EFFICACY OF INTRACERVICAL BLOCK IN CERVICAL DILATATION AND UTERINE INTERVENTION

Roeda Shams[1], Abida Nasreen[1], Sarwat Noreen[2], Shahida Rasheed[1]

ABSTRACT

Objectives: To assess efficacy of intracervical block in management of pain in cervical dilatation and uterine intervention.

Minor gynecological procedures like suction curettage, dilatation curettage, hysteroscopy and hysterosalpingography are frequent occurrence of almost all Obstetrics and Gynecology units. All these procedures are painful and requires some form of anesthesia. Mostly G/A or paracervical blocks are preferred. General anesthesia is expensive, needs expertise, long hospital stays and associated with drugs complications. Paracervical block is technically difficult and its efficacy is still controversial. We selected intracervical block because it is easier and simpler to assess its efficacy in pain management as an alternative to general anesthesia

Results: Total 60 patients were recruited in the study. 72% of patients were <30 years of age. 38(63.3%) patients had D&C, 19(31.7%) had suction curretage,2(3.3%) underwent difficult cannulation for hysterosalpingography. 43(72%) patient had good results with no pain .12(20%) patients had satisfactory pain relief with mild discomfort and in 5(8%) patients it failed and procedure performed under G/A. No drug or procedure related complications were observed in any patient

Conclusion: Intracervical block is effective,safe and simple for pain management in cervical dilatation and uterine intervention.

Key words: intracervical block, pain, cervical dilatation, HSG.

INTRODUCTION

Abnormal uterine bleeding, miscarriage, subfertility are most common and frequent presentation in obstetrics and gynecology outpatient department[1].The management of these conditions may requires some intervention in form of suction evacuation,diltation and curettage(D&C),hysterosalpingography(HSG) and hysteroscopy.

All the above mentioned minor gynecological procedure require cervical dilatation and uterine intervention which is associated with pain due to stretching of vagina, cervix and uterus[2].pain can be managed by using general anesthesia, regional anesthesia and or intravenous sedation

Majority of these minor procedures are carried out under general anesthesia (G/A), which is expensive, requires trained anesthetist, long hospital stay, associated with intra and post-operative complications [3] and many patients might not be fit for it because of co morbidity.

Regional anesthesia is simpler, safer, time and cost effective than general anesthesia in management of pain in minor gynecological procedures.[4,5] patient is awake and can communicate with operator for any problem and can recover without nausea, headache and drowsiness. Local/regional anesthesia may be in form of intra cervical (ICB) or para cervical block (PCB) which includes infiltration of cervix with local anesthetic resulting in cervical numbness[5].intracervical block is technically much easy and simple than paracervical.

The purpose of this study is as suction curettage, Dilatation and curettage are frequent procedure and mostly carried out under G/A. Many patients due to time and financial constraints either delays or carry out these procedure at low resource center at cost of pain. Many centers usually use paracervical block but we selected intracervical as it is easier to perform in comparison to para cervical and also efficacy of later is not yet proved[4], to observe the efficacy and safety in management of pain as an alternative to general anesthesia.

MATERIAL AND METHOD

This is a prospective observational study carried out in OBGY ward of Rehman medical institute over period of six months from July 2016 to Dec 2016. All patients with missed miscarriage less than 12 weeks, incomplete miscarriage, patients requiring trans cervical endometrial biopsy and few cases of infertility with difficult cannulation for hysterosalpingography (HSG) were included in study.. Patients with severe hypertension, cardiac disease and known allergy to lignocaine were excluded from study. Written informed consent was taken from all patients. Patients were called in morning with 8 hour empty stomach. Cervix was primed with 800

1 Department of Gynecology Rehman Medical Complex
2 Department of Gynecology BKMC Mardan

Address for correspondence:
Dr. Roeda Shams
Department of Gynecology Rehman Medical Complex
E-mail: roeda.shams@rmi.edu.pk
Cell no: 03149351003

ug of misoprostol at least 2 hours before procedure. Intravenous line (I/V) with 18g cannula was maintained. Half an hour prior to procedure vagina was packed with xylocaine-soaked swab to reduce pain of vaginal retractor and were given inj Tramadol (50mg/ml) intra muscular (I/M). About 10ml of 1% xylocaine using 10 cc syringe was injected at 2 ,6 and 10 o'clock position (fig-2)in cervix at depth of 1.5cm after check aspiration, to avoid intravenous injection and procedure carried out after 5 mints.. Patient pain was perceived using 0-10 numeric pain rating scale (illus-1). patients who, still find it severely painful general anesthesia was considered. Patients were kept for one hour under observation post procedure and discharged home after bladder emptying on oral analgesics. A total of 60 patients were recruited in this study. Data was collected in terms of age, parity, procedure performed, pain rating, need for supplementary G/anesthesia or sedation and analyzed using SPSS 16. (0-10 numeric pain rating scale.0=no pain, 1-3mild, 4-6 moderate and 7-10 severe (fig.1)

