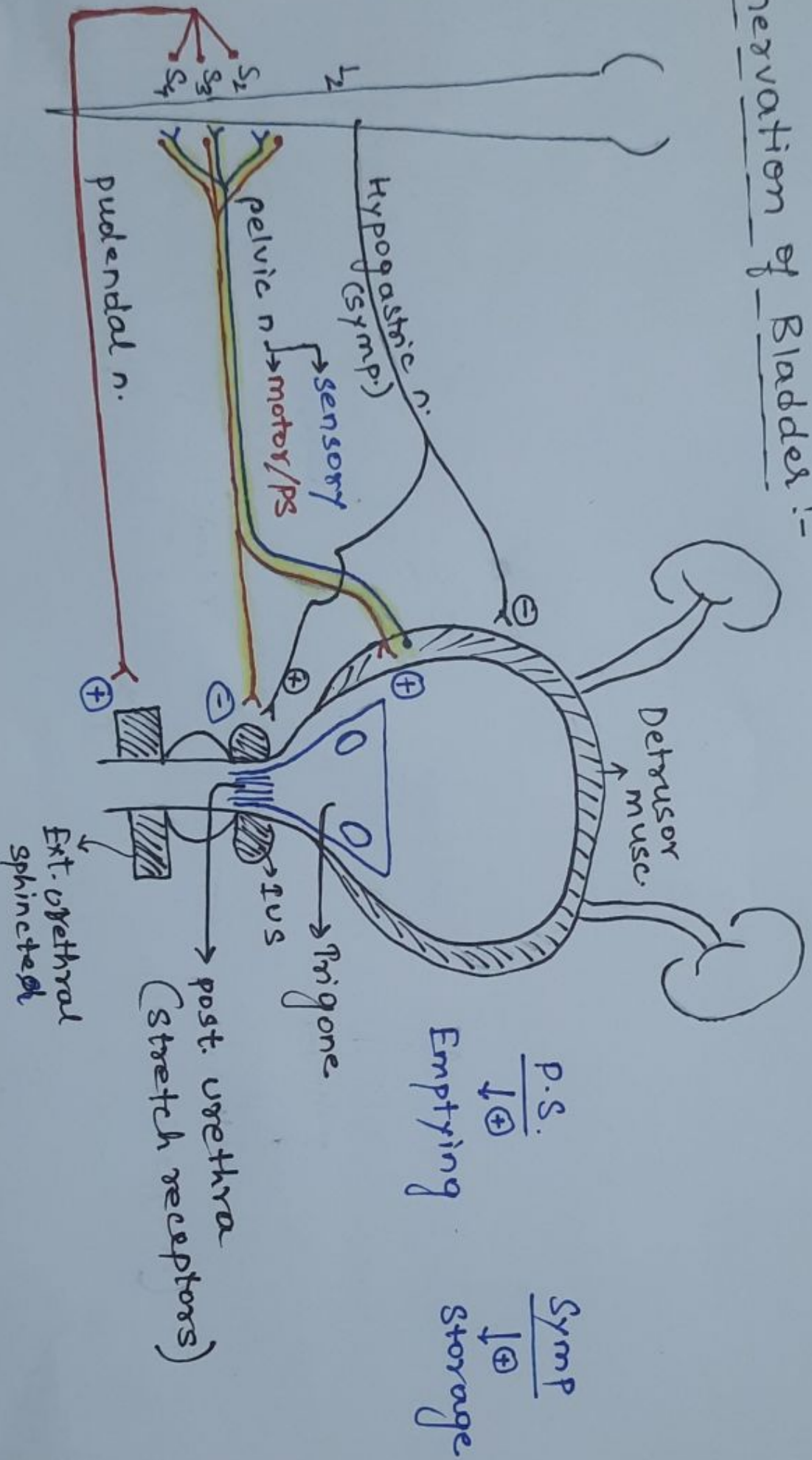


MICTURITION

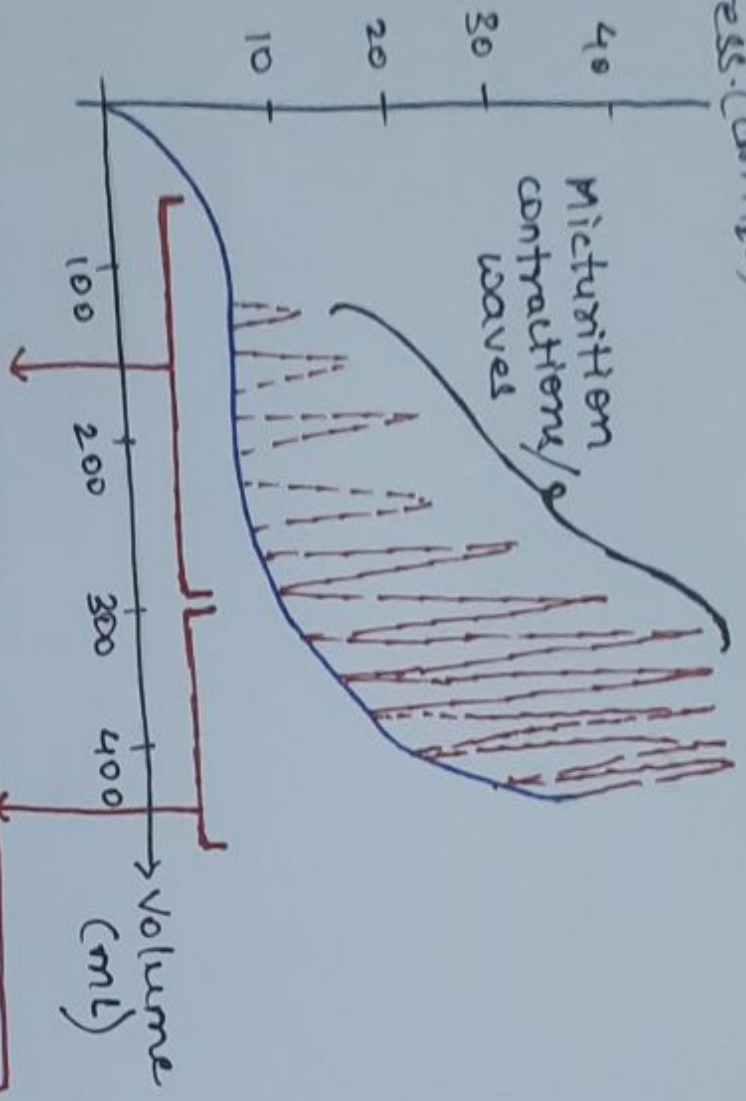
- process of emptying urinary bladder

Innervation of Bladder :-



Cystometrogram

Intravesical Press. (cm H₂O)

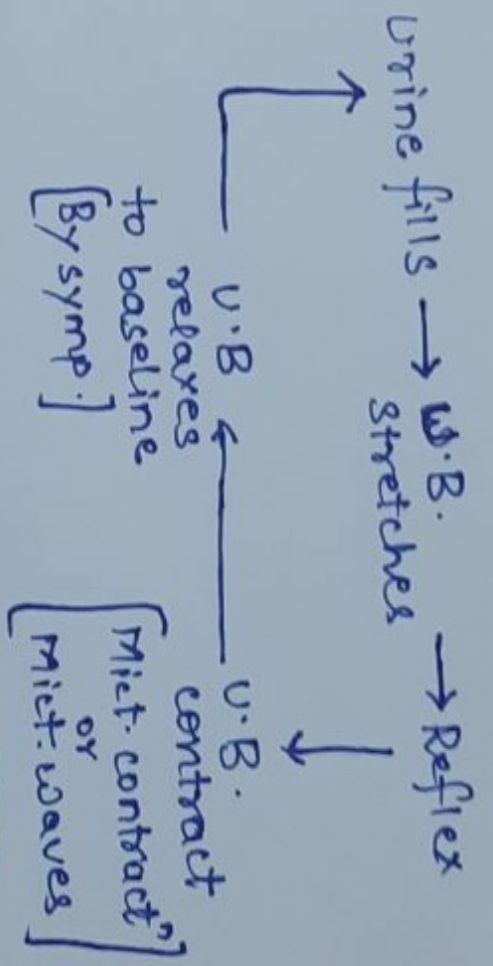


