

Outpatient Hemorrhoidectomy under Perianal Anesthetics Infiltration

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Background: Hemorrhoidectomy is the most effective long-term treatment for hemorrhoids, mostly done in an inpatient setting requiring general or spinal anesthesia.

Objective: To assess the safety and early post-operative results of outpatient closed hemorrhoidectomy under perianal anesthetics infiltration.

Material and Method: A retrospective study of outpatient closed hemorrhoidectomy under perianal block during March 2002 and May 2003 in an ambulatory facility of the Department of Surgery, Siriraj Hospital, Bangkok.

Results: Fifty-five patients with third-degree or fourth-degree internal hemorrhoids underwent outpatient closed hemorrhoidectomy under perianal block, including 40 males and 15 females. The mean age was 44.4 ± 12.2 years (21-72 years). Sites of hemorrhoidectomy at each operation were single 53%, double 42% and triple 5%. Mean operative time was 20.7 ± 9.9 minutes (5-60 minutes). Additional anal procedures were performed in 6 cases. Severity of early postoperative pain were mild in 35% of the patients, moderate in 40% of the patients and severe in 25% of the patients which could be relieved by oral analgesic drug, mostly lasting less than three days. No postoperative urinary retention occurred. The patients could pass their stool in 1.2 ± 0.8 days postoperatively (0-4 days). No postoperative complications were found in the present study. All patients needed no hospital admission or an emergency department visit.

Conclusion: Outpatient hemorrhoidectomy under perianal anesthetics infiltration is effective and well tolerated. It should be an alternative approach in the treatment of hemorrhoidal disease.

Keywords: Outpatient hemorrhoidectomy, Perianal anesthetics infiltration, Ambulatory surgery

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Hemorrhoids are a common cause of perianal complaints and affect millions of people in Thailand. In most instances, hemorrhoids are treated conservatively. Hemorrhoidectomy is indicated when conservative managements have failed or complications have occurred⁽¹⁾. Third-degree or fourth-degree internal hemorrhoids are the main indication for hemorrhoidectomy⁽²⁾.

Some surgeons regard it as an inpatient procedure. The operation carries few complications⁽¹⁾. However, when it is performed under general or spinal

anesthesia, the complications resulting from anesthesia can hide a successful operation^(3,4).

In days of medical expenses, the economic importance of an ambulatory operation can not be over-emphasized. The authors' purpose was to assess the safety and early post-operative results of outpatient closed hemorrhoidectomy under perianal anesthetics infiltration as it was introduced into clinical practice.

Material and Method

From March 2002 to May 2003, a total of 55 ASA class I or II patients, aged 20-75 years, with third-degree or fourth-degree internal hemorrhoids underwent outpatient closed hemorrhoidectomy under perianal block. A patient would be excluded from the present

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study for one of the following reasons: allergy or hypersensitivity to local anesthetic agent, consent refusal, antiplatelet drug or anticoagulant usage, concurrent anal stricture, immunocompromised host or previous anorectal surgery. Each patient gave a medical history and obtained a thorough physical examination including proctoscopy. There were no additional studies done unless specifically indicated by the medical history and physical examination. Each patient gave informed consent for hemorrhoidectomy.

All patients were operated on by the first author using a uniform method: nothing by mouth for 6 hours, no enema, no prophylactic antibiotics, no pre-emptive intravenous narcotics and no preoperative laboratory or manometric studies. The operation was carried out in an ambulatory facility of the Department of Surgery, Siriraj Hospital, Bangkok. At the operating bed, each patient was set on a prone jackknife position. All had pulse and blood pressure monitored by circulating nurses. A local anesthetic mixture was prepared using 10 ml. of 0.5% bupivacaine, 10 ml. of 2% lidocaine with adrenaline 1:10000 and 10 ml. of distilled water. A 20-25 ml- aliquot of this solution was infiltrated by the surgeon into the left and right anterolateral aspect of perianal region, 1-1.5 cm. from the anal verge. Direction of the injection was parallel to the lower portion of the anal canal. The remaining solution (5-10 ml) was infiltrated into the submucosal area beneath the internal hemorrhoids. Fensler anoscope was applied and closed hemorrhoidectomy (Ferguson technique) was performed. All specimens of hemorrhoid were sent for histopathologic examination.

