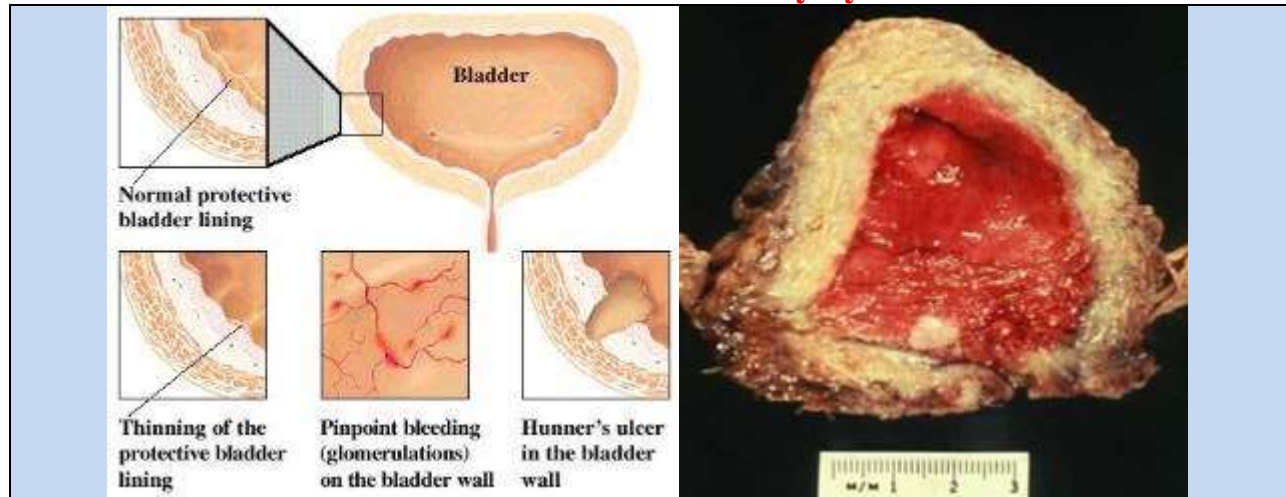


XIX. Diseases of the Urinary System



Congestion

Urinary bladder:	Shows congestion Is reddish Has thickened walls
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N.B.:

Congestion of the bladder may be an early feature of cystitis.

Predisposing causes of cystitis:

1. Injury to bladder :

- (a) Pelvic operations.
- (b) Hysterectomy.
- (c) Fracture-pelvis.
- (d) Foreign bodies (calculus or tumour).

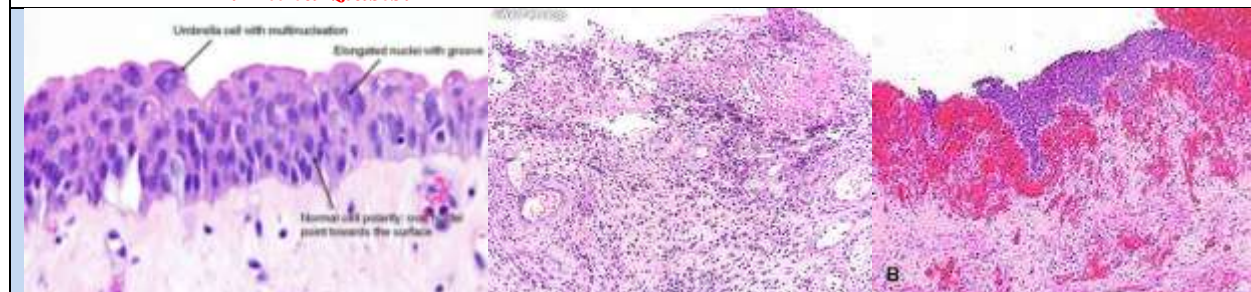
2. Retention of urine:

- (a) Stricture.
- (b) Enlarged prostate.
- (c) Carcinoma.
- (d) Paralysis of bladder (tabes dorsalis or injury to spinal cord).
- (e) Nervous conditions.

3. Infection :

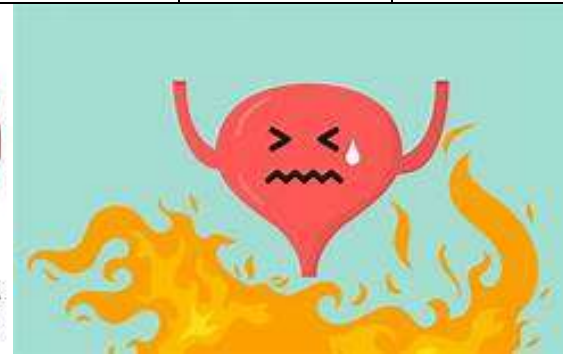
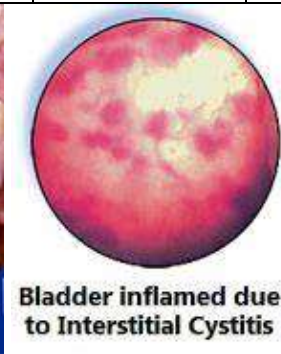
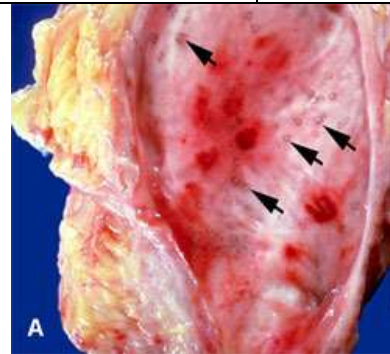
- Non-specific or specific.

