DETRUSOR ISTABILITY

Definition: is presence of spontaneous or provoked detrusor contractions during the filling phase when the patient is attempting to inhibit micturition



A etiology:

. idiopathic is most cases

. neurogenic is found in the presence of condition such as multiple sclerosis, spina bifida, and upper motor neuron lesion

. secondary to pelvic or incontinence surgery

. recurrent UTI

Clinical presentation

. frequency, urgency, urge incontinence, nocturia, nocturnal enuresis

. provocative factors often trigger it such as cold weather, hearing running water

. bladder contraction may also be provoked by increase intra-abdominal pressure leading to complaint of stress incontinence which may be misleading

. quality of life may be effected

Investigations

.GUE and urine culture

.frequency\volume chart

Typically increase diurnal frequency associated with urgency and episodes of urge incontinence , nocturia is common

.urodynamic

Characterized by involuntary detrusor contraction during the filling phase of micturition cycle, which may be spontaneous or provoked

. exclude metabolic causes like diabetes or physical causes like prolapse or faecal impaction and urinary pathology like UTI

Treatment

1.conservative measures

Reduce fluid intake ,stop caffeine and alcohol

2.bladder retraining

Based on the ability to suppress urinary urge and to extend the interval between voiding

3.Drugs :

.inhibit bladder contractility

Anticholinergic agent

.increase outlet resistance

Alpha adrenergic agonist

.decrease urine production

Antidiuretic hormone

.improve local tissue

Estrogen

4.surgery if all measure fail

Urinary diversion or bladder augmentation

URINARY FISTULAE

Definition :is an abnormal opening between the urinary tract and outside

Types :vesicovaginal

Uretrovaginal

Urethrovaginal

Vesicocervical

Causes

1.obstetrics causes

Prolonged obstructed labor which leads to ischemic vascular injury from the compression of the soft tissue between the fetal head and maternal pelvis .ischemic tissue necrosis leads to development of genitourinary fistula in the puerperium usually after 7 – 10 days

.instrumental delivery

.during caesarean section

Most obstetrics fistulae are vesicovaginal



2.operative injury

Abdominal or vaginal hysterectomy

Repair of prolapse

Pelvic tumor

Most gynecological fistulae is ureterovaginal

3.accidents

4.malignancy

5.radiotherapy

Clinical features and diagnosis

.continuous leakage of urine both day and night .if the patient never needs to void ,it signifies that the fistula communicates with the bladder .if ,however the bladder fills and empties as well, it suggests afistula into one ureter is most probable cause .

. discomfort and excoriation in the genital region as the urine irritates the skin

.if the fistula is relatively small then a woman may just complain of increase vaginal discharge .

.three swab test (methylene blue test )

Inject the methylene blue dye into the bladder by using foleys catheter after putting three cotton swab into the vagina

If lower one stain blue –urethrovaginal

If middle one stain blue –vesicovaginal

If non but upper one is wet –uretric fistula



.every case needs investigation to determine the exact position of the fistula ,and the

 anatomy and function of the rest of the urinary tract .

.the minimum requirement are examination of the urine ,pyelography ,cystoscopy and renal function tests

.menouria occur in uterovasical fistula ,presented with haematura at time of menstruation ,the patient remaining free from urinary incontinence .the fistula can be demonstrated by hystrography but not by cystography .

Treatment

Conservative :bladder rest by catheterization for one month

Surgery

After three months to give time for tissue oedema and inflammation to subside

.vesicovaginal fistula: dissect the region and separate the bladder from the vagina and then suture the opening in the bladder and vagina with placing intervening tissue like omentum in between to avoid recurrence

.ureteric fistula :anastomosis

Re implantation

Diversion

SELF ASSESSMENT

 1.the commonest type of incontinence associated with anterior vaginal wall prolapse is detrusor instability

2.Burch colposusspension is one of successful treatment of stress incontinence

3.the cystoscopy is mandatory before any surgery for stress incontinence

4.the maximum bladder capacity is 600ml so never accommodate larger volume of urine

5.detrussor instability usually treated by surgery

6.uretrovaginal fistulae never occur from obstetric

 causes

7.retension overflow is usually treated by bladder rest (catheterization) and bladder retraining with or without urethral dilation

8.the main presentation of vesicovaginal fistulae is hematuria

9.once fistulae are diagnosed immediate surgery is mandatary

10.fistulae have minimal recurrent rate after surgery