

Comparison of Postoperative Results after Hemorrhoidectomy Using Local and Spinal Anesthesia

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Background: Hemorrhoidectomy is a common procedure in clinical practice. Most operations are performed on an in-patient basis using general or regional anesthesia, and the use of local anesthesia is still limited due to concerns about postoperative care.

Objective: To compare perioperative results including pain, urinary retention, bleeding and other complications after hemorrhoidectomy performed using local anesthesia (LA) on an out-patient basis with those achieved after spinal anesthesia (SA) on in-patient cases.

Material and Method: This was a retrospective study of closed hemorrhoidectomy of grade 3 hemorrhoids performed under local and spinal anesthesia between March 2011 and March 2014 in the Department of Surgery, Rajavithi Hospital, Bangkok.

Results: A total of 91 patients with third-degree internal hemorrhoids were recruited. The subjects were divided into two groups with 50 patients in the LA group and 41 in the SA one. Early complications were similar in the two groups: patients in the LA group had more postoperative pain with visual analog (VAS) scores at 6 hours postoperatively of 8.8 ± 1.26 compared with 5.3 ± 1.09 ($p < 0.001$) in the SA group, but at 24 hours postoperatively the LA patients had less pain with mean VAS scores of 6.5 ± 1.25 compared with 7.29 ± 1.15 ($p = 0.002$) in the SA group.

Conclusion: Hemorrhoidectomy under local anesthesia, with proper counseling and consent, is safe and feasible for use on an outpatient basis.

Keywords: Hemorrhoidectomy, Local, Spinal anesthesia, Postoperative

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Hemorrhoids are collections of submucosal, fibrovascular, arteriovenous sinusoids that are part of the normal anorectum. Hemorrhoids involve the loss of connective tissue that supports the hemorrhoidal plexus, followed by dilation of the vessels. Hemorrhoidal complexes normally collect in the left lateral, right anterolateral, and right posterolateral regions of the anal canal, but they may also be found in other locations⁽¹⁾. Their management includes fiber diet, life-style modification, rubber band ligation, sclerotherapy and, finally, hemorrhoidectomy⁽²⁾ which is mostly performed on an in-patient basis because of postoperative care issues such as pain control and immediate complications. This study aimed to compare the postoperative phases of the use of local anesthesia (LA) with those following spinal anesthesia (SA).

Material and Method

This was a retrospective study of closed

hemorrhoidectomy of grade 3 hemorrhoids performed under local and spinal anesthesia between March 2011 and May 2014 in the Department of Surgery, Rajavithi Hospital. The data were collected from medical records and included operative records and inpatient charts. The patients chose their own anesthetic care after receiving counseling from a nurse. The inclusion criteria were patients aged above 18 years with diagnosis of grade 3 hemorrhoids. The exclusion criteria were patients who: had another anorectal disease; had a history of allergy to lignocaine, marcaine, or morphine and its derivatives; were unable to undergo surgery; had symptoms of benign prostatic hypertrophy or bladder neck obstruction; had neuropsychotic disorder; or had coagulopathy. The aim of the study was to compare perioperative results including pain, urinary retention and other complications ensuing after hemorrhoidectomy with LA on an out-patient basis and SA as inpatients.

Local anesthesia technique (LA): The author prescribed preemptive pethidine 25 milligram (mg) intravenous injection 15 minutes before injecting 1% xylocaine 20 ml in the intersphincteric plane, 5 ml in each quadrant, as shown in Fig. 1.

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Spinal anesthesia technique: 0.75% bupivacaine with or without morphine at the discretion of the anesthesiologist.

Hemorrhoidectomy technique: all patients underwent closed hemorrhoidectomy with Metzenbaum scissors.

Postoperative phase: patients with LA were observed in hospital for 8 hours while those in the SA group were admitted. Follow-up in the LA group was by telephone interview in the 24-hour period after the operation.

