

Local Perianal Block in Anal Surgery: Is it Safe, Feasible and Acceptable?

Dr. Binoy Kumar*

Associate Professor, Deptt. of Surgery, P.M.C.H., Patna, Bihar, India

Original Research Article

*Corresponding author

Dr. Binoy Kumar

Article History

Received: 20.01.2018

Accepted: 27.01.2018

Published: 30.01.2018

DOI:

10.36347/sjams.2018.v06i01.066



Abstract: A total of 42 consecutive patients underwent anal surgery under local perianal block and it was observed that the technique is safe and feasible for various anal operations and despite the complain of pain during injections high degree of patient satisfaction can be achieved.

Keywords: Regional anaesthesia, local perianal infiltration.

INTRODUCTION

Majority of anal operations are performed under general or regional anaesthesia. They are associated with general complications of anaesthesia especially in patients with cardiac and pulmonary diseases. Unavailability of expert anaesthetist often causes delay and rescheduling of operations in an already tight operating schedule. Several authors have described local perianal infiltration for various anal surgery without compromising with the results.

Consequently, this study was undertaken to evaluate the feasibility of local perianal block for anal surgery and to assess the outcome and patient satisfaction.

MATERIALS AND METHODS

A total of 42 consecutive anal operations were performed under local perianal block from August 2016 to July 2017 at Patna Medical College Hospital, Patna. After taking informed consent of the patient and after usual preoperative preparations all the operations were performed by a single surgeon.

Pain was recorded on a Visual Analogue Scale (VAS 0 meaning no pain and VAS 10 meaning worst imaginable pain). Patients were followed atleast for 6 months and early and late patient satisfaction was recorded on a four-point scale of unsatisfied, acceptable, satisfied and very much satisfied. We also enquired whether the patient would willingly consider subsequent anal surgeries under perianal block.

All patients were premedicated with 75 mg diclofenac and 5 mg of diazepam. Patients were put in usual lithotomy position and after usual aseptic and antiseptic preparation and draping local anaesthetic cream (lidocaine 2%) was applied to the perianal region. All patients received a local perianal block with a cocktail comprising of 2% Xylocaine 20 ml, 0.5% Bupivacaine 20 ml, 10 ml of normal saline with 5 drops of adrenaline. Injections were made with a 21 G 38 mm needle mounted on a 10 ml syringe. Initially about 10 ml of the solution was infiltrated around the anus in the superficial plane in a diamond shaped area starting about 5 mm away from margin of the anal verge. Now with one finger in the anal canal (using left finger for the left side) using as a guide and inserting the needle at 3'O clock position at an angle of about 45 degrees

about 15 ml of the solution was injected in a fan shaped manner. The same procedure was repeated on the contralateral side at 9'O clock using right finger in the anal canal and again about 15 ml of solution was infiltrated in a fan shaped manner. The effectiveness of anaesthesia was confirmed by pinching of anal skin, insertion of retractors and dilatation of the sphincter. The total amount of solution used was about 40 ml.

OBSERVATIONS AND RESULTS

A total of 42 operations comprising of open haemorrhoidectomy (n=15), fistula-in-an (n=11), lateral internal anal sphincterotomy for chronic anal fissure (n=10) and drainage of anorectal abscess (n=6) were performed under local perianal block. The mean operating time was 28.3 minutes (20 to 52 minutes) including time for the infiltration. In most patients the anal canal became lax and patulous within 3 to 5 minutes. 4 of the patients complained of pain during operation. 3 out of these were controlled by local xylocaine infiltration and in 1 patient intravenous tramadol was needed. No local or systemic complications to local anaesthesia were observed during or after operation. None of the patients needed conversion to general anaesthesia. All patients were

given oral administration or injection of non-steroidal anti-inflammatory drugs in postoperative period.

The mean pain score as on VAS was 4.3 during injection of local anaesthesia which was much higher than during operation (1.4) and than on the day of operation (2.8).

