

## EFFECT OF TREATMENT WITH DUTASTERIDE ON TRANSURETHRAL RESECTION OF THE PROSTATE.

### Hypothesis / aims of study

Dutasteride effects on the prostate through suppression of intraprostatic dihydrotestosterone and prostate tissue vascularity. We evaluate whether preoperative treatment with dutasteride in perioperative bleeding during transurethral resection of prostate (TURP). The aim of this study was whether pretreatment with dutasteride more than 2 weeks before surgery can reduce surgical blood loss.

### Study design, materials and methods

Eighty three patients who had BPH with criteria for TURP were included. Renal impairment, previous finasteride use, prostate < 30cc, age < 50 were excluded. The dutasteride group comprising of 40 patients, were treated with dutasteride (0.5mg/day) for more than 2 weeks before surgery and the control group, comprising of other 43 patients, did not receive dutasteride. Blood loss was evaluated in terms of a reduction in the serum hemoglobin level ( $\Delta$ Hb and  $\Delta$ HCT), and was estimated by measuring the Hb and hematocrit levels before, right after and 24 hours after surgery.

### Results

A significantly lower mean blood loss was observed in the dutasteride group compared to the control group in right after and 24hr after the surgery

( $\Delta$ Hb =  $0.646 \pm 1.270$  vs  $1.164 \pm 0.726$ ,  $1.300 \pm 0.995$  vs  $1.857 \pm 1.046$  respectively,  $p < 0.019$ ,  $p < 0.011$ ;  $\Delta$ HCT =  $1.893 \pm 3.833$  vs  $3.468 \pm 2.091$ ,  $3.693 \pm 2.951$  vs  $5.393 \pm 3.232$ , respectively,  $p < 0.016$ ,  $p < 0.011$ ).

### Interpretation of results

Our study showed that preoperative treatment with dutasteride for 2 weeks before

TURP reduces the surgical bleeding.

### Concluding message

Dutasteride treatment before TURP can be used to decrease surgical bleeding.

### References

1. Effect of short-term dutasteride therapy on prostate vascularity in patients with BPH: a pilot study. Kravchick S, et al. Urology 2009;73:1274-8.
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### Disclosures

**Funding:** NONE **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN **Ethics not Req'd:** This study was done retrospectively. **Helsinki:** Yes **Informed Consent:** Yes