SURGERY 1 AND 2 QUESTIONS AND ANSWERS

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Surgery I & II

Questions and Answers

Question 1

KIWOKO SCHOOL OF NURSING AND MIDWIFERY - NO.52

- List 5 cardinal signs of inflammation.

- Outline the 4 stages of inflammation.

- Describe the management of a patient admitted to your ward with inflammation of lower limbs until discharge.

ANSWER: Examination Script

Redness (Rubor): Caused by increased blood flow to the affected area due to widening of blood vessels (vasodilation).

Heat (Calor): Also due to increased blood flow, making the area feel warm to touch.

Swelling (Tumor/Oedema): Caused by fluid leaking from blood vessels into the surrounding tissues.

Pain (Dolor): Results from the swelling putting pressure on nerve endings, and from chemicals released during inflammation that irritate nerves.

Loss of Function (Functio Laesa): Movement of the inflamed area may be difficult or limited due to pain, swelling, or tissue damage.

1. Vascular Phase: Small blood vessels near the injury widen (vasodilation), increasing blood flow. The vessel walls become more permeable (leaky), allowing fluid and proteins to move into the tissues, causing swelling (oedema). Key mediators: Histamine, bradykinin, prostaglandins.

2. Cellular Phase: White blood cells, mainly neutrophils, are attracted to the site of injury. They move from the blood vessels into the affected tissue. Margination: Neutrophils line up against the vessel wall. Rolling: They roll along the vessel wall. Adhesion: They stick to the vessel wall. Emigration (Diapedesis): They squeeze through the vessel wall into the tissue. Chemotaxis & Phagocytosis: Neutrophils move towards the injury/infection and engulf (eat) and destroy harmful agents (like bacteria) or dead cells.

3. Resolution or Abscess Formation: If the inflammation successfully removes the harmful agent, the area begins to heal (resolution). If bacteria are involved and not cleared, an abscess (a collection of pus surrounded by inflamed tissue) may form. Pus contains dead cells, dead bacteria, and fluid.

4. Healing and Repair (Maturation - if considering the full wound healing process): After the harmful agent is removed, the body starts to repair the damaged tissue. This can involve forming new blood vessels and connective tissue (granulation tissue), and eventually, scar tissue may form. (This stage is more prominent in chronic inflammation or significant tissue injury).

Admission and Initial Assessment: Admit to a well-ventilated room, ensure comfort. History Taking: Collect patient's details, presenting complaint, medical and surgical history. Vital Observations: Record baseline temperature, pulse, respiration, blood pressure. Physical Examination: Surgeon/doctor examines from head to toe, focusing on the inflamed limb(s).

Local Treatment: Remove the Cause: If possible (e.g., foreign object). Rest: Essential to allow the body to overcome the inflammation. May involve splints, slings, or elevating the limb. Avoid prolonged immobilization. Heat Packs (sometimes): Can increase blood supply to hasten resolution or localization (controversial in some acute inflammations, cold packs might be preferred initially). Incision and Drainage: If an abscess forms, it needs to be surgically drained. The wound may be left open for daily dressing. A pus swab is taken for culture and sensitivity.

General Treatment & Investigations: Investigations: Blood tests (Haemoglobin, ESR, White Blood Cell count), X-ray (to rule out bone involvement), Urine test (to rule out UTI, diabetes). Drugs: Antibiotics: Based on culture/sensitivity results (e.g., Ceftriaxone). Analgesics (Pain Relievers): E.g., Paracetamol, stronger ones like morphine if pain is severe, then switched to milder ones. Aperients (Laxatives): If constipated (e.g., Bisacodyl). Supportive: Multivitamins, Iron. NSAIDs (Non-Steroidal Anti-Inflammatory Drugs): E.g., Ibuprofen, Naproxen (if appropriate). Corticosteroids (e.g., Prednisone): In some specific types of severe inflammation. Reduction of Pyrexia (Fever): Tepid sponging, antipyretics (e.g., Paracetamol). Rehydration: Encourage plenty of fluids to dilute toxins and reduce temperature. IV fluids if needed. Diet: Ensure enough calories, proteins, and Vitamin C to aid healing. Tempting meals if appetite is poor.