RESULTS

Total 60 patients were recruited in the study .72% of patients were <30 years of age.6 (10%) patients were nulliparous while rest were multiparous (table.1).38(63.3%) patients had D&C, 19(31.7%) had evacuation and curettage, 2(3.3%) underwent difficult cannulation for hysterosalpingography and in one patient lost IUCD was removed from uterine cavity. (Tab.2)

43(72%) patient had good results with no pain, 12(20%) patients had satisfactory pain relief with mild discomfort and were perfectly cooperative throughout the procedure ,where as in 5(8%) patients it failed and procedure performed under G/A.None of the patient were in category of moderate pain.(Tab 3)

5 patients refused I/M tramadol, but still only ICB was enough to keep patient pain free during whole procedure. In one patient intra cervical block was possible only on one site due to fibrosis so, G/A was given. 4 patients in spite of intracervical block had severe pain so, G/A was considered alternatively. No drug or procedure related complications were observed in any patient. E&C(evacuation and curratage), D&C(dilatation and curratage),HSG(hysterosalpingography)

DISCUSSION

Minor gynecological procedure like suction curettage and diagnostic dilatation and curettage are frequent procedure carried out in Operation Theater

Table 1: Patient's Demographic Data

		No of patients	%ge
Age	<30	43	72%
	>30	17	28%
parity	0	6	10%
	1-2	21	35%
	>3	33	55%

Table 2: Procedure performed under ICB

Indication	E&C	D&C	HSG	Removal of Lost Iucd	Total
No of patients	19	38	2	1	60
%age	31.7%	63.3%	3.3%	1.7%	100%

Table 3: Pain scale in our patients

PAIN SCALE	NO PAIN (0)	MILD PAIN (1-3)	MODERATE PAIN (4-6)	SEVERE PAIN (7-10)	TOTAL
No Of Patients	43	12	none	5	60
%AGE	72 %	20 %	0%	8 %	100%

Table 4: Alternative pain mangement

	I/M TRAMADOL NOT GIVEN	INTRACERVICAL BLOCK NOT POSSIBLE	G/A GIVEN
No of patient	5	1	5 (8%)

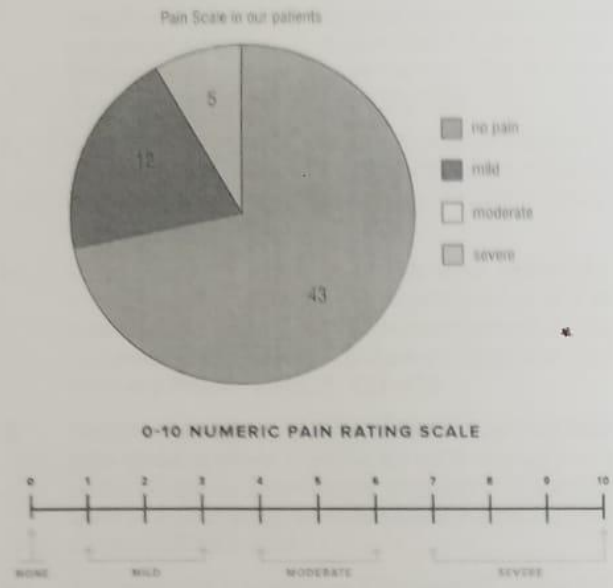

Fig 1:

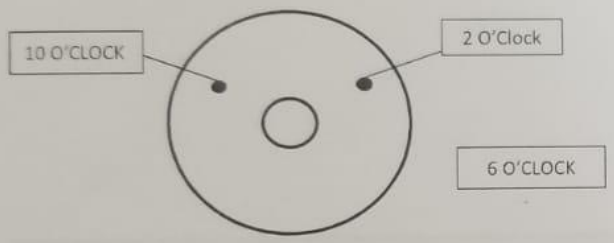

Fig 2: Intracervical block position

under general anesthesia of almost all essential obstetric and gynecological units. Many patients refuse or delay the procedure because of fear of complication related to general anesthesia and more so because of time and financial constraints. We conducted this study to observe if intracervical block is effective and safe in managing pain and can be considered as an alternative to general anesthesia.