Medication: Both groups were prescribed 1 week's supply of Acetaminophen 500 mg 2 tablets orally every 4-6 hours, Metronidazole 400 mg 1 tablet three times daily, and Ispaghula husk to be taken once daily. Data collection included patient demographic data, visual analog score (VAS) at 6 hours (hrs) and 24 hrs, acetaminophen use in the first 24 hours, and early complications such as bleeding and urinary retention. All patients had follow-up at 2 weeks post-operatively when questionnaires regarding patient satisfaction were obtained. These questionnaires consisted of 3 questions: "Are you satisfied with the anesthetic method used in your operation?": "Would you recommend this type of anesthesia to other patients?"; and "Would you choose the same method of anesthesia in case of recurrence?". Questionnaires are shown in Fig. 2.

Statistical analysis

Statistical analysis was done using SPSS 17.0 version for biostatistics. Qualitative data were summarized in percentages, while quantitative data were expressed as means and standard deviation. Student's t-test was used to determine significance differences in data on the numerical scale and Mann-Whitney U test was employed for data on the ordinal scale VAS. For qualitative data, Chi-square test was used to assess differences of proportions. The significance level was set at $p < 0.05$.

Ethical considerations

The study protocol was reviewed and approved by the Institutional Review Board of Rajavithi Hospital, and informed consent was obtained from all patients.

Results

A total of 91 patients with single third-degree internal hemorrhoid were recruited. The patients were divided to an LA group of 50 patients and an SA group

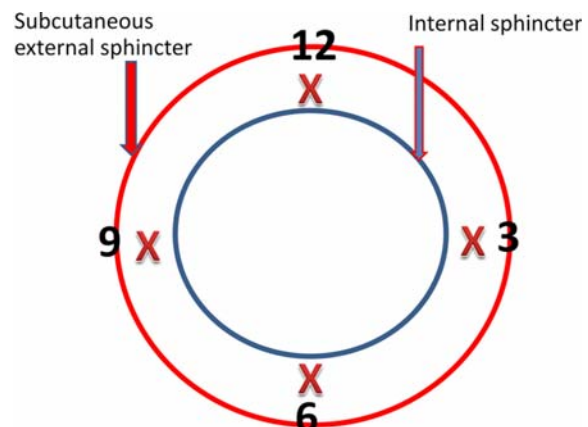


Fig. 1 Position of local anesthesia injection. X = injection site.

	1 (Hate)	2 (Non satisfied)	3 (Satisfied)	4 (Very satisfied)	5 (Impressive)
Q1 : Do you satisfied your anesthetic method					

	1 (No)	2 (Maybe)	3 (Yes)
Q2 : Do you recommend this anesthetic method to other patients			

	1 (No)	2 (yes)
Q3 : In recurrence , Do you still remain use this anesthetic method		

Fig. 2 Questionnaires.

of 41 patients. The mean age of the LA group patients was 41.0 ± 10.7 years old, and 56% were female. The SA patients had a mean age of 42.6 ± 13.5 years and 56.1% were female. The American Society of Anesthesiologists (ASA) classifications were similar for the two groups. The demographic data are shown in Table 1.

The VAS at 6 hours and 24 hours post-operatively in the LA group were 8.8 ± 1.26 and 6.5 ± 1.25 respectively compared to 5.39 ± 1.09 and 7.29 ± 1.15 in the SA patients. The immediate complications at 24 hours in the SA group were two instances of urinary retention 2 (4.9%). An early complication at 2 weeks was perianal abscess which occurred one week post-operatively in one patient in the LA group before developing into low transphincteric fistula in ano 1 month after drainage. The postoperative results are shown in Table 2.