General Nursing Care: Bed Rest: In a well-ventilated room, sedation if necessary. Ambulation: Encourage movement once the acute phase subsides and swelling improves. Daily Vital Observations: Monitor and record regularly. Hygiene: Daily bed bath in acute phase; encourage self-care when able. Oral hygiene. Clean bed linen. Pressure area care. Physiotherapy: Exercises to increase circulation and maintain range of motion in the limbs.

Discharge and Advice: Criteria: Improved condition, reduced pain and swelling, patient is mobile. Advice: Continue prescribed treatment, care for any wounds, follow-up appointments, signs of complications to watch for.

Question 2

Nurses Online Discussion INSTITUTE OF HEALTH SCIENCES - NO.53

- Define the term opthalamia neonaterum?

- List 10 predisposing factors to the above condition.

- Describe the management of adult with tetanus for the first 72hrs.

ANSWER: Examination Script

Ophthalmia Neonatorum (ON), also called neonatal conjunctivitis, is an acute eye infection with pus-like discharge. It occurs in newborns within the first 4 weeks of life. It can be caused by chemicals, bacteria, or viruses. The infection is often passed from the mother to the baby during birth if the mother's birth canal is infected (e.g., with Chlamydia or Neisseria gonorrhoeae).

Maternal Genital Infections: Infections in the mother's birth canal (e.g., Chlamydia, Gonorrhea, Herpes) that the baby can pick up during delivery.

Premature Rupture of Membranes (PROM): If the amniotic sac breaks too early before birth, there's a longer time for bacteria to potentially infect the baby.

Prematurity: Premature babies often have weaker immune systems and less developed protective mechanisms in their eyes.

Inadequate Ocular Prophylaxis: Not giving or incorrectly giving preventive eye drops or ointment (like silver nitrate or antibiotic ointment) to the newborn immediately after birth.

Poor Hygienic Delivery Conditions: Unclean environment or unhygienic practices during childbirth can introduce bacteria.

HIV Infected Mothers: Mothers with HIV may have a higher risk of other infections, and their babies might have weaker immunity.

Exposure of Infant to Infectious Organisms Post-Birth: Contact with infected individuals or contaminated items after birth.

Ocular Trauma During Delivery: Minor injuries to the baby's eyes during birth can make them more susceptible to infection.

Developmental Immaturity of Lacrimal Ducts: If the tear ducts are not fully developed, tears (which help clean the eyes) may not drain properly.

Poor Maternal Prenatal Care: Lack of regular check-ups during pregnancy might mean maternal infections are not detected and treated.

Frequent Colonization of Conjunctivae: Sometimes, bacteria can normally live on the eye surface without causing harm, but in a newborn, they might cause infection more easily.

Mechanical Ventilation (for the newborn): Can sometimes increase the risk of eye irritation or infection if not managed carefully.

Definition: Tetanus is a serious bacterial infection caused by Clostridium tetani. The bacteria are found in soil, dust, and manure and enter the body through breaks in the skin (like cuts or puncture wounds). It produces a toxin that affects the nerves, leading to muscle stiffness and painful spasms. It is a medical emergency requiring prompt team work and intervention.

Initial Care (Out-Patient Department/Emergency): Assessment: Quickly assess the patient, get a history (especially about recent injuries), and confirm the diagnosis. Secure Airway: If unconscious or spasms affect breathing, ensure the airway is open. Recovery position if unconscious. Control Spasms: Give Diazepam (e.g., 10-20mg IV slowly for adults, or rectal Diazepam) to stop or reduce spasms. Loosen tight clothing. IV Line: Insert an IV line for fluids and medications.

Admission to Ward (Isolation Unit): Environment: Nurse in a quiet, dark, single room (isolation unit) to minimize stimuli (noise, light, touch) that can trigger spasms. The door should be well-fitting. Positioning: Recovery position if unconscious. If conscious, allow a comfortable position.