Volume ↑ges but Press ≈ const.

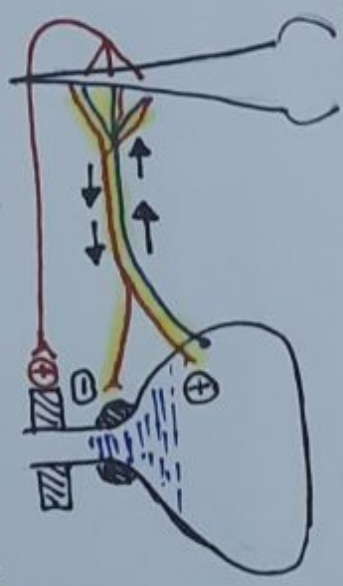
d/t intrinsic tone of bladder wall.

Volume ↑ges then Press ↑ges

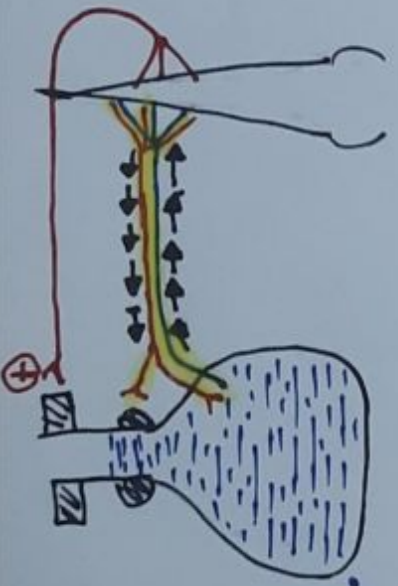
Threshold of intrinsic tone reached.

