

## The Role of Obturator Nerve Blockade during Transurethral Resection of Bladder Tumor under Subarachnoid Block

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Transurethral resection of bladder tumors (TUR-BT) is a frequently used urological operation performed to remove tumors of the bladder. These tumors predominantly occur in the elderly population. TUR-BT carry risk for stimulation of the obturator nerve which is placed next to the lateral bladder wall. The obturator nerve; which arises from the second, third and fourth lumbar plexus passes over the psoas major muscle which is situated near to the obturator fascia and finally goes into the medial aspect of the thigh. It innervates muscles which are responsible for innervating the thigh and the skin on the paramedian part of the thigh.

Urinary bladder masses are frequently performed under subarachnoid block due to the many advantages such as technical ease of the procedure, reducing the risks of bleeding, and earlier recognition of the bladder perforation. The main shortcoming with subarachnoid block is to spare the obturator nerve because of its potential complication of bladder injury secondary to adductor muscle contraction from obturator reflex during TUR-BT.

Incidental stimulation of the obturator nerve during TUR-BT operations can cause complications like bladder perforation, adductor contraction, massive bleedings, leg jerkings and can lead to the discontinuation of the operation.

General anesthesia provides muscle relax and prevents the adductor spasm but in the very elderly patients over the past decade researches have contributed to regional anesthesia approaches for TUR-BT with substantial reduction related mortality and morbidity therefore subarachnoid block with obturator nerve block was preferable for transurethral operations.

Hızlı et al. conducted a study on 41 patients undergoing TUR-BT with subarachnoid block who required obturator nerve block. They concluded that obturator nerve block had an additive role on the quality of analgesia for TUR-BT surgery.

In another study analysing respectively the efficiency of TUR-BT with or without obturator nerve block they found the additional effects of obturator nerve block.

In literature there are many studies proving the positive outcomes of additional obturator nerve blocks.

Our data suggests that identification of the obturator nerve with ultrasound is easy and the block can be assessed by observing avoidance of bladder spasm.

Undertaking clinical research in urology is a potentially challenging process. Several studies published up to date have played an important role in advancing our decision in challenging situations and risk factors influencing outcomes, and in charting new directions for interventions that may reduce the occurrence of adverse outcomes. Decision for mode of anaesthesia in very elderly patients undergoing TURBT finally be left to the discretion of the individual anesthesiologist, to estimate how an informed decision can affect the patient in a particular situations.

### REFERENCES

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