Medical Management (Drugs): Sedation/Muscle Relaxants: Continue Diazepam regularly (e.g., every 3-6 hours) or other muscle relaxants like Chlorpromazine to control spasms. Dosage depends on severity. Tetanus Antitoxin (Passive Immunization): Human Tetanus Immunoglobulin (HTIG) is preferred (e.g., 3000-6000 IU IM). If HTIG is unavailable, equine (horse-derived) Tetanus Antitoxin (ATS) can be used after a test dose to check for allergy (e.g., 50,000-100,000 IU, part IV and part IM). Keep adrenaline ready for allergic reactions. Antibiotics: To kill Clostridium tetani bacteria. Penicillin (e.g., Benzylpenicillin IV) or Metronidazole are commonly used. Wound Care: Clean any wound thoroughly (debridement) to remove dead tissue and bacteria. Avoid suturing if possible, or ensure loose closure. Active Immunization: Start or complete a course of Tetanus Toxoid vaccine if the patient is not fully immunized. Pain Relief: Analgesics as needed. Beta-blockers (sometimes): If there are signs of autonomic nervous system overactivity (like very high heart rate or blood pressure).

Nursing Care (First 72 Hours): Minimize Disturbances: Cluster nursing activities to reduce stimulation. Use warm hands if touching the patient. Airway Protection: Maintain a clear airway. Suction secretions gently if needed. Tracheostomy might be necessary if severe spasms compromise breathing or for prolonged ventilation. Observation: Monitor vital signs (temperature, pulse, respiration, blood pressure) frequently. Observe frequency, duration, and severity of spasms. Monitor for complications like respiratory distress, pneumonia, or cardiac issues. Nutrition and Hydration: IV fluids initially. If able to swallow without risk of aspiration (often difficult with spasms), nasogastric (NG) tube feeding with small, frequent, nutritious liquid feeds may be started cautiously. Prevent aspiration. Bladder and Bowel Care: Catheterize if urinary retention occurs due to spasms. Monitor bowel movements; glycerin suppositories for constipation. Hygiene: Gentle bed baths, oral care, eye care. Turn patient every 2-3 hours to prevent pressure sores if unconscious or heavily sedated. Record Keeping: Strict input/output charts, spasm charts, drug charts. Psychological Support (Reassurance): Tetanus is frightening. Reassure the patient (if conscious) and relatives. Explain procedures.

Question 3

MENGO SCHOOL OF NURSING AND MIDWIFERY - NO.55

- Define epistaxis.

- Explain the general management of a patient with epistaxis.

- List the complications of foreign body in the nose.

ANSWER: Examination Script

Epistaxis is the medical term for a nosebleed, which means bleeding or hemorrhage from the nose. It usually starts in the front part of the nasal cavity (anterior epistaxis) and is caused by the rupture of tiny blood vessels in the mucous membrane lining the nose.

Positioning: Ask the patient to sit upright and lean slightly forward. This prevents blood from draining down the throat, which can cause nausea or airway blockage.

Direct Pressure: Ask the patient to pinch the soft, fleshy part of their nose firmly against the septum for at least 10-15 minutes. They should breathe through their mouth.

Reassurance: Calm the patient, as anxiety can increase blood pressure and worsen bleeding.

Avoid Swallowing Blood: Encourage spitting out any blood that collects in the mouth.

Cold Compress: Applying a cold pack or ice wrapped in a cloth to the bridge of the nose or forehead can help constrict blood vessels.

After Bleeding Stops: Advise the patient to rest, avoid blowing their nose, picking it, or strenuous activity for some time to allow the clot to stabilize.

Seek Medical Help: If bleeding is heavy, doesn't stop after 20 minutes of pressure, or if it's recurrent, seek medical attention.

Assessment and Vital Signs: Check vital signs (pulse, blood pressure, respiration) to assess for shock. Confirm airway patency.

Investigations: Blood tests: Complete Blood Count (CBC) for anemia, clotting profile (PT, PTT, INR), blood group and cross-match if severe. X-ray of paranasal sinuses if trauma or tumor is suspected.

Locate Bleeding Site: Use a good light source (headlamp) and nasal speculum to try and identify the source of bleeding. Remove clots by gentle suction or blowing.

Topical Decongestants/Anesthetics: A cotton swab soaked in a solution like adrenaline (epinephrine) or a local anesthetic with a vasoconstrictor (e.g., lidocaine with epinephrine) can be applied to shrink blood vessels and numb the area.

Cauterization: If the bleeding point is visible, it can be sealed by chemical cautery (e.g., silver nitrate stick) or electrocautery.

Anterior Nasal Packing: If bleeding persists, the nostril can be packed with ribbon gauze (often soaked in petroleum jelly or antibiotic ointment) or a special nasal tampon/balloon. This usually stays in for 24-72 hours.