In the LA group, 2 patients (4%) stated that they "hated" and would not recommend this method to other patients because of the pain during injection;

Table 1. Comparison of patients' demographic data

	LA group (n = 50)	SA group (n = 41)	p-value
Age (years)			
Mean \pm SD	41.0 \pm 10.7	42.6 \pm 13.5	0.513
Sex			0.993
Female	28 (56.0)	23 (56.1)	
Male	22 (44.0)	18 (43.9)	
ASA classification			0.031*
ASA 1	46 (92.0)	31 (75.6)	
ASA 2/3	4 (8.0)	10 (24.4)	
Chief complaint			0.204
Bleeding	9 (18.0)	7 (17.1)	
Pain	6 (12.0)	5 (12.2)	
Prolapse	26 (52.0)	14 (34.1)	
Combined	9 (18.0)	15 (36.6)	
Previous treatment			0.635
None	40 (80.0)	31 (75.6)	
Rubber band	7 (14.0)	6 (14.6)	
Sclerosing injection	0 (0.0)	1 (2.4)	
Surgery	2 (4.0)	3 (7.3)	
Alternative medicine	1 (2.0)	0 (0.0)	
History of laxative use			0.673
Yes	15 (30.0)	14 (34.1)	
No	35 (70.0)	27 (65.9)	

Values are represented as n (%), mean \pm SD

LA = Local anesthesia; SA = Spinal anesthesia

* = Significant at $p < 0.05$

however, neither of them had any complications. Four patients stated that they were not satisfied with this anesthetic method, and one of these had a perianal abscess.

In the SA group, 1 patient (2.4%) stated that he “hated” this anesthetic method because he had urinary retention and need intermittent urinary catheterization, while 2 patients said they were “not satisfied” because of complications; one had urinary retention and needed intermittent urinary catheterization while another experienced fear because of being unable to move in the postoperative period.

Discussion

Hemorrhoidectomy involves surgery on the sensitive anoderm, which is rich in nerve endings. In ambulatory surgery there are 2 major points of concern. Firstly, postoperative care including complication monitoring and pain control. There are several possible ways of reducing postoperative pain including such operative techniques as stapled anopexy⁽³⁻⁵⁾, vascular

sealing device hemorrhoidectomy^(6,7) and hemorrhoidal artery ligation with rectoanal repair^(8,9). Analgesic management techniques include the use of multimodal analgesics, preemptive analgesia, topical metronidazole⁽¹⁰⁾, topical eutectic mixture of local anesthesia cream (EMLA)⁽¹¹⁾, botulinum toxin⁽¹²⁾ and nitrate⁽¹³⁾. The second area of concern is intraoperative anesthetic management issues such as caudal, pudendal, and perineal blocks⁽¹⁴⁾.

In the present study, postoperative pain in the LA group tended to be lower than in the SA group at 24 hour. This was in keeping with the study conducted by Zoher et al⁽¹⁵⁾, which reported that since the duration of pain relief associated with pudendal nerve block (PNBs) considerably exceeded the expected duration of the local anesthetic component of the mixture used for the block (five to six hours), effective blockade of afferent pain impulses during the surgical procedure and the early postoperative period may have achieved a pre-emptive analgesic effect. Such an effect could be the result of a reduction in nociceptive

Table 2. Comparison of postoperative results

	LA group (n = 50)	SA group (n = 41)	p-value
Visual analog score (mean \pm SD)			
6 hours	8.8 \pm 1.26	5.3 \pm 1.09	<0.001*
24 hours	6.5 \pm 1.25	7.29 \pm 1.14	0.002*
Complications at 24 hours, n (%)			0.200
None	50 (100.0)	39 (95.1)	
Bleeding	0 (0.0)	0 (0.0)	
Urinary retention	0 (0.0)	2 (4.9)	
Acetaminophen use	35 (70)	34 (82.9)	0.219
Acetaminophen use (mg)	1,236.84 \pm 852.16 1,000 (500-3,000)	914.63 \pm 715.04 1,000 (500-3,000)	0.219
Early complications, n (%)			1.000
Perianal abscess	1 (2.0)	0 (0.0)	
Late complications			
Incontinence	0.08 \pm 0.56	0.05 \pm 0.31	0.760
Wexner's Score	0 (0 to 4)	0 (0 to 2)	
Ectropion, n (%)	3 (6.0)	1 (2.4)	0.624