In our study majority of patients (n-43(72%) were young with age <30 years and median parity was 2(range 0-3).it was comparible to a randomized control trial assessing effectiveness of cervical block in incomplete miscarraige, where the average age of patients were 25.i(SD+_5.9) and median parity was 2(range0-9).[7]

A randomized study comparing cervical blocks (intracervical/paracervical block) concluded that the mean composite procedure related pain score was low for both cervical block groups (1.3+ 1.4 for para/intracervical group and 2.1+_1.5 for intracervical group)[8].Our study also observed low pain score in 92% patients(72%=in zero scale ,20%=1-3).

In our study we did 19 evacuation and curettage for incomplete miscarriage under intracervical block with good pain relief. This was supported by a large study which concluded that Intra cervical block as local anesthetic technique is simpler relatively safer than paracervical block for pain management of curettage in incomplete abortion[9].

One study published in 2007 by Wilford Hall Medical Center to assess intra cervical block and pain perception during HSG show that Lidocaine intracervical block provides better pain relief than placebo during performance of HSG.[10]Our study we also did difficult hysterosalpingography in 2 patients and they were completely pain free.

Two other studies comparing intracervical block (ICB) with intramuscular (IM) sedation and paracervical block concluded that ICB is effective, easier during D&C procedure[11,12].we performed 38 D&C with good results.

Department of Obstetric and gynae of St Jhon hospital, Essex carried out a study on 278 patient undergoing trans cervical resection of endometrium under effect of intracervical block and concluded that ICB is highly effective and safe for this procedure and patient acceptance was quite high and comparable to G/A.[13]

In our study intracervival block failed to provide adequate pain relief in 85 % of patients and alternative analgesia was considered.study by Ashish Vadhra shows 2.5% patient's dis satisfaction rate.

The results of our study were nearly comparable to all above mentioned studies with 55(%) patients experiencing only mild pain and 5(%) severe. High patient acceptance was observed[3]

CONCLUSION

Intracervical block is safe, effective, and simple for pain management for cervical dilatation and uterine intervention.

REFERENCES

1. Centers for Disease Control. Abortion surveillance, United States, 2003. Available at: http://www.cdc.gov/mmwr/preview/ mmwrhtml/ss5511a1.htm. Retrieved March 18, 2009.
2. Lichtenberg CA.Pregnancy loss termination.In: General Gynecology.Mosby Elsevier; 2007:225-56.
3. Ashish V,Sanjay KS,Madhusudan D. The efficacy & safety of paracervical block with conscious sedation in surgical evacuation of early pregnancy. IJBABN 2017;8(7):279-283.
4. T. Tangsiriwatthana, U. S. Sangkomkamhang, P. Lumbiganon, and M. Laopaiboon, "Paracervical local anesthesia for cervical dilatation and uterine intervention," The Cochrane Database of Systematic Reviews, vol. 9, 2013
5. WHO (2003).Safe Abortion: Technical and Policy Guidance for health System. Switzerland.
6. Manyou B, Phupong V. Prospective random-

ized,Double blinded, placebo controlled trial of preoperative etorico xib for pain relief in uterine fractionalcurettage under paracervial bloc. Eur JObsete Gynecol Reprod Bio. 2008; 140(1):90

7. Ivan.G.,Hernando G,Calisda N,A and Alejandro P.Paracervical block in incomplete abortion using manual vaccum aspiration .Obstetric and gynecology.2004 june: 103(5 Pt 1):943-51.

8. Lukes,AS Roy K, Presthus J,3 Diamond, M Berman, J and Konsker. Randomized comparative trial of cervical block protocols for pain management during hysteroscopic removal of polyps and myomas.Int J Womens Health. 2015; 7: 833–839

9. Oktovianus S,Eddy H,Ishryah S.Intracervical lidocain Block is more effective for pain management of curettage in incomplete abortion: Dr wahidin sudiro husodo Hospital Makassar.Indones J Obstet Gynecol 2014;2-1:13-17.

10. Robinson RD, Casablanca Y, Pagano KE, Arthur NA, Bates GW, Propst AM. Intracervical block and pain perception during the performance of a hysterosalpingogram: a randomized controlled trial. Obstet Gynecol. 2007 Jan; 109(1):89-93.

11. Poornima C, Seetha P. Intracervical block compared with intramuscular sedation for dilatation and curettage. Int J Reprod Contracept Obstet Gynecol. 2014; 3(1): 149-152.

12. Jayaraman M, Kurri H, Muralidhar V. Comparison between paracervical and intracervical block before procedures on uterine cavity and cervical dilatation Int J Reprod Contracept Obstet Gynecol. 2017 Aug;6(8):3252-3255.

13. Ferry J, Rankin L.Transcervical resection of the endometrium using intracervical block only. A review of 278 procedures. . Aust N Z J Obstet Gynaecol. 1994 Aug; 34(4):457-61.