4. Bilharziasis.



Acute Cystitis

Urinary bladder:	Mucosa:	<ul style="list-style-type: none"> • Oedematous and swollen • Hyperaemic and red haemorrhagic areas (or dots). • Areas of discolouration • Loss of glistening appearance • Granular non-velvety appearance of mucosa • Ulcerated (minute ulcers) • Evidence of muco-pus (greyish-yellowish-white) • Shreds of mucosa
	Walls:	<ul style="list-style-type: none"> • Thickened



N.B.1: Sources of infection:

1. **Kidney (in most cases).**
2. **Urethra:**
 - Extension of posterior urethritis.
 - Passage of dirty instruments or catheters.
3. **Neighbouring organs:**
 - Pelvic inflammation in women.
 - Appendicitis.
 - *Colitis (sigmoid colon).*
4. **Hematogenous (or lymphogenous) infection.**

N.B.2:

Types of acute cystitis:

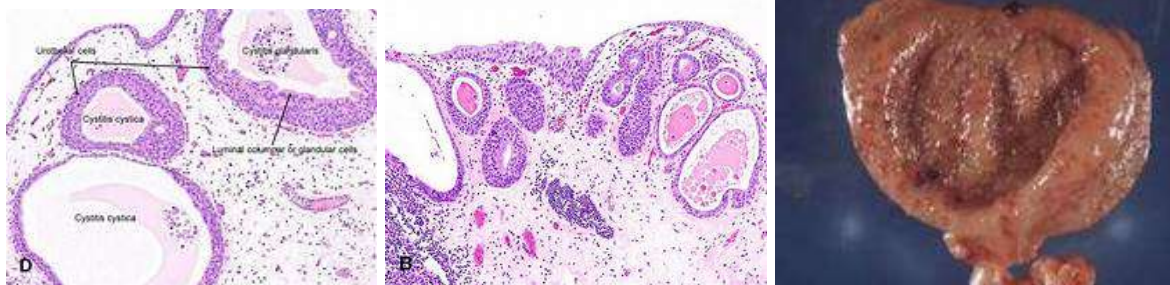
- (1) Haemorrhagic,
- (2) Suppurative,
- (3) Ulcerative,
- (4) Pseudo-membranous,
- (5) Bullous,
- (6) Irradiation and
- (7) Gangrenous.

Clinically,

- **Local symptoms** (frequent painful micturition and pain in the bladder-region) and
- **General features** (chills, fever and malaise),

Chronic Cystitis

Urinary bladder:	<ul style="list-style-type: none"> • Is small (reduced)
Size:	<ul style="list-style-type: none"> • Contracted • Thickened • Walls
Musculosa:	<ul style="list-style-type: none"> • Thickened in parts • Fibrosed
Mucosa:	<ul style="list-style-type: none"> • Patches of slight congestion • Loss of smooth pink appearance • Rough and dull • Ulcerated in parts and oedematous in other parts • Occasional cystic cavities: <ul style="list-style-type: none"> ○ Minute in size ○ Filled with a clear fluid • Irregular ridges (trabeculae)



N.B.1:

When inflammation is marked and unassociated with retention →:

- (1) Thickening of wall → diminished elasticity
- (2) Reduction in the cavity of the bladder.

When inflammation is slight and is associated with marked retention → :

- (1) Atrophy of the wall.
- (2) Dilatation of the cavity.

N.B.2:

Types of chronic cystitis:

- (1) Bilharzial,
- (2) Non-specific,
- (3) Encrusted,
- (4) Interstitial (**Hunner's ulcer**),
- (5) Chronic cystitis cystica,
- (6) Tuberculous and
- (7) Chronic follicular.

URINARY TRACT INFECTION: (U.T.I.)

CYSTITIS:

FREQUENCY
URGENCY
SUPRAPUBIC PAIN
BURNING UPON
URINATION
HEMATURIA
FEVER
NAUSEA
VOMITING

PYELONEPHRITIS

FLANK PAIN
DYSURIA
PAIN AT COSTOVERTEBRAL
ANGLE
SAME S&S AS CYSTITIS

DX → DIPSTICK FOR
LEUKOCYTE ESTRACE
AND NITRATES
UA/C&S

TX: → ANTI-MICROBIALS
↑ FLUID INTAKE
PREVENTION



NURSING GOALS:

- * SYMPTOMATIC RELIEF
- * TEACHING & PREVENTION
- * SHOWERS BETTER THAN BATHS
- * PERINEAL CLEANSING
"FRONT TO BACK"
- * VOIDING \bar{p} INTERCOURSE
- * ANTI-MICROBIAL THERAPY
- * WHITE TOILET PAPER
- * NO PERFUMES, ETC.
TO PERINEAL AREA