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1. The different disorders of the prostate gland includes;
2. **PROSTATITIS**

 It is an acute inflammation of the prostate gland classified as bacterial prostatitis (acute or chronic) and non-bacteria prostatitis. In most cases, the cause of prostatitis is unknown. Bacterial prostatitis responds well to antibiotic drugs that can get into the prostrate. Nonbacterial prostatitis is the most common form of prostatitis and is more difficult to manage

 **PATHOPHYSIOLOGY**

1. From reflux of infected urine into ejaculatory and prostrate ducts
2. From haemotogenous origin or lymphogenous spead.
3. Secondary to urethritis ascent of bacterial from urethra.
4. Urethral instrumentation or rectal examination of the prostrate when bacteria are present.

 **Clinical features**

1) Sudden chill and fever

2) Bladder irritability ; frequency, dysuria, nocturia, urgency, and haematuria.

3) Pain in perineum, rectum lower back and lower abdomen.

4) Pain after ejaculation.

B) **Benign Prostrate Hypertrophy**

 This is an enlargement of the prostate gland that constricts the urethra causing urinary symptoms. It is common among men above 50 years of age. The enlargement of the prostate gland causes the urethra to narrow and puts pressure on the base of the bladder. This can lead to obstruction in the flow of urine. Obstruction of urine can cause retention of urine causing acute urinary retention (this is usually painful and is relieved by inserting a catheter to release the urine).

 **PATHOPHYSIOLOGY**

 The aging effect leads to decrease production of androgen and increase production of androgen and increase production of estrogen. Androgen estrogen imbalance causes overgrowth of normal cells around the urethra causing obstruction of urine flow. There is urinary retention, statis, incomplete bladder emptying and infection develops.

 **CLINICAL FEATURES**

1. Obstructive symptoms: Hesistancy, terminal dribbling, urinary retention.
2. Irritative voiding symptoms: Urgency,, frequency, or micturition.
3. Sensation of incomplete emptying of bladder.
4. Other symptoms include; fatigue, anorexia, nausea and vomiting, dysuria.

1. **Prostate cancer:**

 Prostate cancer is cancer that occurs in the prostrate. A small walnut shaped gland in men that produces the seminal fluid that nourishes and transports sperm. In the early stages, the cancer cells are confined in the prostate gland. With the more aggressive type of prostate cancer, cancer cells enter the lymphatic and vascular systems early and to other parts of the body where they develop secondary tumors, particularly in the bones.

  **PATHOPHYSIOLOGY**

Prostate cancer is an adenocarcinoma as it develops primarily from the glandular patterns on microscopic examination. The cancer cells grow and begin to multiply, initially spreading prostrate tissue forming a tumor nodule.

 **CLINICAL FEATURES**

1. Difficult urination such as trouble starting the flow of urine
2. The urge to urinate often, particularly at night.
3. Painful urination
4. Blood in the urine

2a) **Aetiologies Of Prostatitis includes;**

1. It can be caused by a bacteria that leak into the prostate gland from the urinary tract and from direct extension or lymphatic spread from the rectum
2. It can also result from various sexually transmitted organisms such as Neisseria gonorrhea, Chlamydia trachomatis or HIV.
3. Other organisms responsible for infection are the same found most frequently in urinary tract infections, such as Escherichia coli.
4. Enlarged prostate glands
5. Dehydration
6. Engaging in rectal intercourse.

2b) **Aetiologies of Benign Prostrate Hypertrophy includes;**

1. Bladder or kidney stones
2. Prostatitis
3. Urinary tract infection
4. Urethral strictures

2c) **Aetiologies of prostate cancer includes;**

1. Occurs when some cells in the prostrate grow and divide more rapidly than normal cells do and accumulate and form a tumor that can grow to invade nearby tissue.
2. DNA mutations that keep oncogenes turned on, or that turn off tumor suppressor genes.

3a} **Therapeutic Intervention For A Patient Who Has Prostatitis Includes**;

1. An antibiotic is used to treat prostatitis that is caused by an infection. Some antibiotics that might be used are ciprofloxacin, norfloxacin and ofloxin.
2. Drugs called alpha adrenergic blockers help to relax the muscles of the prostate gland.
3. Aspirin, ibuprofen, and other nonsteroidal inflammatory drugs which may relieve symptoms.

 **Surgeries that may be performed for a patient who has prostatitis includes;**

1. **Transurethral resection of the prostrate;**

This is the most common surgery to treat prostatitis. The doctor removes portions of the prostrate that are affecting urine flow. There is no cutting and no external scars are seen since a scope is inserted through the urethra to remove the excess tissue.

1. **Open prostatectomy;**

This is the surgical removal of the prostate gland. It is done under a general or spinal anesthetic. Usually, an incision is made through the lower abdomen or between the rectum and the base of the penis and the surgeon makes a cut and takes out the enlarged tissue from the prostrate.

1. **Laparoscopic and Robotic prostatectomy:**

 This differs from traditional open surgery by making four incision as opposed to one large one to perform surgery to remove the enlarged tissue of the prostrate.