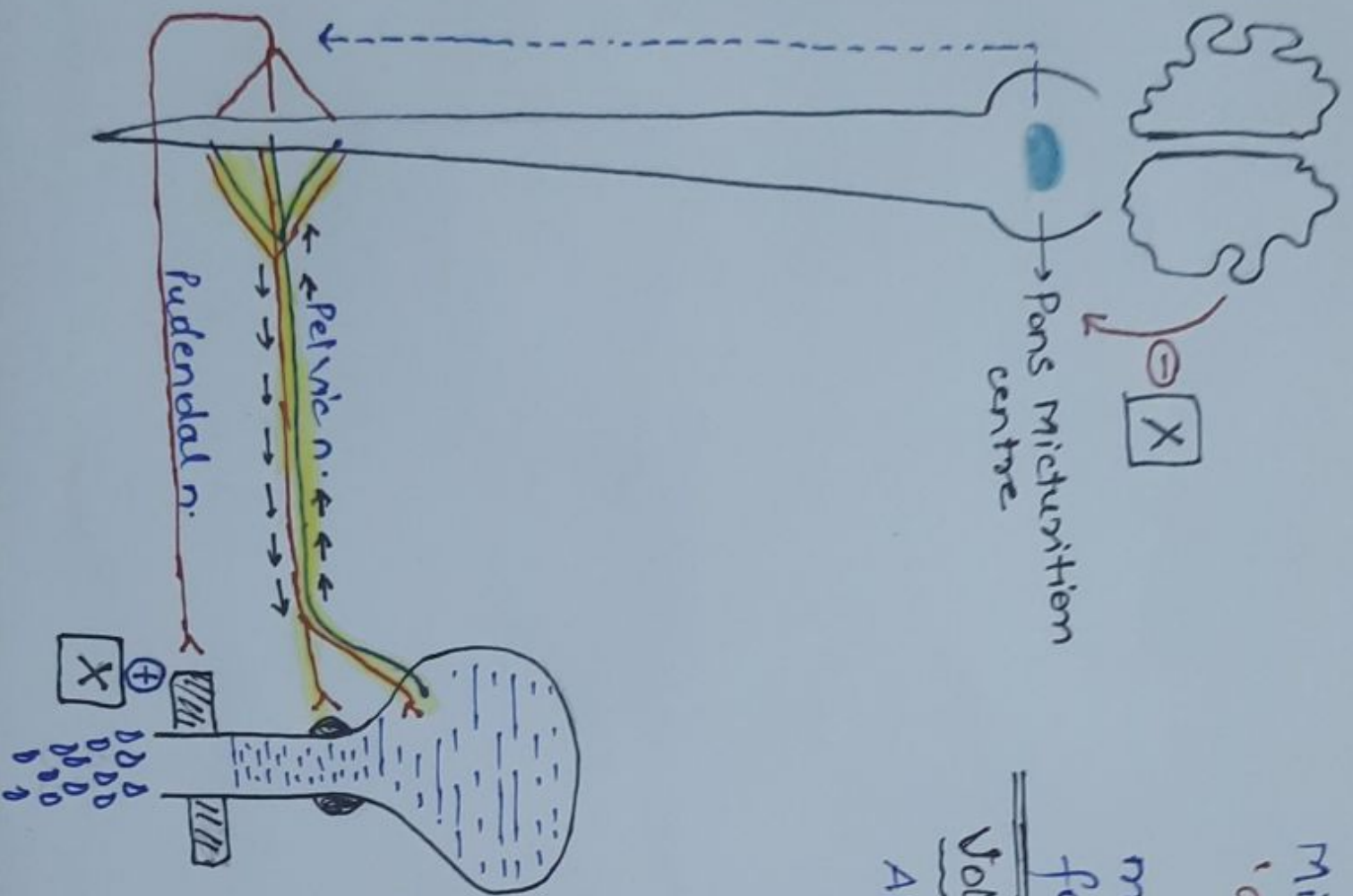


∴ Micturition reflex is 'self regenerative'



• freq. ↑
• intensity ↑





Micturition reflex is an 'autonomic spinal cord reflex' but micturition is inhibited or facilitated by 'brain'

Voluntary micturition:-

- Abdominal muscle contracts
- Bladder presses ↑
- More urine in post. urethra
- ↑ sed stretching
- ↓
- Micturition reflex
- ↓
- Brain decides to urinate by releasing inhibition from PMC
- ↓
- ⊖ of Pudendal n.
- ↓
- EUS relaxes
- ↓
- Voiding.

Abnormalities of micturition:-

Atonic bladder $\Rightarrow$ Sensory n. fibres damage

$\downarrow$
No micturition reflex

$\downarrow$
Bladder filling & overflow

$\downarrow$
'Overflow incontinence'

Automatic bladder $\Rightarrow$ S.C. above sacrum damaged

$\downarrow$
micturition reflex $\checkmark$

Inhibitory control of brain $\times$

} $\rightarrow$ frequent micturition.

Uninhibited neurogenic $\Rightarrow$ S.C./Brainstem damaged

$\downarrow$
micturition reflex $\checkmark$

Inhibitory control of brain $\times$

} $\rightarrow$ frequent & uncontrolled micturition