all these cases. All those cases required for manual removal of placenta, instrumental deliveries, PPH, multiple gestation and high risk cases i.e. diabetics and hypertensive were excluded from our trial. Randomization was done and two equal groups A&B were generated. Group A cases were given 100mgdiclofenac which was placed rectally soon after the delivery is done. Whereas, in Group-B cases, no diclofenac was placed, then all females were shifted in post-delivery ward and followed-upto24 hours. After 24 hours, females were asked for presence of pain and VAS was used to assess the pain score. The data was analyzed by using SPSS version 21. Independent sample test was used to record any significant difference between the two groups with regards to pain.

RESULTS

Age distribution showing that most of the cases in both groups were between 18-30 years of age, as showing in Fig. 1.

Comparison of mean pain score with Rectal Diclofenac versus Placebo in females undergoing vaginal delivery at term shows 2.29±0.53 in Group-A and 3.24±0.77 in Group-B, p value was <0.05. (Table No. 1)

Table 1: Comparison of Pain on VAS (n=90)

	Group-A(n=45)		Group-B(n=45)	
Pain score	Mean	SD	Mean	SD
	2.29	0.53	3.24	0.77

P value: 0.0001

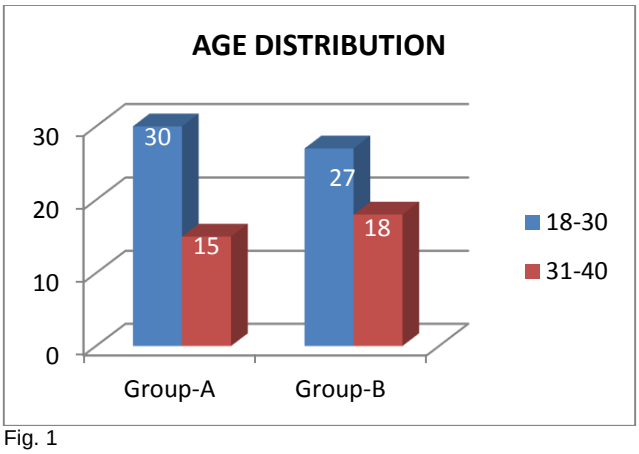

Fig. 1

DISCUSSION

This study was to measure the mean pain score with rectal diclofenac versus placebo in females undergoing vaginal delivery at term. In routine, females who undergo vaginal delivery through episiotorny or had perineal repair complain of perineal pain. Such patients are given pain killer / analgesia. Literature review revealed that if diclofenac suppository is administered, it can reduce the perineal pain after 24 hours. But, there is no local evidence available in this regard and in some setups diclofenac is given after delivery of placenta and in some setups it is not practiced. So, we wanted to conduct this study to get local evidence and implement the results of this study in local population. However, in future, we can implement the use of rectal diclofenac prophylactically to cause less perineal pain after vaginal delivery. This will be helpful for us to achieve local evidence and can improve our practice.

In our study, comparison of mean pain score with Rectal Diclofenac versus Placebo in females undergoing vaginal delivery at term shows 2.29±0.53 in Group-A and 3.24±0.77 in Group-B, p value was 0.0001.

One randomized trial has reported that mean pain score i.e. 2.8±0.3 with diclofenac while 3.9±0.3 with placebo after normal vaginal delivery at term. The difference was significant (P=0.01).[6]These findings support our results.

Another study also showed mean pain score of 0.25±0.11 with diclofenac while 0.45±0.15 with placebo after normal vaginal delivery at term. The difference was significant (P<0.001).[7]The only difference with the data is pain score is less than ours, however, significant lower pain was recorded in diclofenac group was the same.

Another study[8] found that the median pain score was significantly reduced by the use of diclofenac suppositories at 12 and 24 hours after administration compared to control group.

Another study[9] assessed the effectiveness of rectal analgesic suppository and oral analgesia in management of post episiotomy pain among primipara women, and to compare the efficacy of rectal suppository versus oral analgesia and found that rectal analgesic suppository was effective for longer time than oral analgesia.

Zahra Rezaei and others[10] compared the prophylactic efficacy of a diclofenac suppository and an indomethacin suppository on decreasing post-episiotomy painand revealed that diclofenac was more effective than the indomethacin (4th hour).Diclofenac suppository is recommended at 4-hour intervals for all patients, without internal disorders, to decrease episiotomy pain.

Considering the above results and supportive studies, the hypothesis of our study “There is a difference in the mean pain score with rectal diclofenac versus placebo in females undergoing normal vaginal delivery at term” is justified.

CONCLUSION

We concluded that the mean pain score is significantly lower in cases with rectal diclofenac when compared with those with placebo in females undergoing vaginal delivery at term.

REFERENCES

1. Farajkhoda T, Bokaie M, Rashidmanafi A. The efficacy of rectal diclofenac on pain after vaginal delivery. Int J Reprod Biomed 2011;9(SUPPL 2):59-60.
2. Naz S, Memon NY, Sattar A, Baloch R. Diclofenac rectal suppository: an effective modality for perineal pain. JPMA The Journal of the Pakistan Medical Association 2016;66(8):1005.
3. Shah F, Syed 5, Bano N, Chaudhri R. Rectal versus oral analgesia for perineal pain relief after childbirth. J Rawalpindi Med Coll 2011;15:56-8.
4. Rezaei Z, Haghighi Z, Haeri G, Hekmatdoust A. A comparative study on relieving post-episiotomy pain with diclofenac and indomethacin suppositories or placebo. Journal of Obstetrics and Gynaecology 2014;34(4):293-6.
5. Jacob AM, Resmy CR, Ajayan PV. Acceptance of an analgesic suppository for post-operative analgesia in caesarean section. J Evol Med Dent Sci 2016;5(94):6915-8.
6. Dodd JM, Hedayati H, Pearce E, Hotharn N, Crowther CA. Rectal analgesia for the relief of perineal pain after childbirth: a randomised controlled trial of diclofenac suppositories. BJOG: an international journal of obstetrics & gynaecology 2004;111(10):1059-64.
7. Dasanayake D. A randomized controlled trial of rectal analgesia diclofenac sodium for relief of perineal pain following child birth. Sri Lanka Journal of Obstetrics and Gynaecology 2014;36(1).
8. Achariyapota V, Titapant V. Relieving perineal pain after perineorrhaphy by diclofenac rectal suppositories: a randomized double blinded placebo controlled trial. J Med Assoc Thai 2008;91:799-804.
9. Varghese, Sandhya & Rani, Seema&Rahman, Jahanara& Khan, Mikki. A Quasi Experimental Study to Assess the Effectiveness of Rectal Analgesic Suppository versus Oral Analgesia in the Management of Post Episiotomy Pain among Primipara Women in a Selected Hospital of New Delhi. International Journal Of Applied Research and Studies 2017;6:
10. Rezaei, Zahra & Haghighi, Zahra & Haeri, Ghazal & Hekmatdoust, A. A comparative study on relieving post-episiotomy pain with diclofenac and indomethacin suppositories or placebo. Journal of obstetrics and gynaecology the journal of the Institute of Obstetrics and Gynaecology 2014;34:293-6.