1. **Laser surgery:**

The doctor uses laser energy to kill off prostrate tissue and shrink the gland. Laser procedures usually give the patient symptom relief and better urinary flow similar to TURP. However, some laser therapies may have side effects and also reduce the risk of bleeding.

**Patient Who Has Benign Prostrate Hypertrophy Includes;**

1. Drug therapy (eg,alpha blockers eg alfuzosin, cardura etc, 5 alpha reductase inhibitors) for patients with bothersome, moderate to severe lower urinary tract symptoms. These drugs help to relax muscles of the prostrate and neck of the bladder to relieve symptoms.
2. Watchful waiting.

 **Surgeries that may be performed for a patient who has benign hypertrophy prostrate includes;**

1. **Transurethral incision of the prostrate:**

It is commonly used in men with smaller prostate glands and instead of cutting them and removing tissue with a resectoscope, small incisions are made in the prostrate as well as where the urethra meets the bladder. This widens the urethra, making urination easier and removing some of the pressure of the prostrate on the urethra, making it easier to urinate. Side effects may include incontinence, dry orgasm and erectile dysfunction.

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3c) **Therapeutic Intervention For A Patient Who Has Prostrate Cancer includes;**

1. A combination of radiation therapy and androgen deprivation therapy. It is the best treatment for older men. There are different types of radiation therapy and they include; external beam radiation, brachytherapy, LDR brachytherapy, HDR brachytherapy.
2. Observation and active surveillance.
3. Chemotherapy
4. Hormone therapy

 **Surgeries That Maybe Performed for A Patient With Prostrate Cancer Includes:**

1. **Radical retropubic prostatectomy:**

 This is an open surgery and the doctor makes and incision in the lower abdomen, from the belly button down to the pubic bone. Patient would be under general anesthesia or epidural anesthesia along with sedation during surgery. After the prostrate is removed, a catheter will be put in the penis to help drain the bladder and will stay in place for atmost’’ 2 weeks.

1. **Radical perineal prostatectomy:**

 It is an open operation and the surgeon makes the cut in the skin between the anus and scrotum. It is often a sorter operation and might be an option when the patient does not care about erections and doesn’t mind lymph nodes removed. After surgery, the patient is put under anesthesia and the catheter is fixed and stays there for at most 2 weeks.

1. **Open prostatectomy;**

This is the surgical removal of the prostate gland. It is done under a general or spinal anesthetic. Usually, an incision is made through the lower abdomen or between the rectum and the base of the penis and the surgeon makes a cut and takes out the enlarged tissue from the prostrate.

1. **Laparoscopic and Robotic prostatectomy:**

This differs from traditional open surgery by making four incision as opposed to one large one to perform surgery to remove the enlarged tissue of the prostrate.

4A) **NURSING CARE AND HEALTH EDUCATION FOR A PATIENT WHO HAS BENIGN PROSTRATE HYPERTROPHY**

1. Explain the symptoms and complication of BPH (a) Urinary retention ((b) Cystitis (c) Increase in irritative voiding symptoms by encouraging patient to report the symptoms.
2. Teach patient to do Kegel (Perineal exercise) after surgery to help gain control of voiding.
3. Contract perineal muscle for 10-15 secs, then relax. Repeat 15 times.
4. Do 15 sets per day.
5. Advice and tell patient to avoid sexual intercourse, straining at stool, heavy lifting and long periods of sitting for 6 to 8 weeks after surgery until Prostatic fossa is healed.
6. Advice follow-up visits as urethra stricture may occur and regrowth of prostate is possible.
7. Monitor vital signs

4b) **Nursing care and health education for a patient who has prostatitis;**

1. Obtain history of previous urinary tract infection, sexually transmitted infections or voiding pattern.
2. Collect specimens of urine for culture and prostatic secretions.
3. Start as prescribed antibiotics therapy according to results of culture and sensitivity.
4. Tepid sponge and administer antipyretic when necessary.
5. Keep patient well hydrated but avoid overhydration
6. Administer analgesic and anti-inflammatory drugs as prescribed.
7. Maintain bed rest to relief perineal and suprapubic pain.
8. Health educate on the importance of completing the course of the treatment.
9. Instruct on sitz bath 10-20 minutes daily.
10. Void sitting for long periods of time. Advice to avoid sexual intercourse/arousal may be beneficial till cleared.
11. Encourage follow-up because reoccurrence is possible.
12. Monitor vital signs

4C) **NURSING HEALTH CARE AND MANAGEMENT FOR A PATIENT WHO HAS PROSTRATE CANCER;**

1. Monitor vital signs closely
2. Encourage patient to void 2 to 4 hour and when suddenly felt.
3. Assess patient nutritional status.
4. Encourage the patient to eat small amounts frequently.
5. Perform ambulation with dependent drainage bag.
6. Maintain a sterile catheter and provide catheter car.
7. Observation of wound drainage around suprapubic catheter.