Structural Abnormalities

**Cryptorchidism**
- Testes undescended; empty scrotum
- Lie in inguinal canal, abdominal cavity
- Unknown cause; asymptomatic
- Impact on sperm production, fertility
- Risk for testicular cancer
- Treatment: Androgen therapy; orchiopexy
- Nursing management: Pre- and postoperative care
- Client teaching: Testicular self-examination

**Torsion of the Spermatic Cord**
- Twisted spermatic cord; artery kinked; compromised blood flow to testicle
- Spermatic cords congenitally unsupported
- Signs and symptoms: Sudden, sharp testicular pain; local swelling; nausea, vomiting, chills, and fever
- Diagnosis: Physical examination
- Treatment: Immediate surgery
- Nurse’s role: Pain relief; scrotal support; medication; pre- and postoperative care
**Structural Abnormalities**

- **Phimosis and Paraphimosis**
  - Occur among uncircumcised males
  - Opening of the foreskin is constricted
  - Signs and symptoms
    - Pain with erection and intercourse
    - Difficulty cleaning under foreskin
    - Painful swelling of glans
    - Edema; urinary retention
  - Treatment
    - Circumcision; hygiene

- **Hydrocele, Spermatocoele, and Varicocele**
  - Swelling of the scrotum
  - Hydrocele and spermatocoele: No treatment
  - Varicocele: Surgically repaired; cause of male infertility

**Infectious and Inflammatory Conditions**

- **Prostatitis**
  - Inflammation of the prostate gland
  - *Escherichia coli*; microbes that cause STDs; psychosexual problem
  - Signs and symptoms
    - Glandular swelling; tenderness
    - Perineal pain; unusual sensation prior to or after ejaculation
    - Low back pain; fever
    - Chills; dysuria; urethral discharge
Infectious and Inflammatory Conditions

**Prostatitis**
- Treatment
  - Antibiotic therapy; analgesics; sitz baths
- Nursing management: Client teaching
  - Treatment: Client; sexual partners
- Avoid caffeine; prolonged sitting; constipation
- Prostate gland drainage: Masturbation; intercourse
- Medication: Compliance; pain relief

Infectious and Inflammatory Conditions

**Epididymitis and Orchitis**
- May occur alone or simultaneously
- Causes
  - Infectious agent causing prostatitis
  - Infection in body
  - Noninfectious epididymitis: Long-term indwelling catheter; genitourinary procedures
- Orchitis: Viral mumps after puberty
- Bilateral epididymitis

Infectious and Inflammatory Conditions

**Epididymitis and Orchitis**
- Signs and symptoms
  - Pain and swelling in inguinal area and scrotum; fever; chills
  - Physical examination
- Treatment
  - Bed rest; scrotal elevation; local cold applications; analgesics
  - Anti-inflammatory agents; antibiotic therapy; epididymectomy
Infectious and Inflammatory Conditions

- **Epididymitis and Orchitis**
  - Nursing management
    - Pain relief measures; fluid intake
    - Client teaching
      - Home care treatments: Sitz baths; local heat application
      - Limitation in activity: Lifting; sexual intercourse
    - Medication
    - Immunization

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Erection Disorders: Erectile Dysfunction

- **Pathophysiology and Etiology**
  - Ineffective neurologic stimulation, arterial blood flow, or trapping of venous blood
  - Physical and psychological origins
- **Assessment Findings**
  - Signs and symptoms
    - Difficulty in achieving or maintaining an erection; insufficient rigidity
  - Diagnostic findings
    - Nocturnal penile tumescence and rigidity test; vascular ultrasound studies

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Erection Disorders: Erectile Dysfunction

- **Medical and Surgical Management**
  - Change in drugs that cause impotence
  - Drug therapy; treatments to facilitate penile engorgement
  - Vascular surgery; penile implants
- **Nursing Management**
  - Client teaching
    - Vasodilator self-injection: Techniques; frequency; side effects
    - Penile implants: Assessment; self-care
    - Possible complications after discharge
Erection Disorders: Priapism

- **Priapism**
  - Persistent erection without sexual stimulation
  - Etiology: Vascular problem; medical condition; side effect of medication
  - Symptoms: Discomfort; interference with arterial blood flow and urinary elimination; tissue damage
  - Treatment: Vasoconstrictive medications; draining trapped blood; emergency surgery
  - Emotional support

Erection Disorders: Benign Prostatic Hyperplasia

- **Pathophysiology and Etiology**
  - Increased number of cells in prostate
  - Decreasing diameter of the prostatic section of the urethra

- **Assessment Findings**
  - Signs and symptoms
    - Gradual onset; difficulty urinating and emptying bladder; nocturia; urgency
  - Diagnostic findings
    - DRE; cystoscopy; IVP; blood chemistry tests; PSA; transrectal ultrasound

Erection Disorders: Benign Prostatic Hyperplasia

- **Medical and Surgical Management**
  - Monitoring with DREs
  - Drug therapy; alternative therapy
  - Surgical procedures: TURP; TUIP; TULIP; TUNA; prostatectomy

- **Nursing Management**
  - Teaching: Optimal bladder emptying
  - Clients undergoing surgery: Support; information; deep breathing; leg exercises; catheterization; CBI; pre- and postoperative care
Malignancies of the Male Reproductive System: Cancer of the Prostate

- **Pathophysiology and Etiology**
  - Increased testosterone; high-fat diet; family history
  - Occurs in periphery of the gland; GU symptoms; untreated cells spread by bloodstream and lymphatics

- **Assessment Findings**
  - Signs and symptoms: Frequent urination; nocturia; dysuria; hematuria; hemospermia; erectile dysfunction; back pain, pain down leg—metastasis

- **Assessment Findings**
  - Diagnostic findings: Rectal examination; PSA; transrectal ultrasound; radiographs; MRI; CT; IVP; elevated serum acid phosphatase

- **Medical and Surgical Management**
  - Screening: At age 40 for men with family history of early-age prostate cancer
  - Treatment: Observation, surgery, radiation, hormone therapy, or combination

- **Medical and Surgical Management**
  - Surgery
    - Suprapubic prostatectomy; radical prostatectomy; bilateral orchidectomy; potential complications
  - Radiation therapy
    - Used alone or with other therapies; side effects
  - Hormone therapy
    - Men with D stage carcinoma; antiandrogenic or estrogenic drugs; feminizing side effects
Nursing Process: The Client With Prostatic Cancer

- **Assessment**
  - History
    - **Health:** Changes in urinary elimination, hematuria, and low back pain
    - **Family:** Prostatic cancer
  - After surgical treatment
    - Signs of infection
    - Urinary incontinence
    - Sexual dysfunction

Nursing Process: The Client With Prostatic Cancer

- **Diagnosis, Planning, and Interventions**
  - Risks: Infection; total urinary incontinence; sexual dysfunction; impotence; metastasis; client teaching

- **Evaluation of Expected Outcomes**
  - No infection; urinary continence; sexual expression; monitor for recurrence of primary cancer and metastasis
  - Discharge plan of care: Medication; diet; support group; consult physician before taking herbal supplements

Malignancies of the Male Reproductive System: Cancer of the Testes

- **Pathophysiology and Etiology**
  - Cryptorchidism
  - Early degeneration of cells in undescended testis or testes; abnormal cellular changes
  - Seminomas; nonseminomas

- **Assessment Findings**
  - Scrotal swelling; hard, nontender nodule; abdominal pain; general weakness; aching in the testes
  - Tumor markers; IVP; lymphangiography; CT; MRI
Malignancies of the Male Reproductive System: Cancer of the Testes

**Medical and Surgical Management**
- Treatment depends on the stage of the disease
- Autologous bone marrow transplantation; sperm banking
- Surgery
  - Radical inguinal orchiectomy; ligation of the spermatic cord
  - Radical retroperitoneal lymph node dissection

**Chemotherapy**
- Multiple antineoplastic drug regimen
  - Usually instituted after surgery
  - Initial sperm destruction or mutation
  - Later spermatogenesis resumes

**Radiation**
- Seminomas are sensitive to radiation
  - Radiation to retroperitoneal lymph nodes

Malignancies of the Male Reproductive System: Cancer of the Testes

**Nursing Management**
- Preoperative period
  - Emotional support
  - Provide private opportunities for the client to ask questions about
    - Life-threatening diagnosis
    - Unfamiliar surgical experience
    - Confronting alterations in body image, sexuality, and fertility
  - Therapeutic communication techniques
Malignancies of the Male Reproductive System: Cancer of the Testes

**Nursing Management**
- Postoperative period
  - Scrotal support; drainage; medication; infection prevention; pain relief
  - Opportunity for safe expression of emotions
  - Client and family teaching
    - Diet; exercise; self-care; hygiene; medication
    - Testicular prosthesis; fertility concerns; sperm banks

Malignancies of the Male Reproductive System

**Cancer of the Penis**
- Rare; occurs more often in men who are uncircumcised
- Probable progress
  - Chronic irritation; precancerous skin lesion; malignancy
- Diagnosis
  - Biopsy; CT; MRI
- Treatment
  - Tumor excision; chemotherapy
  - External or interstitial radiation therapy
  - Amputation

**Elective Sterilization**

**Vasectomy**
- Minor surgical procedure; ligation of vas deferens
- Permanent sterilization: Interruption of the pathway that transports sperm
- Procedure has no effect on erection or ejaculation
- Nursing management
  - Client teaching: Contraception; sperm bank; home care
  - Vasovasostomy; vasoepididymostomy
General Considerations

- **Nutritional Considerations**
  - Risk of prostate cancer: High-fat diet; inactive lifestyle and being overweight

- **Pharmacologic Considerations**
  - Drug therapy for testicular cancer: Administration, effects, and side effects
  - Client and family teaching: Pulmonary toxicity; Raynaud’s phenomenon; nephrotoxicity; ototoxicity; fluid retention
  - Chemotherapy: Increases risk for infection, anorexia, vomiting, and hair loss

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General Considerations

- **Pharmacologic Considerations**
  - Adverse reactions; anaphylactoid reaction—symptoms to report
  - Medications that may cause sexual dysfunction: Client teaching; treatment

- **Gerontologic Considerations**
  - Impotence increases with age; not a normal part of aging
  - Penile cancer more common in older men
  - Changes in genitalia, sperm production, and testosterone as age increases

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End of Presentation