Posterior Nasal Packing: For bleeding from the back of the nose that doesn't respond to anterior packing. This is more complex and often requires hospital admission. Special catheters (e.g., Foley catheter) or gauze packs are used.

Fluid Replacement/Blood Transfusion: If significant blood loss has occurred, IV fluids or blood transfusion may be necessary.

Surgical Management (if other methods fail): Includes procedures like endoscopic sphenopalatine artery ligation or septal surgery.

Nursing Management: Monitor vital signs, observe for continued bleeding or signs of airway compromise, administer humidified oxygen if needed, provide tissues and emesis basin, keep patient comfortable.

Advice to Patient on Discharge: Avoid nose blowing/picking, use saline nasal spray or humidifier to keep nasal passages moist, avoid aspirin/NSAIDs if they contribute to bleeding, follow up as advised.

Nasal Infection/Local Inflammation: The foreign body can irritate the nasal lining and cause infection, leading to pain, swelling, and discharge.

Sinusitis: Infection can spread from the nasal cavity to the sinuses.

Rhinolith (Nasal Stone) Formation: If a foreign body stays in the nose for a long time, mineral salts can deposit on it, forming a hard stone-like mass.

Acute Otitis Media (Middle Ear Infection): Inflammation or blockage in the nose can affect the Eustachian tube, leading to ear infections.

Nasal Septal Perforation: A hole can develop in the septum (the wall between the nostrils) due to pressure or infection from the foreign body.

Epistaxis (Nosebleed): The foreign body can damage blood vessels, causing bleeding.

Aspiration: The foreign body could be inhaled into the lower airway (trachea or lungs), which is a serious complication.

Unilateral Foul-Smelling Nasal Discharge: This is a common sign, especially in children, indicating a retained foreign body and secondary infection.

Cellulitis (e.g., Periorbital Cellulitis): Infection can spread to the tissues around the nose or eyes.

Rare Complications: Meningitis, Diphtheria (if the foreign body carries the bacteria), Tetanus (if the foreign body causes a contaminated wound).

Question 4

MAGANJO SCHOOL OF NURSING AND MIDWIFERY - NO.53

- Outline 12 specific interventions of a nurse during pre and post-operative care of the patient.

- List the complications that can arise after surgery.

ANSWER: Examination Script

1. Comprehensive Patient Assessment: Collect detailed medical, surgical, and allergy history. Assess physical status (vital signs, nutritional status, skin integrity) and psychosocial well-being (anxiety levels, support systems).

2. Informed Consent Verification: Ensure the patient (or legal guardian) has understood the surgical procedure, risks, benefits, and alternatives, and that a valid consent form is signed and witnessed. Clarify any misunderstandings with the surgical team.

3. Pre-Operative Teaching: Educate the patient about what to expect before, during, and after surgery. This includes NPO status, pain management, deep breathing and coughing exercises, leg exercises, early ambulation, and use of incentive spirometer.

4. Physical Preparation: Administer prescribed pre-medications (e.g., sedatives, antibiotics). Ensure NPO status is maintained. Assist with skin preparation (e.g., showering with antiseptic soap, hair removal if ordered). Ensure patient has voided or catheterized if needed. Remove jewelry, dentures, prosthetics.

5. Ensuring Completion of Pre-Operative Checklist: Verify all necessary preparations, documentation (lab results, X-rays, ECGs), and patient identification are complete and correct before transfer to the operating room.

6. Psychological Support: Address patient and family anxiety. Allow them to express fears. Provide reassurance and answer questions. Involve family in care planning as appropriate.

7. Immediate Post-Anesthesia Care Unit (PACU) Monitoring: Continuously monitor vital signs (every 5-15 mins initially), level of consciousness, airway patency, oxygen saturation, surgical site (for bleeding/drainage), IV fluids, and pain levels.

8. Pain Management: Assess pain regularly using a pain scale. Administer prescribed analgesics (IV, IM, oral) promptly and effectively. Evaluate effectiveness of pain relief. Teach non-pharmacological pain relief methods (e.g., positioning, distraction).

9. Maintaining Respiratory Function: Encourage deep breathing, coughing, and use of incentive spirometer to prevent atelectasis and pneumonia. Position patient to facilitate lung expansion. Monitor breath sounds. Administer oxygen as prescribed.

10. Preventing Circulatory Complications: Encourage early ambulation and leg exercises to prevent deep vein thrombosis (DVT). Apply anti-embolism stockings or sequential compression devices if ordered. Monitor for signs of DVT (calf pain, swelling, redness).

11. Wound Care and Infection Prevention: Assess surgical incision for signs of infection (redness, swelling, pus, warmth, increased pain). Maintain sterile technique during dressing changes. Monitor drains and record output. Administer antibiotics as prescribed.

12. Promoting Nutrition and Elimination: Gradually reintroduce diet as tolerated (from clear liquids to solids). Monitor for nausea/vomiting. Assess bowel sounds and function. Ensure adequate hydration. Monitor urine output. Assist with ambulation to bathroom or provide bedpan/urinal.

Shock (Hypovolemic, Septic, Cardiogenic): A life-threatening condition where blood flow to organs is insufficient.

Hemorrhage (Bleeding): Excessive bleeding from the surgical site, either internally or externally.

Wound Infection: Bacterial contamination of the surgical site leading to redness, pus, fever.

Deep Vein Thrombosis (DVT): Blood clot formation in a deep vein, usually in the leg.

Pulmonary Embolism (PE): A DVT that breaks loose and travels to the lungs, blocking blood flow. Life-threatening.

Atelectasis: Collapse of small air sacs (alveoli) in the lungs, often due to shallow breathing after surgery.

Pneumonia: Infection of the lungs.

Urinary Retention: Inability to empty the bladder, often due to anesthesia or pain.

Paralytic Ileus: Temporary paralysis of the intestines, leading to abdominal distension and inability to pass stool or gas.

Wound Dehiscence or Evisceration: Opening of the surgical wound (dehiscence) or protrusion of internal organs through the incision (evisceration).

Adverse Reaction to Anesthesia: Nausea, vomiting, headache, allergic reactions, or more serious complications like malignant hyperthermia.

Pain (Chronic Post-Surgical Pain): Pain that persists for months after surgery.

Incisional Hernia: Protrusion of tissue through a weakened surgical scar.

Adhesions: Bands of scar tissue that can form between organs, potentially causing pain or bowel obstruction.

Fluid and Electrolyte Imbalance: Due to blood loss, IV fluids, or poor intake.

Question 5

MASAKA SCHOOL OF COMPREHENSIVE NURSING AND MIDWIFERY - NO.54

- Define glaucoma.

- Outline 5 classifications of glaucoma.

- Describe the nurse s action in the management of a patient with glaucoma.

ANSWER: Examination Script

Glaucoma is a group of eye conditions that damage the optic nerve, which is vital for vision. This damage is often caused by an abnormally high pressure inside your eye (intraocular pressure - IOP). If untreated, glaucoma can lead to irreversible vision loss and blindness. It is often called the "silent thief of sight" because it may have no symptoms in its early stages.

1. Open-Angle Glaucoma (Primary Open-Angle Glaucoma - POAG): This is the most common type. The drainage angle formed by the cornea and iris remains open, but the trabecular meshwork (the eye's drainage system) gradually becomes less efficient at draining fluid. This causes eye pressure to slowly increase, damaging the optic nerve. It's often painless and causes no vision changes at first.

2. Angle-Closure Glaucoma (Acute or Chronic): Occurs when the iris bulges forward to narrow or block the drainage angle formed by the cornea and iris. Fluid can't circulate through the eye and pressure increases. Acute Angle-Closure Glaucoma: A sudden blockage, causing severe eye pain, nausea, blurred vision, and halos around lights. This is a medical emergency. Chronic Angle-Closure Glaucoma: The angle closes more slowly and can be asymptomatic initially.

3. Congenital Glaucoma: This is a rare type that occurs in infants and young children. It's caused by an incorrect or incomplete development of the eye's drainage canals during the prenatal period. Signs include cloudy eyes, excessive tearing, and light sensitivity.

4. Secondary Glaucoma: This type of glaucoma is a result of another medical condition or factor. Examples include: Uveitic (Inflammatory) Glaucoma: Caused by inflammation in the eye (uveitis). Neovascular Glaucoma: Associated with conditions like diabetes or retinal vein occlusion that cause new, abnormal blood vessels to grow in the eye, blocking drainage. Traumatic Glaucoma: Caused by an eye injury. Steroid-Induced Glaucoma: Caused by prolonged use of corticosteroid medications.