Values are represented as n (%), mean \pm SD, median (min-max), * = significant at $p < 0.05$

LA = Local anesthesia; SA = Spinal anesthesia

* Numbers may not added up to the totals due to missing data

Table 3 Patient satisfaction

	LA group n = 50	SA group n = 41	p-value
Satisfaction with anesthetic method			0.549
Impressive	11 (22.0)	14 (34.1)	
Very satisfied	20 (40.0)	18 (43.9)	
Satisfied	13 (26.0)	6 (14.6)	
Non satisfied	4 (8.0)	2 (4.9)	
Hate	2 (4.0)	1 (2.5)	
Would you recommend this anesthetic method to other patients?			0.541
Yes	37 (74.0)	26 (63.4)	
Maybe	11 (22.0)	12 (29.3)	
No	2 (4.0)	3 (7.3)	
Would you choose this anesthetic method in the event of recurrence?			1.000
Yes	41 (82.0)	34 (82.9)	
No	9 (18.0)	7 (17.1)	

Values are represented as n (%)

LA = Local anesthesia; SA = Spinal anesthesia

plasticity within the central nervous system i.e., reduced wind-up, and reduced recruitment of silent nociceptive neurons^(16,17). Another possible factor could have been a more local effect at the level of the injured perianal nerves.

Complications in the two groups were

comparable. In the first 24 hours, there was no postoperative bleeding in the LA group, possibly because local anesthesia with perianal and anal canal blocks gives adequate duration and depth of anesthesia and results in excellent relaxation of the anal canal, providing an adequate operative field⁽¹⁸⁾ similar to

that obtained under spinal anesthesia. In this study, lignocaine (1% Xylocaine® with adrenaline) was used for the blockade. In this technique, lignocaine filled the intersphincteric space and blocked all nerve supplies from the inferior rectal branch of the pudendal nerve sacral nerve (S2, S3) and from the perineal branch of the fourth, causing paralysis of the external and internal sphincters. This local anesthetic solution provided 60-90 minutes of anesthesia and reduced intraoperative bleeding in the same way as previously reported in ambulatory hemorrhoidectomy^(19,20). Lignocaine also provides excellent initial pain relief and adrenaline, reducing bleeding in the operative field due to vasoconstriction. An excellent report from Hanish B et al⁽²¹⁾ reported that local anesthesia via lignocaine with adrenaline provides enough time for hemorrhoidectomy, enabling immediate discharge and obviating the need for in-hospital observation. Another complication was urinary retention, and in this study 2 patients (4.9%) in the SA group were affected. Spinal or caudal anesthesia and pudendal (ischioanal) nerve blocks may cause urinary retention with a reported incidence of between 10 and 17%⁽²²⁻²⁵⁾. Two patients had urinary retention associated with the use of morphine in the spinal block, which increases the risk of urinary retention due to remnant sacral parasympathetic blockage, which will remain until it reaches the third sacral segment⁽²⁶⁾.

In this study, there was no difference in wound infection in the two groups, but 1 patient in the LA group had perianal abscess. The cause of this occurrence was superficial infection which led to stitch granuloma or coalescence of skin bridges, resulting in subcutaneous fistula⁽²⁷⁾. Khan I et al⁽²⁸⁾ reported that prophylactic antibiotic treatment did not reduce the risk infection after hemorrhoidectomy.

With regard to patient satisfaction, the study from Kushwala et al⁽²⁹⁾ reported that there was no difference between results after hemorrhoidectomy under local and general anesthesia, although there was a lower cost in the local anesthetic group.

With respect to local anesthesia techniques, Roxas MF et al⁽³⁰⁾ reported that Nivatvong's technique (intraanal injection) and conventional local injection were comparable, with no difference in postoperative pain, patient satisfaction or surgeon's effectiveness.

