

Women's Health

Clinical pharmacy
4th stage

Cystitis

- A collection of urinary symptoms including dysuria, frequency and urgency.
- The urine may be cloudy and strong smelling.
- The common bacteria are *Escherichia coli*, *Staphylococcus saprophyticus* and *Proteus mirabilis*.

Cystitis

- Cystitis is much more common in women than in men for two reasons:
 1. Cystitis occurs when bacteria pass up along the urethra and enter and multiply within the bladder. As the urethra is much shorter in females than in males, the passage of the bacteria is much easier. In addition, the process is facilitated by sexual intercourse.
 2. prostatic fluid has antibacterial properties, providing an additional defense against bacterial infection in males.

The causes of Cystitis

- Infection
- Diabetes.
- The irritant effects of toiletries
- Estrogen deficiency in postmenopausal women leads to thinning of the lining of the vagina. Lack of lubrication can mean the vagina and urethra are vulnerable to trauma and irritation and attacks of cystitis can occur.
- Drugs (cytotoxic drug (cyclophosphamide), and oral contraceptive pills).

Signs and symptoms

- Itching or pricking sensation in the urethra.
- Frequency and urgently.
- Dysuria.
- After urination, the bladder may not feel completely empty.
- The urine may be cloudy and strong smelling; these may be signs of bacterial infection.
- Suprapubic (lower abdominal) pain and tenderness.
- hematuria (should be referring to doctor).

Management

1. Drinking large quantities of fluids.
2. During urination the bladder should be emptied completely by waiting for 20 s after passing urine and then straining to empty the final drops.
3. After a bowel motion wiping toilet paper from front to back may minimize transfer of bacteria from the bowel into the vagina and urethra.
4. Urination immediately after sexual intercourse will theoretically flush out most bacteria from the urethra.

Management

5. Reduced intake of coffee and alcohol .
6. Cranberry juice.
7. For pain relief, offer paracetamol or ibuprofen for up to 2 days. A high temperature will also be reduced.
8. Alkalization of the urine by Potassium and sodium citrate can relief dysuria.
9. Antibiotic prescribe only when sensitive test is available like Trimethoprim and Nitrofurantoin and Azithromycin for chlamydial infection.

Vaginal thrush

- is common disorder in women due to:
 - A. Vaginal pH is generally acidic (low pH) and contains glycogen.
 - B. Estrogen, responsible for the availability of glycogen in the vagina and also contributes to the development of a protective barrier layer on the walls of the vagina.

The causes of vaginal thrush

- Pregnancy.
- Diabetes .
- Sexually transmitted diseases.
- Oral steroid.
- Immunocompromised patients.
- Drug like oral contraceptive pill, antibiotic, and Local anesthetics.

Signs and symptoms

- Itch (pruritus)
- Discharge (classically cream-colored, thick and curdy in appearance) while bacterial infection discharge appearance (yellow or greenish- colored, watery, unpleasant odor).
- Dysuria.
- Dyspareunia.

Management

- Both woman with vaginal thrush and her husband should be treated at the same time due to husband remain asymptomatic.
- Women who are prone to attacks of thrush may find that avoiding nylon underwear and tights and using cotton underwear instead may help to prevent future attacks.
- Avoid soaps, foam paths and douches as possible as.
- Since Candida can be transferred from the bowel when wiping the anus after a bowel movement, wiping from front to back should help to prevent this.

Management

- Live yoghurt contains lactobacilli, which are said to alter the vaginal environment, making it more difficult for *Candida* to grow. It can be taken orally or locally vaginal application.
- Single-dose intravaginal and oral azole preparations are effective in treating vaginal candidiasis like single oral fluconazole cap weekly and topical Miconazole or Clotrimazole vaginal cream twice daily or suppository at night.

Management

- Side-effects of oral fluconazole are usually mild and transient include nausea, abdominal discomfort, flatulence and diarrhea. Oral fluconazole should not be recommended during pregnancy or for nursing mothers because it is excreted in breast milk.

Dysmenorrhea

- It is severe painful cramping in the lower abdomen before or during menses. It is subdivided in primary and secondary dysmenorrhea.
- **Primary dysmenorrhea:** Are a uterine problem and predominantly a complaint of young women between the ages of 17 and 25 years.
- **Secondary dysmenorrhea:** is occurred secondary to some underlying pelvic pathology such as endometriosis or pelvic inflammatory disease aged over 30 years.

Risk factor

1. Age (common in young age).
2. Smoking and parity (reduce in parous women).
3. Weight.
4. Length of menstrual cycle.

Pathology

Local hormone imbalance (mainly PG, endothelins, vasoactive peptides (produced in the endometrium which have roles in the local regulation of PG synthesis), and vasopressin) stimulate uterine activity and reduce blood flow lead to stimulation and vasoconstriction. Thus, increase myometrial contractility and myometrial ischemia and then pain (start on 1st day of menses and continue beyond day 1 or 2 of the cycle) and some GIT symptoms (N, V, and D).

Management

1. Exercise during menstruation may well be beneficial since it raises endorphin levels, reducing pain and promoting a feeling of well-being.
2. Eating a low-fat, high-carbohydrate diet reduces breast pain and tenderness.
3. Locally applied low-level heat may also help pain relief.
4. Pyridoxine alone and combined with magnesium showed some benefit in reducing pain.

Management

5. Increase intake of diet containing more omega -3 fatty acids (due to eicosapentaenoic acid is substrate for PG synthesis with less potent stimulators and vasoconstrictors).
6. Drinking of coffee, tea, and other contain caffeine.
7. Hyoscine, (a smooth muscle relaxant)
8. NSAIDs (Ibuprofen, diclofenac and naproxen) can be considered the treatment of choice for dysmenorrhoea.

Emergency hormonal contraception

- EHC is necessary for failure of a barrier contraceptive method (e.g. condom that splits), missed contraceptive pill(s) and unprotected sexual intercourse (UPSI).
- Pharmacy can be given EHC for woman age over 16 years and necessary to ask woman to do pregnancy test.
- EHC needs to be started within 72 h of unprotected intercourse. If unprotected sex took place between 72 h and 5 days ago, the woman can be referred to have an intrauterine device (IUD) fitted as a method of emergency contraception.

Emergency hormonal contraception

- Medicines that induce specific liver enzymes have the potential to increase the metabolism of levonorgestrel and thus to reduce its efficacy. Women taking the following medicines should be referred to an alternative source of supply of EHC:
 1. Anticonvulsants (carbamazepine, phenytoin, primidone, phenobarbital (phenobarbitone))
 2. Rifampicin and rifabutin
 3. Ritonavir
 4. St John's wort.
 5. Ciclosporin (the progestogen inhibits the metabolism of ciclosporin and increases levels of the latter).

Emergency hormonal contraception

- Levonorgestrel EHC is taken as a dose of one 1.5-mg tablet as soon as possible after unprotected intercourse.

Thank you

For listening