CLINICAL OBSERVATION OF THE EFFECTS OF VESICARE ON CYSTOSPASM AFTER PARTIAL CYSTECTOMY FOR BLADDER TUMORS

Hypothesis / aims of study
After partial cystectomy for bladder tumors, cystospasm and paroxysmal, spasmodic and contractile pain of the bladder are the most common and refractory complications that are not only disturbing to patients during their rehabilitation but also resistant to regular analgesics. In addition to aggravating patient's suffering, frequent incidence of cystospasm may cause secondary exacerbation of postoperative hemorrhage, delayed wound healing of the bladder, obstruction of the irrigation tubes, and even overflow of the irrigation fluid and urine from the urethral meatus along the catheter, greatly increasing the possibility of infection. We treated 25 patients with the study drugs after partial cystectomy in our hospital and obtained satisfactory efficacy.

Study design, materials and methods
1.1 Study subjects: twenty-five patients who experienced cystospasm after partial cystectomy for bladder tumors at the Central Hospital of Liaohe Oil Fields were randomly selected to receive Vesicare. Inclusion criteria: paroxysmal and spasmodic pain in bladder area with urge incontinence > 5 times within 12h postoperatively; age of 44-75 years with a mean of 62 years; the number of cystospasm was 5-10 times within 24h postoperatively with an average of 6.2 times, each lasting for 20s-10min.

1.2 Administration method: single-blinded administration. The study drug was solifenacin succinate tablets (trade name: Vesicare, 5mg, administered orally, once daily). Patients who experienced cystospasm within 12h postoperatively and met the inclusion criteria began to receive the study drug until 24h before removing the urethral catheter.

1.3 Observation indexes: the number of paroxysmal and spasmodic pain in the bladder area and duration of each pain episode, backflow of irrigation fluid and number of incidence, urge incontinence and number of incidence were recorded continuously for 12h after the operation and before ending of the treatment. Blood biochemistry and urine routine were examined before and after medication.

1.4 Efficacy criteria: complete remission (cured) of cystospasm: paroxysmal and spasmodic pain in the bladder area no longer occurred without urge incontinence; the occasional discomfort, if any, was mild. Partial remission (effective): the number of cystospasm within 24h was ≤2 times and significantly reduced when compared with the pretreatment condition; in addition, the duration was shortened significantly (only half of the original duration); the spasmodic pain was alleviated significantly and tolerable for patients without incidence of urge incontinence. Non-remission (ineffective): the number of cystospasm within 24h did not decrease and the duration of each incidence did not shorten when compared with the pretreatment condition, or there was still backflow of irrigation fluid and even around the urethral catheter.

Results
In 24h after drug treatment, 12, 6 and 2 patients experienced complete remission, partial remission and non-remission of cystospasm, respectively. In 72h after drug treatment, 15, 5 and 0 patients experienced complete remission, partial remission and non-remission of cystospasm, respectively.

Interpretation of results
Vesicare is a new generation of M3 receptor antagonist that has been marketed in over 50 countries and regions in the world up to date. Vesicare, a drug recommended by multiple authoritative bodies and guidelines, has become the leading brand for treatment of overactive bladder in European, American and Japanese markets. Based on the above theories, mechanisms of action and the observations of this study, Vesicare was clinically effective in treating operation-induced cystospasm; in addition, none of these patients experienced dry mouth and other adverse reactions during drug treatment.

Concluding message
partial cystectomy for bladder tumors; paroxysmal, spasmodic and contractile pain

Disclosures
Funding: No Clinical Trial: Yes Public Registry: No RCT: Yes Subjects: HUMAN Ethics not Req’d: It is investigator driven study and there is not treatment before for these kinds of patients Helsinki: Yes Informed Consent: Yes