In a report from Ong CH et al⁽³¹⁾ which compared local and regional anesthesia, there were similar pain scores, postoperative analgesia requirements, and incidence of urinary retention. With regard to patient satisfaction, this study did not find

any difference in the two groups, and no differences were found not relating to postoperative complications. Other social problems were not examined in this study such as education level, socio-economic status and family status. Lastly, in order to achieve good outcomes in hemorrhoidectomy under local anesthesia, it is important to give preoperative counseling with proper information about the expected postoperative state after hemorrhoidectomy in order to minimize fear of the unknown.

The limitation of this study was that, due to its retrospective nature, some data was missing.

Conclusion

In this study, hemorrhoidectomy under local anesthesia proved to be safe and feasible for use with selected outpatients after proper preoperative education and counseling.

What is already known on this topic?

Previous studies have reported the safety of ambulatory hemorrhoidectomy.

What is this study adds?

This study reported a local anesthetic technique in hemorrhoidectomy with results comparable to those of regional anesthesia in terms of complications, postoperative outcomes and patient satisfaction.

Potential conflicts of interest

None.

References

1. Singer M. Hemorrhoids. In: Beck DE, Roberts PL, Saclarides T, Senagore AJ, Stamos MJ, Wexner SD, editors. The ASCRS textbook of colon and rectal surgery. 2nd ed. New York: Springer; 2011: 175-202.
2. Sun Z, Migaly J. Review of hemorrhoid disease: presentation and management. Clin Colon Rectal Surg 2016; 29: 22-9.
3. Jayaraman S, Colquhoun PH, Malthaner RA. Stapled versus conventional surgery for hemorrhoids. Cochrane Database Syst Rev 2006; (4): CD005393.
4. Fazio VW. Early promise of stapling technique for haemorrhoidectomy. Lancet 2000; 355: 768-9.
5. Mehigan BJ, Monson JR, Hartley JE. Stapling procedure for haemorrhoids versus Milligan-Morgan haemorrhoidectomy: randomised