Postoperative complications observed included skin tags in 7 patients, tenesmus in 3 patients, and mild degree of bleeding in 2 patients. None of the patient developed post operative retention of urine requiring catheterization. 28 patients (66.7%) were satisfied with local perianal block (very satisfied 13, satisfied 15, acceptable 12 and unsatisfied 2). Most of the patients were satisfied with postoperative results (very satisfied 16,38.1%; satisfied 20,47.6%; acceptable 6,14.3% and unsatisfied 0).

Out of 42 patients 32 patients (76.2%) were willing to accept local perianal block for any future anal surgery while 8 patients (19.0%) were unwilling and 2 patients (4.8%) were not sure.

DISCUSSION

The majority of anal operations are performed under general or regional anaesthesia. However, they are often associated with nausea, vomiting, retention of urine, motor blockade of lower limbs associated with other systemic risks of anaesthesia.

Local perianal block is a viable alternative which can be easily learnt by surgeons and in addition of reducing the morbidity and mortality of general and regional anaesthesia the operation can begin immediately. The procedure is also economical with feasibility even in poor infrastructure settings. Although there are differences in the agent and types of infiltration, local anaesthesia has many advantages including satisfactory relaxation of anal sphincters, decreased hospital stays and costs and increased turnover of cases in the theatre.

In our study pain during initial injection was an important factor having adverse effects on patient satisfaction which was also observed by other workers. Arndt *et al.* [1] observed that rapid rate of injection hurts to the patient more and similarly Scarfone *et al.* [2] suggested a slow rate of injection to minimise initial pain. Celoria *et al.* [3] conducted 300 anal procedures under local anaesthesia and reported good patient acceptance. Lacerda *et al.* [4] carried out 51 haemorrhoidectomies under local anaesthesia and concluded that late complications did not differ significantly and the estimated hospital costs were much lower. Foo *et al.* [5] reported that Local anaesthesia with perianal and anal canal blocks gives adequate duration and depth of anaesthesia and results in excellent relaxation of the anal canal. Nystrom *et al.* [6] conducted 30 consecutive proctological operations

with local perianal block and concluded that the perianal block is easy to apply and effective as a sole method of anaesthesia for proctological operations. Lohsiriwat L *et al.* [7], in his study of 222 cases, reported that the ambulatory settings, when combined with perianal blockade and no intravenous fluid administration, allows anorectal surgery to be performed with a very low incidence of urinary retention. Spinal or caudal anaesthesia and pudendal nerve blocks may cause urinary retention with a reported incidence of between 10 and 17 %. In the present study also, none of the patients operated under local perianal block developed urinary retention.

CONCLUSION

Local perianal block is feasible and safe in anorectal surgeries. The advantage of early alimentation, early ambulation with low morbidity and reduced economic costs make it acceptable to the patients. The technique is more feasible in developing countries like ours as it is easy to learn and can be undertaken in poor infrastructural set ups.

REFERENCES

1. Arndt KA, Burton C, Noe JM., Minimizing the pain of local anaesthesia; *Plast Reconstruct Surg* 1983; 72:676-9.
2. Scarfone RJ, Jasani M, Gracely EJ. Pain of local anesthetics: rate of administration and buffering. *Ann Emerg Med*,1998;31:36-40.
3. Celoria G, Falco E, Nardini A, Gianardi G, Di Alesio L: Local anaesthesia in anal surgery, Technical note and immediate results; *Minnerva Chir*:1993, Oct 15,48(19),1103-6.
4. Lacerda-Filho A, Cunha-Melo JR., Outpatient haemorrhoidectomy under local anaesthesia; *Eur J Surg*. 1997; 163(12):935-940.
5. Foo E, Sim R, Med M, Lim HY, Chan STF, Ng BK. Ambulatory anorectal surgery—is it feasible locally? *Ann Acad Med Singapore*. 1998; 27:512-514.
6. Nyström P, Derwinger K, Gerjy R. Local perianal block for anal surgery. *Tech Coloproctol*. 2004;8(1):23-26: 10.1007/s10151-004-0046-8.
7. Lohsiriwat L, Lohsiriwat D. Ambulatory anorectal surgery under perianal anesthetics infiltration: analysis of 222 cases. *J Med Assoc Thai*. 2007; 90(2):278-281.