Routine postoperative care was provided to each patient. This consisted of a warm sitz bath, oral paracetamol (500 mg every 6 hours for one or two days), selective COX-2 inhibitor (celecoxib 100 mg or rofecoxib 12.5 mg twice a day for five days) for pain and mild laxative before bedtime. Questionnaires evaluating postoperative pain with urination and defecation record were filled up by the patients themselves using visual analog scale (0 = no pain, 10 = the worst pain). The authors classified the pain score into 4 groups : no pain (pain score = 0), mild pain (pain score = 1-4), moderate pain (pain score = 5-7) and severe pain (pain score = 8-10). All patients were scheduled for follow-up at 1 and 6 weeks postoperatively.

Results

The present study was conducted in a series of 55 ASA status I or II patients, 21-72 years of age (mean of age 44.4 ± 12.2 years). There were 40 males

and 15 females. Sites of hemorrhoidectomy at each operation were single 53%, double 42% and triple 5%. Mean operative time was 20.7 ± 9.9 minutes (5-60 minutes). Additional procedures were performed in 6 cases (5 lateral internal anal sphincterotomy for chronic anal fissure and 1 anal polyp excision).

Nineteen patients (35%) had mild postoperative pain and twenty two patients (40%) had moderate postoperative pain which began 4.4 ± 4.3 hours postoperatively (0-24 hours) and subsided within two days. Fourteen patients (25%) had severe postoperative pain, lasting 2.2 ± 2.1 days (0-7 days), which could be relieved by oral analgesic drugs.

The patients urinated in 2.8 ± 2.7 hours postoperatively (0.25-8 hours). Twenty eight patients (51%) could void without difficulty. Mild dysuria in the first 2 days was found in 13 patients (24%) and lasted for six days in 14 patients (25%). However all dysuria subsided in one week and no urinary catheterization was needed. The patients could pass their stool in 1.2 ± 0.8 days postoperatively (0-4 days). No postoperative complications, such as bleeding or infection, were found in the present study. All patients needed no hospital admission or any emergency department visit.

Discussion

Symptomatic hemorrhoids, grade I and II, can be treated conservatively by any of the various methods available such as laxatives and suppositories. Most authors agree that hemorrhoids grade III and IV should be eradicated surgically^(2,5). The hemorrhoidectomy carries few complications⁽¹⁾. However, if it is performed under general or spinal anesthesia, the complications resulting from anesthesia can hide a successful operation⁽³⁾. Caudal or spinal anesthesia can be used but they require a trained anesthesiologist and can create numerous known complications. On the other hand, the perianal block is easy to perform, can be safely carried out by any surgeon, and has virtually no obvious complications⁽⁶⁾.

The most frequent complication of surgical hemorrhoidectomy is urinary retention⁽⁷⁾ which relates to spinal anesthesia and fluid overloading⁽⁸⁾. The ambulatory setting, when combined with perianal blockade and perioperative fluid restriction, allows surgical hemorrhoidectomy to be performed with a very low incidence of urinary retention⁽⁹⁾.

In outpatient hemorrhoidectomy, the following principles should be adopted: local anesthesia, limited laboratory testing, no rectal enema and appropriate home care program. Local anesthesia permits the

use of a safe jackknife position, resulting in a technically easy surgical setting. A short-acting local anesthetic (lidocaine) provides excellent initial pain relief. A long-acting local anesthetic (bupivacaine) provides several hours of anesthesia postoperatively and allows for the patient's immediate discharge at the end of surgery⁽¹⁰⁻¹²⁾. Adrenaline in these anesthetics, results in vasoconstriction which reduces bleeding in the operative field. Neither preoperative laboratory tests nor preoperative enemas are necessary⁽¹³⁾. Finally, the use of a home care program that includes a high-residue diet, mild laxative agent, adequate oral analgesics and warm sitz bath makes an easy postoperative course.

The authors found that patients tolerated this surgical operation very well, and there was no progression of complications due to the out-of-hospital setting. An additional benefit is the cost savings as the patients do not require any hospitalization. Outpatient hemorrhoidectomy is a technique that can be effectively used in an ambulatory surgical setting with good patient tolerance and acceptance.

Conclusion

Outpatient hemorrhoidectomy under perianal anesthetics infiltration is effective and well tolerated with fewer complications. It needs no hospital admission and should be an alternative approach in the treatment of hemorrhoidal disease.

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การผ่าตัดริดสีดวงทวารหนักโดยการฉีดยาชารอบทวารหนัก ที่แผนกผู้ป่วยนอก

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วัตถุประสงค์: เพื่อประเมินความปลอดภัยและผลของการผ่าตัดริดสีดวงทวารหนักภายใต้การฉีดยาชารอบทวารหนัก โดยไม่ต้องนอนรักษาตัวในโรงพยาบาล

วัสดุและวิธีการ: เก็บข้อมูลศึกษาย้อนหลังของผู้ป่วยที่เข้ามารักษาโรคริดสีดวงทวารหนัก ในโรงพยาบาลศิริราช โดยวิธีการผ่าตัดริดสีดวงทวารหนักภายใต้การฉีดยาชารอบทวารหนักและไม่ต้องนอนรักษาตัวในโรงพยาบาล ตั้งแต่เดือนมีนาคม พ.ศ. 2545 ถึง เดือนพฤษภาคม พ.ศ. 2546

ผลการศึกษา: ผู้ป่วยที่ได้รับการวินิจฉัยริดสีดวงทวารหนักระดับที่ 3 และ 4 จำนวน 55 คน เป็นเพศชาย 40 คน และหญิง 15 คน อายุเฉลี่ย 44.4 ปี (ตั้งแต่ 21-72 ปี) ได้รับการผ่าตัดริดสีดวงทวารหนักภายใต้การฉีดยาชารอบทวารหนัก โดยไม่ต้องนอนรักษาตัวในโรงพยาบาล จำนวนหัว ริดสีดวงทวารหนักที่ตัดออกในแต่ละการผ่าตัด มีดังนี้ หัวเดียว 53%, สองหัว 42% และสามหัว 5% ระยะเวลาการผ่าตัดเฉลี่ย 20.7 นาที (ตั้งแต่ 5-60 นาที) มีเหตุการณ์ที่ทำให้เพิ่มบริเวณทวารหนักในผู้ป่วยจำนวน 6 ราย ระดับความรุนแรงของอาการปวดหลังผ่าตัดพบว่าผู้ป่วย 35% มีความปวดเล็กน้อย, 40% มีความปวดปานกลาง และ 25% มีความปวดมาก ซึ่งสามารถระงับปวดด้วยการรับประทานยาแก้ปวด อาการส่วนมากหายภายใน 3 วันหลังการผ่าตัด ไม่พบว่ามีอาการบัสสาวะไม่ออก โดยเฉลี่ยผู้ป่วยสามารถถ่ายอุจจาระได้ที่ 1.2 วัน หลังการผ่าตัด (ตั้งแต่ 0-4 วัน) ไม่พบภาวะแทรกซ้อนอื่น ๆ หลังการผ่าตัด และผู้ป่วยไม่จำเป็นต้องนอนรักษาตัวในโรงพยาบาลหรือกลับมาพบแพทย์ที่ห้องฉุกเฉิน

สรุป: การผ่าตัดริดสีดวงทวารหนักภายใต้การฉีดยาชารอบทวารหนัก โดยไม่ต้องนอนรักษาตัวในโรงพยาบาล เป็นวิธีที่มีประสิทธิภาพและปลอดภัย สามารถใช้เป็นทางเลือกในการผ่าตัดรักษาโรคริดสีดวงทวารหนักได้