- controlled trial. *Lancet* 2000; 355: 782-5.
6. Xu L, Chen H, Lin G, Ge Q. Ligasure versus Ferguson hemorrhoidectomy in the treatment of hemorrhoids: a meta-analysis of randomized control trials. *Surg Laparosc Endosc Percutan Tech* 2015; 25: 106-10.
 7. Madoff RD. LigaSure hemorrhoidectomy versus stapled hemorrhoidopexy: a prospective, randomized clinical trial: retraction. *Dis Colon Rectum* 2014; 57: 1151.
 8. Scheyer M, Antonietti E, Rollinger G, Lancee S, Pokorny H. Hemorrhoidal artery ligation (HAL) and rectoanal repair (RAR): retrospective analysis of 408 patients in a single center. *Tech Coloproctol* 2015; 19: 5-9.
 9. Athanasiou A, Karles D, Michalinos A, Moris D, Spartalis E, Rosenberg T. Doppler-guided hemorrhoidal artery ligation and rectoanal repair modification for the treatment of grade III and grade IV hemorrhoids: one-year follow-up. *Am Surg* 2014; 80: 1279-80.
 10. Nicholson TJ, Armstrong D. Topical metronidazole (10 percent) decreases posthemorrhoidectomy pain and improves healing. *Dis Colon Rectum* 2004; 47: 711-6.
 11. Rahimi M, Kazemeini AR, Pourtabatabaei N, Honarmand AR. Comparison of topical anesthetic cream (EMLA) and diclofenac suppository for pain relief after hemorrhoidectomy: a randomized clinical trial. *Surg Today* 2012; 42: 1201-5.
 12. Davies J, Duffy D, Boyt N, Aghahoseini A, Alexander D, Leveson S. Botulinum toxin (botox) reduces pain after hemorrhoidectomy: results of a double-blind, randomized study. *Dis Colon Rectum* 2003; 46: 1097-102.
 13. Wasvary HJ, Hain J, Mosed-Vogel M, Bendick P, Barkel DC, Klein SN. Randomized, prospective, double-blind, placebo-controlled trial of effect of nitroglycerin ointment on pain after hemorrhoidectomy. *Dis Colon Rectum* 2001; 44: 1069-73.
 14. McHugh GA, Thoms GM. The management of pain following day-case surgery. *Anaesthesia* 2002; 57: 270-5.
 15. Naja Z, El Rajab M, Al Tannir M, Ziade F, Zbibo R, Oweidat M, et al. Nerve stimulator guided pudendal nerve block versus general anesthesia for hemorrhoidectomy. *Can J Anaesth* 2006; 53: 579-85.
 16. Aida S. The challenge of preemptive analgesia. *PAIN Clinical Updates* 2005; 13: 1-4.
 17. Wall PD. The prevention of postoperative pain. *Pain* 1988; 33: 289-90.
 18. Foo E, Sim R, Lim HY, Chan ST, Ng BK. Ambulatory anorectal surgery is it feasible locally? *Ann Acad Med Singapore* 1998; 27: 512-4.
 19. Lohsiriwat V, Lohsiriwat D. Ambulatory anorectal surgery under perianal anesthetics infiltration: analysis of 222 cases. *J Med Assoc Thai* 2007; 90: 278-81.
 20. Aphinives P. Perianal block for ambulatory hemorrhoidectomy, an easy technique for general surgeon. *J Med Assoc Thai* 2009; 92: 195-7.
 21. Bansal H, Jenaw RK, Mandia R, Yadav R. How to do open hemorrhoidectomy under local anesthesia and its comparison with spinal anesthesia. *Indian J Surg* 2012; 74: 330-3.
 22. Ye F, Feng YX, Lin JJ. A ropivacaine-lidocaine combination for caudal blockade in haemorrhoidectomy. *J Int Med Res* 2007; 35: 307-13.
 23. Kim J, Lee DS, Jang SM, Shim MC, Jee DL. The effect of pudendal block on voiding after hemorrhoidectomy. *Dis Colon Rectum* 2005; 48: 518-23.
 24. Darrah DM, Griebing TL, Silverstein JH. Postoperative urinary retention. *Anesthesiol Clin* 2009; 27: 465-84, table.
 25. Prasad ML, Abcarian H. Urinary retention following operations for benign anorectal diseases. *Dis Colon Rectum* 1978; 21: 490-2.
 26. Moreira H Jr, Moreira JP, Isaac RR, Alves-Neto O, Moreira TA, Vieira TH, et al. Morphine spinal block anesthesia in patients who undergo an open hemorrhoidectomy: a prospective analysis of pain control and postoperative complications. *Ann Coloproctol* 2014; 30: 135-40.
 27. Bouchard D, Abramowitz L, Castinel A, Suduca JM, Staumont G, Soudan D, et al. One-year outcome of haemorrhoidectomy: a prospective multicentre French study. *Colorectal Dis* 2013; 15: 719-26.
 28. Khan KI, Akmal M, Waqas A, Mahmood S. Role of prophylactic antibiotics in Milligan Morgan hemorrhoidectomy - a randomized control trial. *Int J Surg* 2014; 12: 868-71.
 29. Kushwaha R, Hutchings W, Davies C, Rao NG. Randomized clinical trial comparing day-care open haemorrhoidectomy under local versus general anaesthesia. *Br J Surg* 2008; 95: 555-63.
 30. Roxas MF, Delima MG. Randomized controlled trial to determine the effectiveness of the Nivatvongs technique versus conventional local anaesthetic infiltration for outpatient haemorrhoidectomy.

- Asian J Surg 2006; 29: 70-3.
31. Ong CH, Chee Boon FE, Keng V. Ambulatory circular stapled haemorrhoidectomy under

local anaesthesia versus circular stapled haemorrhoidectomy under regional anaesthesia. ANZ J Surg 2005; 75: 184-6.