5. Normal-Tension Glaucoma (Low-Tension Glaucoma): In this type, the optic nerve is damaged even though the eye pressure is within the normal range. The exact cause is not fully understood but may involve a sensitive optic nerve or reduced blood flow to the nerve.

Patient Education: Disease Process: Explain what glaucoma is in simple terms, its chronic nature, and the importance of lifelong management to prevent vision loss. Medication Adherence: Stress the importance of using eye drops or oral medications exactly as prescribed, even if the patient feels no symptoms. Teach correct eye drop instillation technique. Side Effects: Inform about potential side effects of medications and when to report them. Follow-up Appointments: Emphasize the need for regular eye exams and IOP checks to monitor the condition and treatment effectiveness. Safety Measures: Advise on home safety to prevent falls due to potential vision impairment (e.g., good lighting, removing hazards).

Assessment and Monitoring: Visual Acuity: Regularly assess and document vision. Intraocular Pressure (IOP): Assist with or note IOP measurements. Medication Compliance: Ask about how they are managing their medication schedule. Symptoms: Inquire about any changes in vision, eye pain, halos, or medication side effects.

Administering Medications: If in an inpatient setting, ensure timely and correct administration of prescribed glaucoma medications.

Psychological Support: Acknowledge the patient's fears and anxieties about potential vision loss. Provide emotional support and refer to counseling or support groups if needed.

Pre and Post-Operative Care (if surgery is indicated): Pre-op: Provide information about the surgical procedure, obtain consent, administer pre-op medications. Post-op: Monitor for complications (pain, infection, bleeding), administer eye drops, educate on activity restrictions and eye care.

Promoting Self-Care and Independence: Help patients adapt to any vision changes and maintain as much independence as possible. Refer to low vision services if appropriate.

Advocacy: Act as an advocate for the patient, ensuring they understand their treatment plan and their concerns are addressed by the healthcare team.

Lifestyle Modifications: Advise on healthy lifestyle choices (e.g., regular exercise, healthy diet, avoiding smoking) that may support overall eye health.

Question 6

KABALE SCHOOL OF COMPREHENSIVE NURSING - NO.56

- Define the term Benign Prostatic Hypertrophy.

- Outline the predisposing factors to BPH.

- Describe the pre-operative management of a 52yrs old man with BPH until discharge.

ANSWER: Examination Script

Benign Prostatic Hypertrophy (BPH), also known as Benign Prostatic Hyperplasia , is a non-cancerous enlargement of the prostate gland. The prostate is a small gland located below the bladder in men, surrounding the urethra (the tube that carries urine from the bladder out of the body). As the prostate enlarges, it can squeeze or partially block the urethra, leading to problems with urination. It is a common condition in older men.

Aging: This is the most significant risk factor. BPH rarely causes symptoms before age 40, but the likelihood increases significantly with age. Many men over 60 have some degree of BPH.

Hormonal Changes: Changes in the balance of sex hormones, particularly an increase in dihydrotestosterone (DHT), a male hormone derived from testosterone, are believed to play a major role in prostate growth.

Family History: Having a blood relative (like a father or brother) with BPH increases a man's risk of developing the condition.

Ethnic Origin: Some studies suggest BPH may be more common in men of certain ethnicities, though this is not definitively established for all populations.

Obesity: Being overweight or obese, particularly with increased abdominal fat, has been linked to an increased risk of BPH.

Lack of Physical Activity: A sedentary lifestyle may contribute to the risk. Regular exercise might have a protective effect.

Diabetes Mellitus: Men with diabetes, especially Type 2, may have a higher risk of developing BPH.

Heart Disease: Some conditions affecting the heart and blood vessels, and medications used to treat them (like beta-blockers), have been associated with BPH in some studies.

Erectile Dysfunction: There may be a link between BPH and erectile dysfunction, possibly due to shared underlying factors.

Comprehensive Assessment: Medical History: Including severity of BPH symptoms (using a scale like IPSS - International Prostate Symptom Score), other health conditions (cardiac, respiratory, diabetes), medications (especially anticoagulants like warfarin, aspirin). Physical Examination: General exam, digital rectal exam (DRE) to assess prostate size and consistency. Investigations: Urinalysis & Urine Culture: To rule out urinary tract infection (UTI). Blood Tests: Full Blood Count, Renal function tests (Urea, Creatinine, Electrolytes), Prostate-Specific Antigen (PSA) to screen for prostate cancer, Coagulation profile. Uroflowmetry: Measures urine flow rate. Post-Void Residual (PVR) Urine Volume: Ultrasound to check how much urine is left in the bladder after urinating. Imaging (if needed): Ultrasound of prostate/kidneys, cystoscopy. ECG, Chest X-ray: To assess fitness for anesthesia.

Managing Acute Symptoms/Complications: Urinary Retention: If present, catheterization (urethral or suprapubic) may be needed before surgery. UTI Treatment: If an infection is found, it should be treated with antibiotics before surgery.

Patient Education: Explain BPH and the planned surgical procedure (e.g., TURP), its purpose, risks, benefits, and expected outcomes. Discuss post-operative expectations: catheter use, hematuria (blood in urine), bladder spasms, pain management, potential for retrograde ejaculation, importance of fluid intake. Teach deep breathing, coughing, and leg exercises.

Informed Consent: Ensure the patient understands and signs the consent form.

Medication Adjustments: Stop anticoagulants/antiplatelet drugs (aspirin, warfarin) as per surgeon's advice before surgery to reduce bleeding risk. Alpha-blockers (like tamsulosin) for BPH symptoms might be continued or stopped.

Physical Preparation: NPO (Nothing By Mouth): Usually 6-8 hours before surgery. Bowel Preparation (if ordered): E.g., enema. Prophylactic Antibiotics: Often given just before surgery. Pre-operative shower/skin prep.

Psychological Support: Address anxiety and concerns. Allow patient to ask questions.

Immediate Post-Op Care (PACU & Ward): Monitor Vital Signs: Frequently. Catheter Care & Continuous Bladder Irrigation (CBI): If TURP, a 3-way catheter is usually in place with CBI to prevent blood clots. Monitor urine color (should gradually clear from bright red to pink to clear), output, and ensure irrigation is flowing correctly. Check for catheter blockage. Pain Management: Assess and manage pain (often bladder spasms). Analgesics, antispasmodics. Fluid Balance: Maintain IV fluids initially, then encourage oral fluids once tolerated. Monitor intake and output. Observe for Complications: Bleeding (hemorrhage), infection, TURP syndrome (fluid overload/hyponatremia), DVT.

Mobilization: Encourage early ambulation (usually day after surgery) to prevent complications like DVT and chest infections.

Diet: Progress from clear fluids to light diet as tolerated. Encourage high fiber to prevent constipation (straining can increase bleeding risk).

Catheter Removal: Usually 1-3 days post-op. Monitor for ability to void, amount, stream, and any difficulty. Check PVR if needed.

Discharge Planning and Teaching: Care of Incision (if any, though TURP is transurethral). Fluid Intake: Drink plenty of fluids (2-3 liters/day) to keep urine dilute and flush bladder. Activity Restrictions: Avoid heavy lifting, strenuous exercise, and sexual activity for several weeks as advised. Medications: Pain relief, laxatives if needed. Signs of Complications to Report: Fever, severe pain, inability to urinate, heavy bleeding, signs of UTI. Expected Recovery: Discuss common post-op issues like temporary incontinence, hematuria, retrograde ejaculation. Follow-up Appointment: Schedule and emphasize importance.

Question 7

ARUA SHOOL OF COMPREHENSIVE NURSING AND MIDWIFERY - NO.7

An adult female patient is presented to surgical out patient with features of an enlarged Thyroid gland.

- Outline 5 cardinal features of enlarged thyroid gland.

- Describe her pre and post operative management following thyroidectomy.

- List 5 specific complications of thyroidectomy.

ANSWER: Examination Script

Visible Swelling: A noticeable lump or swelling at the base of the neck, which might be more obvious when shaving or putting on makeup.

Tight Feeling in the Throat: A sensation of pressure or constriction in the throat area.

Coughing: Persistent cough, especially if the enlarged gland is pressing on the windpipe.

Hoarseness: Changes in the voice, sounding raspy or strained, if the gland affects the vocal cords or nerves.

