Transurethral Resection of Bladder Tumor (經尿道膀胱癌切除術)

Introduction

Transurethral resection of bladder tumor (TURBT) is an endoscopic procedure; both serve the purpose of diagnosis, staging and treatment of bladder cancer.

It is the first treatment for all visible lesion in bladder mucosa. Complete resection and cure of the tumor can only be happened if the tumor is superficial, and it is not involved the muscle layer, otherwise, subsequent procedures like radical cystectomy or radical radiotherapy will be needed.

The procedure

The Procedure can be performed under Spinal anesthesia or General anesthesia; the final choice of anesthesia will depend on patient's general condition and assessment of anesthetist. In some cases, obsturator nerve block will be offered to prevent obsturator jerk and subsequent bladder perforation during the procedure.

Before resection of the bladder tumor, bimanual examination will be performed to show whether the tumor is fixed to surround structure, if so, it is not a localized tumor and may need additional treatment like radical surgery or radical radiotherapy.

The procedure is performed using endoscope, passing through the urethra and into the bladder, so that no superficial wound will be seen after the surgery.

Tumor will be resected bit by bit using the small loop by electrical energy and all the tissues resected will be sent for pathology, finally meticulous electro-cauterisation will be performed for hemostasis. Usually indwelling catheter will be inserted after the procedure.

Post op Mitomycin C will be instilled into the bladder within 6 hours after the operation to prevent tumor implantation unless contraindicated. Final decision will be made by the physician.

Risk and complications

Peri operative:

- Anesthetic risk → for detail please ask your anesthetist
- Bladder perforation (<5%)
- Blood transfusion due to blood loss from bleeding tumor
- TUR syndrome (very unlikely)
- Converted to open surgery if uncontrolled bleeding from the tumor (very unlikely)

Post operative:

- Mild haematuria – common usually subside within few days
- Mild dysuria – common after endourological surgery, will subside within few days
- Haemoglobin drop need blood transfusion – only happen for vascular bleeding tumor
- Clot retention – if reactive hemorrhage from the tumor site after operation
- Urinary tract infection
- Urethral stricture (unlikely)

Before the procedure

Preparation appropriate to tumor status and patient's general condition will be prescribed, such as antibiotic prophylaxis, or type and screen. Pulmonary and cardiac condition need to be optimized before operation. There should not be uncorrected coagulopathy or local infection.

Patient should fully understand what is the operation before they sign the consent.

After the procedure

Postoperative care appropriate to specific procedures will be prescribed, such as need for fasting, monitoring, analgesics, catheterization, antibiotics cover, blood transfusion and fluid replacement. Post operative Mitocycin C instillation to bladder will be prescribed unless it is contraindicated. There may be slight haematuria from foley catheter and the patient might feel some irritative urinary symptoms after the operation, usually those symptoms will subside within few days.

Follow up

Patient will be discharged usually at post op day 1 to day 2. They should follow instruction for follow up given upon their discharge. If serious events develop after discharge, patient should seek medical advice at the nearest Accident and Emergency Department.

Remarks

This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information, please contact your doctor.