การศึกษาเปรียบเทียบผลลัพธ์ระยะหลังผ่าตัดการผ่าตัดริดสีดวงทวารโดยการระงับความรู้สึกเฉพาะที่และการระงับความรู้สึกที่ไขสันหลัง

สิริพงศ์ สิริกุลพิบูลย์, อนุสรณ์ สิริพัฒน์กุล

ภูมิหลัง: การผ่าตัดริดสีดวงทวารนั้นเป็นการผ่าตัดที่ไม่ซับซ้อนในด้านวิธีการผ่าตัดสามารถทำได้ในเวชปฏิบัติของศัลยแพทย์ ทั้งในโรงพยาบาลขนาดใหญ่ และขนาดเล็ก แต่อย่างไรก็ตามการผ่าตัดริดสีดวงทวารนั้น โดยมากมักจะต้องระงับความรู้สึก โดยวิธีการระงับความรู้สึกที่ไขสันหลัง หรือการดมยาผสม แต่อย่างไรก็ตามในสภาวะที่มีข้อจำกัดในด้านวิสัญญีแพทย์ หรือจำนวนห้องผ่าตัด หรือตัวผู้ป่วยเอง ไม่สามารถระงับความรู้สึกด้วยวิธีข้างต้นได้ การทำผ่าตัดโดยการระงับความรู้สึกเฉพาะที่จึงเป็นทางเลือกที่เหมาะสม

วัตถุประสงค์: เพื่อศึกษาเปรียบเทียบผลลัพธ์หลังการผ่าตัดริดสีดวงทวารในผู้ป่วยที่ระงับความรู้สึกเฉพาะที่กับระงับความรู้สึกที่ไขสันหลัง โดยประเมินจากภาวะแทรกซ้อนที่พบ เช่น บัสสาวะไม่ออก เลือดออกหลังการผ่าตัด อาการเจ็บปวดหลังผ่าตัด และอื่นๆ

วัสดุและวิธีการ: ศึกษาเปรียบเทียบย้อนหลังในผู้ป่วยย้อนหลัง (retrospective study) ในผู้ป่วยที่เข้ารับการผ่าตัดริดสีดวงทวารเกรด 3 แบบเย็บปิด ที่ได้รับการระงับความรู้สึกทั้งสองแบบ ตั้งแต่เดือนมีนาคม พ.ศ. 2554 ถึง มีนาคม พ.ศ. 2557 ในแผนกศัลยกรรม โรงพยาบาลราชวิถี

ผลการศึกษา: ผู้ป่วยริดสีดวงทวารเกรด 3 ที่เข้ารับการผ่าตัดจำนวน 91 ราย โดยแบ่งเป็นกลุ่มระงับความรู้สึกเฉพาะที่จำนวน 50 ราย และกลุ่มระงับความรู้สึกที่ไขสันหลัง จำนวน 41 ราย พบว่าภาวะแทรกซ้อนที่เกิดขึ้นทั้งสองกลุ่มไม่มีความแตกต่างกัน ในเรื่องอาการปวดหลังผ่าตัด พบว่ากลุ่มที่ทำการระงับความรู้สึกเฉพาะที่นั้นมีค่า visual analog score (VAS) scores ที่ 6 ชั่วโมงหลังผ่าตัด มากกว่ากลุ่มที่ระงับความรู้สึกที่ไขสันหลัง 8.8 ± 1.26 vs. 5.3 ± 1.09 ($p < 0.001$) แต่ที่ 24 ชั่วโมงหลังผ่าตัด กลุ่มที่ระงับความรู้สึกเฉพาะที่จะมีค่าที่ต่ำกว่า โดยค่าเฉลี่ยของ VAS scores คือ 6.5 ± 1.25 vs. 7.29 ± 1.15 ($p = 0.002$)

สรุป: การผ่าตัดริดสีดวงทวาร ภายใต้การระงับความรู้สึกเฉพาะที่ นั้นสามารถทำได้อย่างปลอดภัย และสามารถนำมาพัฒนาปรับปรุงเพื่อให้การรักษาผู้ป่วยแบบผู้ป่วยนอกได้ ในกลุ่มผู้ป่วยที่ได้รับคำชี้แจง คำอธิบายก่อนผ่าตัดเป็นอย่างดี
