

A Case Study On Cholelithiasis

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Abstract: This case study presents the nursing care management of a 66-year-old woman diagnosed with symptomatic cholelithiasis and treated with laparoscopic cholecystectomy. The purpose of the study was to apply theoretical knowledge to clinical practice through comprehensive assessment, identification of nursing needs, implementation of evidence-based interventions, and evaluation of patient outcomes. Orem's Self-Care Deficit Theory guided the nursing approach, utilizing both partly compensatory and supportive-educative systems. Key postoperative issues included acute pain, risk of fluid and nutritional imbalance, and lack of disease-related knowledge. Targeted interventions such as pain management, hydration monitoring, dietary education, ambulation support, and health teaching were implemented to promote recovery and enhance self-care ability. Diversional therapies and individualized patient support further contributed to psychological comfort and coping. The patient demonstrated steady improvement, maintained stable vital signs, and was discharged with appropriate instructions regarding diet, activity, medication adherence, and follow-up care. This case study strengthened the application of holistic nursing practice, clinical judgment, and patient-centered education in managing cholelithiasis.

Keywords: nursing care management, symptomatic cholelithiasis, laparoscopic cholecystectomy, supportive-educative systems.

1. OBJECTIVES OF THE STUDY

General Objective:

To provide comprehensive nursing care to a patient with symptomatic cholelithiasis and support optimal recovery.

Specific Objectives:

To:

Obtain relevant patient history and conduct a thorough physical assessment.

Identify developmental and nursing needs.

Apply appropriate nursing theories in delivering holistic care.

Provide targeted health education to the patient and family.

Formulate discharge plans, promote home care, and emphasize follow-up adherence.

Evaluate the effectiveness of the nursing care provided.

2. HISTORY TAKING

1. Demographic Information:

2. Name: Uma KC, 66-year-old female

3. Address: Sarlahi (permanent), Dillibazar (temporary)

4. Religion: Hindu

5. Education: Illiterate

6. Marital Status: Widowed

7. