

Obturator Nerve Block in Lithotomy Position to Prevent Adductor Muscle Contraction during Trans-Urethral Resection of Bladder Tumours

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Abstract: Bladder growth is the most prevalent urological malignancy. It is managed by TURBT. TURBT is often performed with SA, but it cannot block the obturator jerk reflex. So, the technique that proves to be effective for preventing the obturator jerk is ONB following SA. **Objective:** To assess the efficacy and safety of ONB performed with nerve stimulator using the interadductor approach in the lithotomy position versus the supine position performed under SA. **Material and Method:** This is prospective, randomised, controlled, interventional, single blind study. Total 50 patients of ASA physical status I, II and III, between 45 and 80 years undergoing TURBT under SA with ONB were randomly allocated to two equal groups. Group A: Supine Group. Block in supine position. Group B: Lithotomy Group. Block in lithotomy position. After giving SA, ONB was given. Patients were studied for adductor spasm, ease of administration, minimum current and the time required to give the block, and any complications. **Result:** Statistically significant occurrence of adductor spasm was noted in Group A compared to Group B ($p < 0.05$). **Conclusion:** ONB given in lithotomy position as compared to supine position was Easy with higher success rate Required less current to block Less time consuming Less complication

Keywords: TURBT- Transurethral Resection of Bladder, ONB- Obturator Nerve Block, SA- Spinal Anesthesia

1. Introduction

Bladder growth is the most prevalent urological malignancy reported. The basic methods for diagnosis and management are endoscopic procedures (cystoscopy, transurethral resection of bladder tumor TURBT). 75-80% of cases are non-muscle invasive (NMIBC) at time of diagnosis. TURBT is the most common surgical technique for the diagnosis and initial treatment of bladder cancer. The aim of TURBT is removing all visible lesions in the bladder, including part of the underlying muscle tissue.

Obturator nerve (ON) originates from L2 - L4 lumbar plexus and passes through obturator foramen. It supplies adductor muscles of thigh and passes close to inferolateral bladder wall, bladder neck and prostatic urethra. As it courses through the pelvis, during transurethral operations, resection in these areas invariably stimulates the obturator nerve, with resultant mass contraction of the adductor muscles. The violent jerking of the legs disturbs the surgeon causing inadequate resection and may also lead to an inadvertent bladder perforation, vascular injury, etc.

To overcome this problem, various techniques have been evaluated with regard to their efficacy, safety, feasibility and ease of availability.

Peripheral nerve blocks remain a well-accepted component of comprehensive anesthetic care. Transurethral resection of a bladder tumor (TURBT) is often performed with spinal anaesthesia, but it cannot block the obturator jerk reflex. The obturator reflex can occur when the obturator nerve is

directly stimulated by the electrical current transmitted by the resectoscope, especially when the tumor is localized at the lateral wall of the bladder, where the obturator nerve runs in close proximity during its intrapelvic course.

Adductor reflex is defined as jerky adduction, and eternal rotation of the thigh at hip joint. It is due to contractions of the adductors of the thigh (caused by tapping the tendon of the adductor magnus muscle, or stimulation of obturator nerve along its course) while the thigh is abducted.

The techniques that prove to be effective for preventing the obturator jerk are:

- General anesthesia,
- Obturator nerve block (ONB) following spinal anesthesia.

By utilizing and standardizing the technique of ONB, while making it safe and simple, the morbidity of TURBT and potential mortality can be significantly reduced.

2. Literature Review

Selective obturator nerve block was first described by Labat in 1922. Labat's classical technique was modified by Parks in 1967. In 1993, the interadductor approach was described by Wassef, which was further modified by Pinnock in 1996. In 1973, Winnie introduced the concept of the "3-in-1 block," an anterior approach to the lumbar plexus using a simple paravascular inguinal injection to anesthetize the femoral, lateral cutaneous nerve of the thigh and obturator nerves.

- 1) In 2002, Manabu Kakinohana et. al, conducted a study to compare interadductor approach to obturator nerve block for transurethral resection procedure of bladder tumours with traditional approach. We compared the two approaches in terms of the insertion-adductor contraction interval (ICI), success rate, completion of the block, and plasma lidocaine concentration. An obturator nerve block by the interadductor approach was performed by needle insertion 1 cm behind the adductor longus tendon and 2 cm lateral to the pubic arch in 12 patients, and by the traditional approach in 12 patients. The ICI with the interadductor approach was significantly shorter than that with the traditional approach. The success rate, completion of the block, and plasma lidocaine concentrations were similar with both approaches. They concluded that the interadductor approach can provide faster identification of the obturator nerve than the traditional approach.
- 2) In 2004, Dr. Dipika Patel, Dr. Bhavna Shah & Dr. B.M. Patel, selected 50 patients, scheduled for transurethral resection of bladder tumor and divided them into two equal groups; group-sa received only spinal anesthesia and group-saob received both spinal anesthesia + obturator nerve block, for the proposed surgery. ONB was given with 1% lidocaine 10 ml, unilaterally or bilaterally according to position of the bladder tumor. They observed that in group-saob, adductor spasm of lower limb did not occur in most of patients, whereas adductor spasm was seen in almost all the patients of group-sa which disturbed the surgeon. Bladder perforation occurred in 2 patients in group-sa and emergency laparotomy had to be done in 1 patient. They concluded that ONB is an effective method of preventing adductor spasm and the associated complications in patients undergoing trans urethral resection of bladder under spinal anaesthesia.
- 3) In 2004, Marcin Ciechomski et. al, prospectively studied the obturator nerve blockade in TURBT under spinal anesthesia, by the interadductor approach with the patients laying in lithotomy position. Blockade of an obturator nerve was performed in 189 patients using interadductor approach with 10 mL of 2% Lidocaine. 174 (92.06%) blockades were recognized as successful, 9 (4.76%), as satisfactory and in 6 (3.18%) cases there were no blockade. They did not observe any complications related to the blockade. In one case with satisfactorily recognized blockade, perforation of the bladder wall occurred. It was treated conservatively. They concluded that interadductor approach of obturator nerve blockade in patients laying in lithotomy position is an effective method of preventing of uncontrolled muscle contraction during transurethral resection of bladder tumors, and it is a safe method for preventing perforation of bladder wall during transurethral procedures.
- 4) In 2012, Karolina Pladzyk et. al, conducted a prospective study (from 01/01/1999 to 12/31/2010) over 500 patients, in the Department of General, Oncologic and Functional Urology, Medical University of Warsaw, to assess the efficacy of ONB performed using interadductor approach during TURB under spinal anesthesia. In these cases nerve stimulation and ONB with 2% lidocaine using thigh interadductor approach in the lithotomy position were performed. They found that the efficacy of 542 ONB was 94%. In 31 cases general anesthesia was necessary. There were two cases of urinary bladder perforation, but only one resulted from an insufficient nerve block. Both were managed conservatively. Neither hematomas nor neurological adverse events were observed. The described method offered a high rate of efficacy and ensured optimal and safe conditions for the resection of a tumor located on the inferolateral wall of the urinary bladder and the risk of complication is low.
- 5) In 2012, Khorrami M et.al, conducted a study to compare blind and nerve stimulation guided transurethral obturator nerve block (ONB) in transurethral resection of bladder tumor (TURBT) to prevent obturator reflex. They studied 112 patients with lateral bladder wall tumors and at high risk for general anesthesia, categorized them randomly in three groups. In the first group (34 patients), after spinal analgesia was administered, the exact site of the obturator nerve was determined by nerve stimulation and 15 mL of lidocaine HCl 2% was injected around the nerve. In the second group (31 patients), we determined the obturator nerve using nerve stimulation (like the first group), then 20 mL of saline was injected. In the third group (47 patients), the obturator nerve was determined based on anatomic landmarks and blocked subsequently. Leg jerking was reported and compared in the three groups. Leg jerking was reported in 5.8%, 34%, and 6.3% of patients in the first, second, and third groups, respectively (P=0.0001). ONB took 6.7 minutes in the first, 6.1 minutes in the second, and 5.2 minutes in the third group, on average. There was no report of adverse effects of lidocaine HCl in this study. They concluded that transvesical ONB is a safe and effective method of ONB before TURBT and this method is feasible by urologists and promising even without nerve stimulation and only by anatomic landmarks.

3. Methods and Approach

This is prospective, randomised, controlled, interventional, single blind study. After obtaining permission from Institutional Ethics Committee, written informed consent was taken. Total 50 adult patients of American Society of Anesthesiologists (ASA) physical status I, II and III, aged between 45 and 80 years undergoing TURBT involving the lateral wall under Spinal Anaesthesia with ONB were randomly allocated to two equal groups ($n = 25$ in each group) using random number.

Group A: Supine Group

Patients given block in supine position.(conventional method)

Group B: Lithotomy Group

Patients given block in lithotomy position.

Patient selection criteria

Inclusion criteria

- ASA grade I, II and III
- Age between 45 to 80 years
- Growths on lateral wall of urinary bladder

Exclusion criteria

- Patient refusal
- ASA status IV,V
- Pre-existing obturator nerve injury
- Infection at injection site
- Inguinal lymphadenopathy
- Known allergy to local anaesthetic agents
- History of significant neurological, psychiatric, or neuromuscular disorders

Preoperative assessment of the patients including history, general examination was done. Systemic examinations, and assessment of the airway and spine was done.

All required investigations hemoglobin (Hb%), CBC, blood sugar, blood urea, serum creatinine, serum electrolytes, liver function tests, ECG and chest X-ray were done a day prior to surgery.

Preparation on table

Monitoring - ECG, SpO₂, systolic BP, diastolic BP, MAP, pulse rate, respiratory rate.

The procedure was explained to the patient and informed consent was taken. IV line was secured and preloading with 500 ml crystalloid was done. The drip was continued throughout the length of the surgery.

Premedication:

Inj. Ondansetron (0.15 mg/kg) was administered.

Spinal anaesthesia:

Under all aseptic and universal precautions, SA was administered in sitting position midline approach at the L3–L4 or L4-L5 interspace after confirming free-flow and clear cerebrospinal fluid. When the sensory level block reached above T10, ONB was performed. Depending upon the location of tumor, patients were given unilateral or bilateral ONB.

The two approaches used for giving ONB-

Interadductor approach (Lithotomy position)

With the patient in the lithotomy position, two lines on the skin were drawn at the adductor longus tendon and the pubic arch. An 8-cm, 22-gauge insulated needle was inserted 1cm behind the adductor longus tendon and 2cm lateral to the pubic arch. The inserted needle was advanced with a slight lateral and posterior inclination, while a nerve stimulator using continuous 1Hz, 2 mA was simultaneously employed. Once muscle twitch in the thigh adductor was visible and palpable, the amperage was lowered and the needle was advanced and/or redirected until stimulation recurred. This procedure was repeated until 0.4-0.5mA. A successful encounter with the obturator nerve resulted in contractions of the adductor muscles by 1mA or lesser electrical stimulation.

Conventional approach (Supine position)

With the patient in the supine position, the same type of needle as described above was inserted perpendicularly to the skin 3 cm lateral and 3 cm inferior to the pubic tubercle. The needle was advanced until contact was made with the

inferior ramus of the pubis. The needle was withdrawn short of the tip and redirected in a lateral and slightly anterior direction, parallel to the superior ramus of the pubis. The needle was slowly advanced until a response to a nerve simulator was elicited, as described above.

Any needle re-direction to reach the end-point for injection was recorded as an additional needle pass.

Five minutes after the end of injection, the surgeon who was masked to group assignment entered the operating room to start TURBT and evaluate the motor blockade, which was graded as follows:

- 0 = Adductor spasm
- 1 = No adductor spasm

The strength of thigh adduction was measured at 5, 10, 15 min after injection, and a score of 1 was considered as a successful block. If spasm persisted after 15 min, the block was classified as failed. Per operative findings during transurethral resection were evaluated.

The following data was recorded intraoperatively:

Motor block onset time: Time elapsed from the end of injection (time 0) until a motor block score of 2 was reached. Onset time was not recorded in failed blocks (when spasm persisted at 15 min).

Motor block success: The number of patients who had a score of 1 within 15 min after block placement.

Block performance time: The time elapsed between the start of PNS needle insertion and needle removal at the end of block.

The ease of approach: Classified according to the number of needle redirections required to accomplish the block as follows:

- Number of needle passes ≤ 2 – Easy
 - Number of needle passes > 2 – Difficult
 - Number of needle passes > 10 – Failed.
- Patient and surgeon satisfaction

Complications: The incidence of vascular puncture, hematoma, nerve injury, visceral injury, if any, was recorded.

GA with muscle relaxation and intubation was given in those cases where jerks of the adductor muscle were elicited. Those requiring GA were excluded from the study and considered as failed ONB. Outcome was measured by

- The presence or absence of jerk when the surgeon resects on the lateral wall of the bladder any complication of the procedure.
- Data was tabulated and analysed

4. Discussion

Bladder cancer is the most common urological malignancy and commonly presents in the geriatric age group. The incidence is three times more common in men than women.

Although general anaesthesia continues to be used for most of the surgical procedures, regional anaesthesia has been increasing in popularity in recent years.

Regional anaesthesia provides improved satisfaction and cause less cognitive impairment and immunosuppression (particularly in elderly patients) compared to general anaesthesia.

Regional anesthesia also avoids the exposure to various drugs systemically administered in general anesthesia which may prove to be deleterious in geriatric patients with associated comorbidities.

The other advantages of giving nerve blocks in the elderly include prevention of stress responses to laryngoscopy and tracheal intubation, early ambulation, decreased recovery room stay and improved post operative analgesia thereby reducing the need for postoperative narcotics and other analgesics.

Peripheral nerve blocks offer an excellent alternative for patients in whom postoperative nausea and vomiting are a problem, who are at risk for development of malignant hyperthermia, or who are hemodynamically compromised or too ill to tolerate general anesthesia.

An alternative to general anesthesia for the patients posted for TURBT is ONB in the peripheral segment following spinal anesthesia.

Stimulation of the ON by electric current during TURBT causes sudden jerk (obturator reflex) due to contraction of adductor muscles. This may lead to bladder perforation or deep cut causing profuse bleeding. This may also result in incomplete resection of the bladder tumor and dissemination.^[7,8]

Some contraindications for the block overlap with those of spinal anesthesia, such as clotting disorders. Limited mobility at joints does not affect the eligibility for the block unless it prevents positioning the patient in the lithotomy position. Over 12 years of observation, only one patient was not eligible to ONB due to advanced skin lesions in the inguinal regions.^[5]

Dipika Patel et. Al^[3] administered obturator nerve block with spinal anesthesia and observed for development of adductor spasm. Out of 25 patients given SA with ONB, 24 patients resulted in complete ablation of spasm and 1 resulted in approximately 80 % reduction of adductor spasm, and in the group given only SA bladder perforation occurred in 2 patients and emergency exploratory laparotomy had to be done in one patient.

Different approaches were proposed by Labat and by Wassef. The former, described in 1928, is based upon inserting a needle approximately 2 cm down and 2 cm to the side of the palpable pubic bone tubercle. The patient is positioned in the supine position, with the limb adducted and slightly bent knees^[1]. In the Wassef approach the needle is inserted in the rear of the attachment of the long adductor tendon, which is why it is called the interadductor approach .

While the lithotomy position provides attractive alternative over the supine approaches for giving ONB, it has not been studied much in detail. One advantage of the modification to the Wassef approach described by the authors is eliminating the necessity to change the patient's lithotomy position to perform the block. It can be performed at any stage of the procedure without the need to repeat the preparations of the operating field^[5]. The use of nerve stimulator and aspiration before drug administration can also ensure a low rate of adverse events.

Demographic data

All patients in our study were demographically similar in both groups. There were no statistically significant intergroup variations regarding age, body weight and gender distribution.

Surgical procedure and duration of surgery

All the patients were posted for the trans-urethral resection of bladder tumours. Duration of surgery was similar in both groups and statistically not significant.

Adductor spasm(Grade)

In the present study statistically significant occurrence of adductor spasm was noted in Group A compared to Group B ($p < 0.05$). The number of patients who developed adductor spasm after giving ONB in Group A was 16(66.6%) and that in Group B was 7(31.8%).

3 patients in Group A and 1 patient in Group B encountered a failed block such that surgeon could not proceed with the surgery and GA was given and the patients were excluded from the study.

In a study done by **Nida Farooq et. al^[10]**, Successful motor block at 15 min of injection of LA, was achieved in 23 out of 30 patients in Group I(ultrasound guided), and 27 of 30 patients in Group II(ultrasound+nerve stimulator guided) with a success rate of 76.7% and 90%, respectively. However, the difference was statistically insignificant.

Number of needle passes

In our study the number of needle passes required to give ONB was significantly lower in more patients in Group B - 18(75%) compared to Group A where only 9(40.9%) required needle passes less than 2. Needle passes > 2 categorised as 'difficult' were required in more number of patients in Group A -13(59.1%) compared to Group B-6(25%).

This could have been due to the anatomical ease of approach of the obturator nerve as it comes to lie more superficially in lithotomy position.

Minimum current in mA

In this study, the mean of minimum current required to produce a successful ONB was much lower in Group B-1.13 \pm 0.53 than that required in Group A-0.77 \pm 0.44.

Block performance time

The mean duration of time to give ONB in Group B was markedly lower (3.87 \pm 1.96 min) as compared to Group A (6.27 \pm 2.93 min)

Intraoperative vitals

In present study, the intra operative pulse rate and systolic blood pressure remained stable without any significant intergroup fluctuations.

Complications

No complications were found in either group.

Karolina pladzyk et. al^[5] in a study of over 500 obturator nerve blocks in lithotomy position did not encounter any case of paralysis, nerve damage, or hematomas at the injection site.

5. Conclusion

This study was conducted on 50 patients of 45 to 80 years age group, male gender, of ASA physical status I, II or III planned for transurethral resection of bladder tumours. They were randomly divided in to two groups of 25 patients each, according to the position given while performing Obturator Nerve Block.

Group A- Supine Group

Patients given block in supine position.(conventional method)

Group B- Lithotomy Group

Patients given block in lithotomy position.

All patients received an obturator nerve block following spinal anesthesia. 3 patients from Group A and 1 patient from Group B had failed block such that the surgeon could not proceed with the surgery, and these patients were excluded from the study. Vital parameters like heart rate, noninvasive blood pressure, respiratory rate and SpO2 were monitored throughout the surgical procedure and post-operatively till the effect wore off. All patients were studied for adductor spasm, ease of administration, minimum current and the time required to give the block, and any complications.

Our study has shown that the obturator nerve block given in lithotomy position as compared to supine position was

- Significantly easy
- With higher success rate
- Required less current to block the nerve
- Less time consuming
- Devoid of complications

References

- [1] Wassef MR: Interadductor approach to obturator nerve blockade for spastic conditions of adductor thigh muscles. *Reg Anesth.* 1993 Jan-Feb;18(1):13-7.
- [2] Manabu Kakinohana et. al, Interadductor approach to obturator nerve block for transurethral resection procedure: comparison with traditional approach. *Journal of Anesthesia* May 2002, Volume 16, Issue 2, pp 123–126.
- [3] Dr. Dipika Patel¹ Dr. Bhavana Shah² Dr. B. M. Patel: Contribution of the Obturator Nerve Block in the Trans-Urethral Resection of Bladder Tumours. *Indian J. Anaesth.* 2004; 48(1): 47-49.
- [4] Marcin Ciechomski et. al: Obturator nerve blockade during resection of bladder tumor. *Urologia Polska* 2004/57/4.
- [5] Karolina Pladzyk, Lidia Jureczko, and Tomasz Łazowski: Over 500 obturator nerve blocks in the lithotomy position during transurethral resection of bladder tumor. *Cent European J Urol.* 2012; 65(2): 67–70.
- [6] Khorrami M et. al: A comparison between blind and nerve stimulation guided obturator nerve block in transurethral resection of bladder tumor. *J Endourol.* 2012 Oct;26(10):1319-22.
- [7] Deniz Bolat et. al: Impact of nerve stimulator-guided obturator nerve block on the short-term outcomes and complications of transurethral resection of bladder tumour: A prospective randomized controlled study. *Can Urol Assoc J.* 2015 Nov-Dec; 9(11-12): E780–E784.
- [8] T. Yoshida et. al: A new ultrasound-guided pubic approach for proximal obturator nerve block: clinical study and cadaver evaluation. *Journal of the Association of the Anesthesiologists of Great Britain and Ireland.* 1 December 2015.
- [9] F. Hızlı et. al: Obturator nerve block transurethral surgery for bladder cancer: comparison of inguinal and intravesical approaches: prospective randomized trial. *Irish Journal of Medical Science (1971 -),* August 2016, Volume 185, Issue 3, pp 555–560.
- [10] Nida Farooq Shah, Khalid Parvez Sofi, and Showkat Hussain Nengroo: Obturator Nerve Block in Transurethral Resection of Bladder Tumor-A Comparison of Ultrasound-guided Technique versus Ultrasound with Nerve Stimulation Technique. *Anesth Essays Res.* 2017 Apr-Jun; 11(2): 411–415.
- [11] Haroon Sabir Khan et. al: An effective technique of obturator nerve block to prevent adductor reflex during transurethral resection of bladder tumor. *Pak Armed Forces Med J* 2017; 67 (2): 199-202.
- [12] Deepak Sharma, V. P. Singh, Nidhi Agarwal, and M. K. Malhotra: Obturator Nerve Block in Transurethral Resection of Bladder Tumor: A Comparative Study by two Techniques. *Anesth Essays Res.* 2017 Jan-Mar; 11(1): 101–104.
- [13] Muhammad Akram Malik et. al: Obturator Nerve Block (ONB) in Trans Urethral Resection of Bladder Tumors (TURBT). *JUMDC* volume 4, no. 2, jul-dec 2013.
- [14] H. Bouaziz, MD et. al: 34. Chapter Obturator Nerve Block. *Nysora textbook of Regional Anesthesia and Acute Pain Management.*
- [15] Kardash, Ken MD et. al: Obturator Versus Femoral Nerve Block for Analgesia After Total Knee Arthroplasty. *Anesthesia & Analgesia: September 2007 - Volume 105 - Issue 3 - p 853-858.*
- [16] Choquet O et. al: A new inguinal approach for the obturator nerve block: anatomical and randomized clinical studies. *Anesthesiology.* 2005 Dec;103(6):1238-45.
- [17] Baba M, Nishihara L, Tomi K. [Pubic tubercle side approach to the obturator nerve block]. *Masui.* 2007 Oct;56(10):1174-8.
- [18] Jochum D, Adding a selective obturator nerve block to the parasacral sciatic nerve block: an evaluation. *Anesth Analg.* 2004 Nov;99(5):1544-9.

- [19] Tatlisen A, Sofikerim M (2007) Obturator nerve block and transurethral surgery for bladder cancer. *Minerva Urol Nefrol* 59:137–141.
- [20] Kuo JY (2008) Prevention of obturator jerk during transurethral resection of bladder tumor. *JTUA* 19:27–31.
- [21] Kobayashi M, Takeyoshi S, Takiyama R, Seki E, Tsuno S, Hidaka S, Fukuda H, Inada K (1991) A report on 107 cases of obturator nerve block. *Masui* 40(7):1138–1143.
- [22] So PC (2004) Two case reports of obturator nerve block for transurethral resection of bladder tumor. *Hong Kong Med J* 10:57–59.
- [23] Sinha SK, Abrams JH, Houle TT, Weller RS (2009) Ultrasound-256 guided obturator nerve block: an intrafascial injection approach without nerve stimulation. *Reg Anesth Pain Med* 34(3):261–264.
- [24] Yamauchi M, Sato Y (2008) Ultrasound-guided obturator nerve block. *Masui* 57(5):588–595.
- [25] Chen WM, Cheng CL, Yang CR, Chung V (2008) Surgical tip to prevent bladder perforation during transurethral resection of bladder tumors. *Urology* 72:667–668.
- [26] Deliveliotis C, Alexopoulou K, Picramenos D (1995) The contribution of obturator nerve block in transurethral resection of bladder tumors. *Acta Urol Belg* 63:51–54.
- [27] Hradec E, Soukup F, Novak J, Bures E (1983) The obturator nerve block: preventing damage of the bladder wall during transurethral surgery. *Int Urol Nephrol* 15:149–153.

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