Difficulty Swallowing (Dysphagia): Trouble swallowing food or liquids if the goiter presses on the esophagus (food pipe).

Difficulty Breathing (Dyspnea): Shortness of breath, especially when lying down or during exertion, if the goiter compresses the trachea (windpipe).

Investigations: TSH Test: Measures Thyroid Stimulating Hormone. High TSH can mean hypothyroidism (underactive thyroid); low TSH usually means hyperthyroidism (overactive thyroid). T4 Test: Measures thyroxine. High T4 can indicate hyperthyroidism. Ultrasound: To see the size, shape, and position of the thyroid gland and any nodules.

Medication to Stabilize Thyroid Function: Antithyroid drugs (e.g., Carbimazole, Propylthiouracil/PTU) are given to make the thyroid function normal before surgery (usually for 4-6 weeks). PTU lowers T3 and T4 production. Beta-blockers (e.g., Propranolol) may be used for about 1 month to reduce symptoms like fast heart rate. NB: Antithyroid drugs are usually stopped a day before the operation. Antibiotics may be given as a preventive measure (prophylaxis).

Other Routine Nursing Care: Includes informed consent, NPO (nothing by mouth) status before surgery, psychological support, and education about the surgery and recovery.

Recovery Room and Ward Transfer: Patient is monitored in recovery for about an hour, then moved to the ward, often staying overnight.

Positioning: Semi-Fowler's position (sitting up slightly) with head and neck supported by pillows or sandbags to prevent neck hyperextension and reduce stress on the suture line.

Diet/Nutrition: Usually starts with clear liquids, then advances to a regular diet as tolerated over 1-2 days. Avoid irritants like alcohol, cigarettes, coffee, and spicy foods initially.

Activity: Keep head elevated in bed for the first week. Avoid heavy lifting or strenuous activity.

Pain Management: Pain is usually mild. Oral pain medication is given. Avoid NSAIDs like ibuprofen/aspirin initially. Some sore throat is common.

Nausea: Can occur after anesthesia; anti-nausea medication can be given.

Monitoring for Complications: Fever: Report if present. Swelling: Mild swelling is normal for 1-2 weeks. Numbness: Around the incision is common for weeks to months. Tingling (Hypocalcemia): If total thyroidectomy, watch for tingling in fingers, toes, or around lips (sign of low calcium). Report immediately. Hoarseness: Common and usually temporary. If nerve injury, can last longer. Bleeding/Hematoma: Check dressing and drain for excessive bleeding. Difficulty breathing can be a sign of hematoma pressing on the trachea. Respiratory Distress: Monitor breathing closely. Keep tracheostomy set nearby.

Drain Care: A surgical drain is often placed. Monitor output. Patient may go home with drain if output is high; instructions for care are given.

Incision Care: Usually closed with absorbable sutures or steri-strips. Keep clean and dry. Scar improves over 3-6 months.

Medications: Pain relief, antibiotics if prescribed. If total thyroidectomy, lifelong thyroid hormone replacement (e.g., levothyroxine) will be needed. Calcium supplements if parathyroid glands are affected.

Relaxation Techniques: Encourage guided imagery, soft music to manage pain/discomfort.

Follow-up Appointment: Usually about one week after surgery.

Hemorrhage/Hematoma: Bleeding at the surgical site, which can form a collection of blood (hematoma) that may compress the airway.

Hypocalcemia (Low Calcium): Due to accidental removal or damage to the parathyroid glands (which regulate calcium). Symptoms include tingling, muscle cramps, and spasms.

Recurrent Laryngeal Nerve Injury: Can cause hoarseness (if one nerve is affected) or airway obstruction (if both are affected). Injury can be temporary or permanent.

Respiratory Distress/Airway Obstruction: Can be caused by hematoma, laryngeal edema (swelling), bilateral nerve injury, or tracheomalacia (weakening of the windpipe).

Infection: Risk at the surgical site, though less common with good aseptic technique and prophylactic antibiotics.

Hypothyroidism (if total or near-total removal): The body no longer produces enough thyroid hormone, requiring lifelong hormone replacement therapy.

Thyroid Storm (Thyrotoxic Crisis): Rare but serious, especially if surgery is done on a patient with poorly controlled hyperthyroidism. It's an acute worsening of hyperthyroid symptoms.