

- It is characterized by an increase in epithelial & stromal cell numbers in the **transitional zone** of the urethra.
- **Testosterone** → by 5- α - reductase → **DHT** → proliferation Not a pre-malignant
- It's the MCC of BOO , in 50% in >60 yrs, 90% in >80 yrs

4) **PDE5-I** : Tadalafil

- Surgical treatment

➔ Indications :- Failure of max medical Tx, severe bothersome Sx regardless of max medical Tx
Recurrent UTI & UB stones , Recurrent severe gross Hematuria, Recurrent Urinary Retention,
Renal Failure due to distal Obs, Patient's desire

1) **Minimally invasive** —> 3 months to appear the result

Transurethral radiofrequency needle ablation (TUNA)

Transurethral microwave thermotherapy (TUMT)

High-intensity focused ultrasound (HIFU)

2) **Transurethral Resection of Prostate / TURP**

- Removal of the obstructing tissue of BPH .. leaving the compressed outer zone intact (surgical capsule)
- By **electrically-heated wire loop** is used through a **resectoscope** to cut the prostate tissue.
- At the end of resection —> the cut chips is evacuated using **evacuators**

- SEs :- Infx , Bleeding , Bladder neck contracture , loss fertility, TURP syndrome

- ➔ fluid overload and iso-osmolar hyponatraemia (cardiological and neurological manifestations) after prolonged (>1.5 hours)
- ➔ Due to large volumes of irrigation fluid being absorbed through venous sinuses / **Glycine** 1.5% in H₂O
- ➔ Glycine acts as an inhibitory CNS neurotransmitter at GABA receptors and —> potentiates NMDA receptors
- ➔ Glycine also has cardio-depressant effects and may have renal toxicity.

3) **Open (suprapubic/transvesical) prostatectomy**

- Indications —> Large prostate (>100g) / Failed TURP / Urethra is too long for resectoscope / pt with inguinal hernia / large bladder stones
- Contraindications —> small fibrous prostate , PC, abd hematuria.

➔ **Flowmetry**

- The curve represents the flow rate of urine during the voiding process (**flow curve**)
- Patient should void at least **200 cc** for max flow rate to be accurately calculated.
- Normal flow curve is a **bell** shaped one with maximum flow rate **Q max** being
 - For male 20-25 ml/sec
 - Female 25-30 ml /sec
- The curve is not a bell shaped , with low rate & with hesitancy —> **BOO/ BPH**
- The curve is **Box shaped** —> **Urethral stricture**

