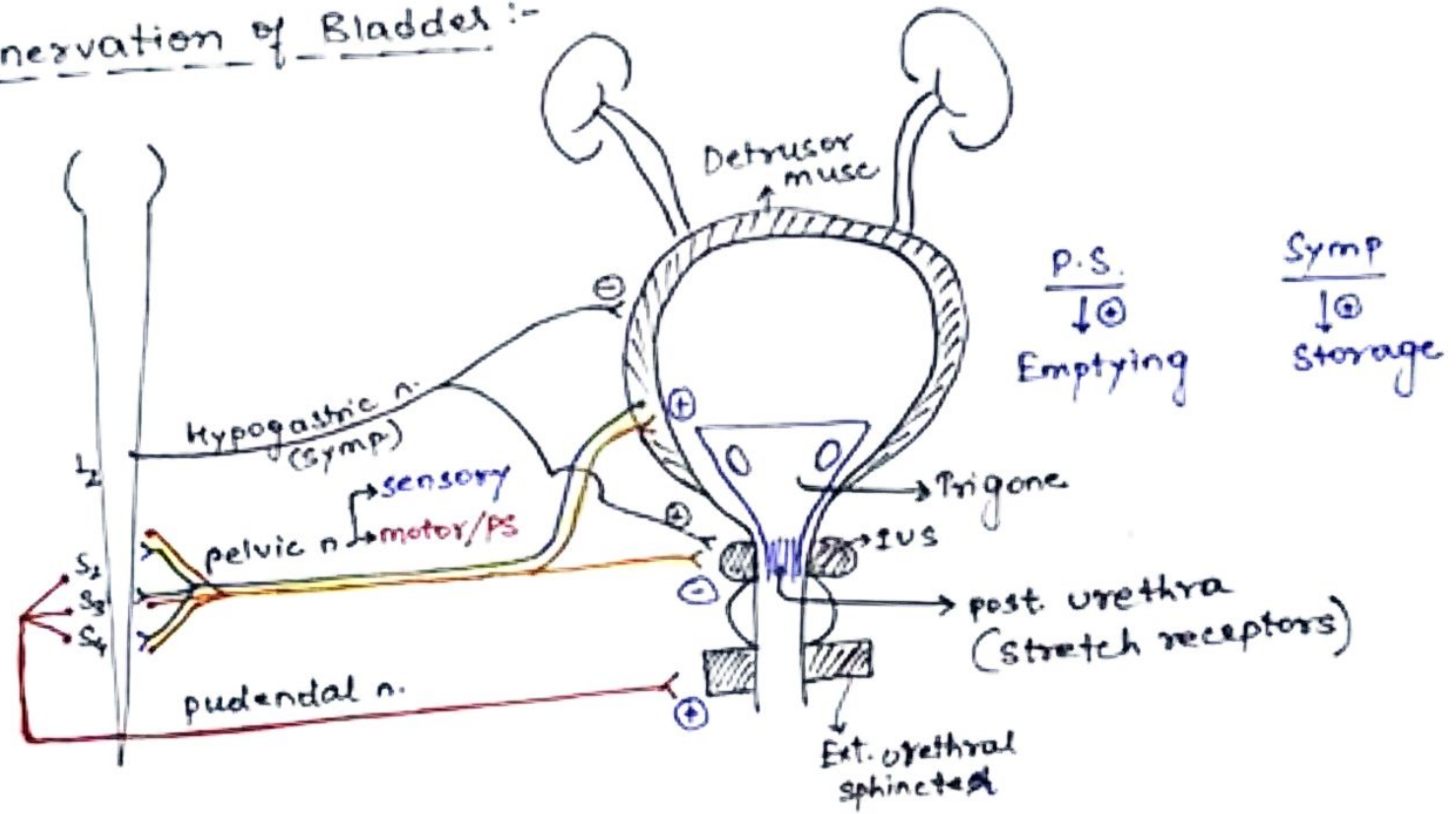


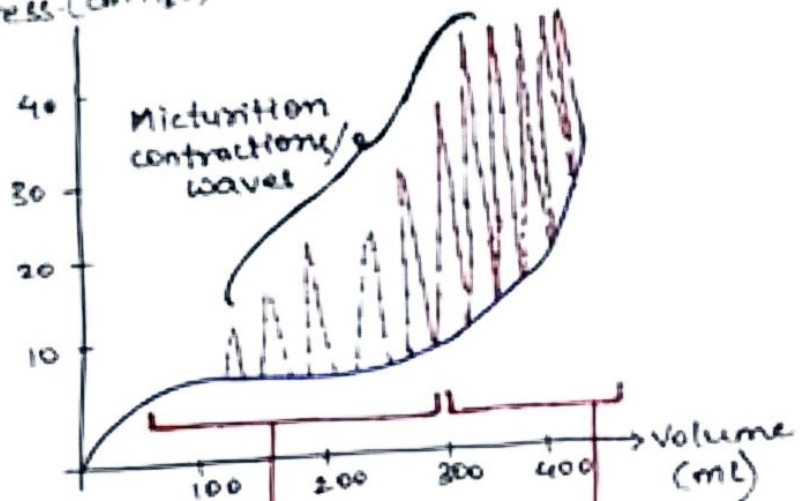
MICTURITION

- process of emptying urinary bladder

Innervation of Bladder :-



Intravesical Press. (cm H₂O) Cystometrogram

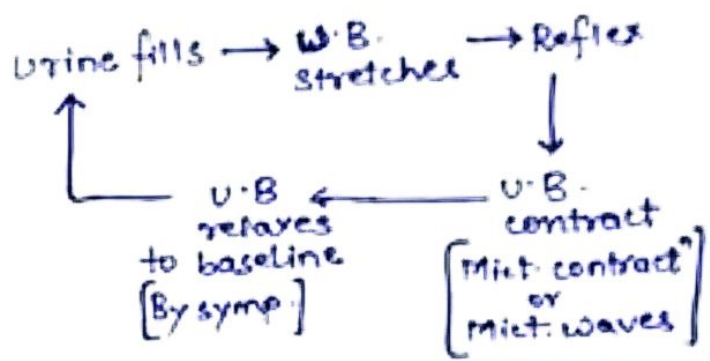


Volume ↑es
but
Press = constt.

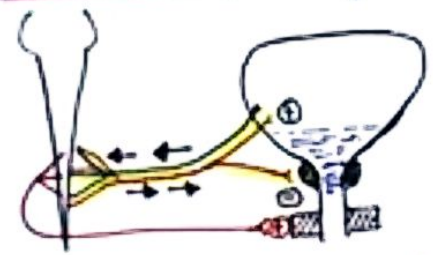
d/t Intrinsic tone of
bladder wall.

Volume ↑es
then
Press ↑↑es

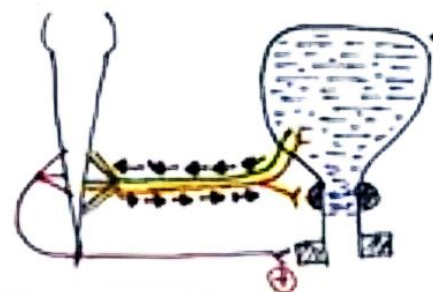
Threshold of
intrinsic tone
reached.

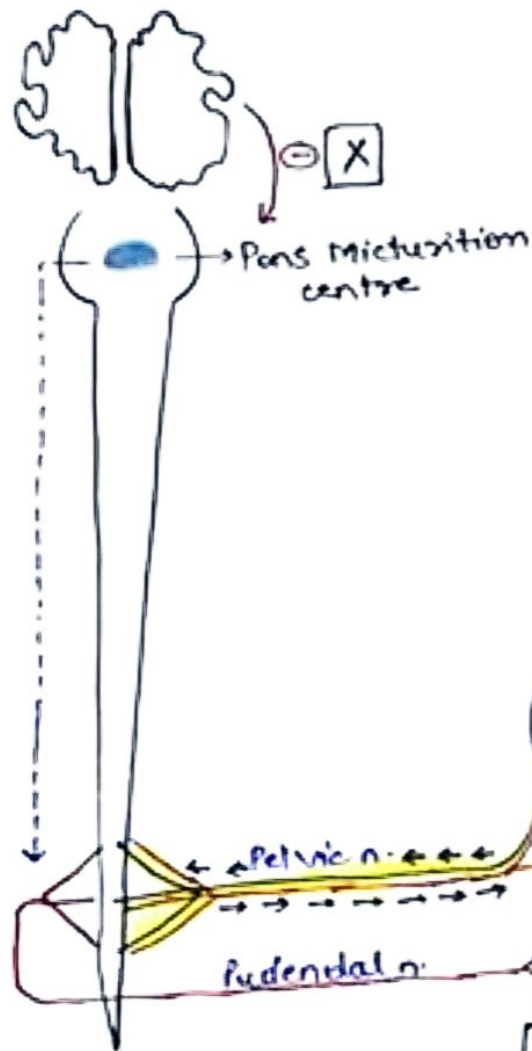


∴ Micturition reflex is
'self regenerative'



• freq. ↑
• intensity ↑





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

Voluntary urination:-

Abdominal muscle contracts
 ↓
 Bladder press ↑
 ↓
 More urine in post-urethra
 ↓
 ↑ed 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 X } \rightarrow frequent micturition.

Uninhibited neurogenic bladder \Rightarrow S.C./Brainstem damaged
 \downarrow
micturition reflex \checkmark
Inhibitory control of brain X } \rightarrow frequent & uncontrolled micturition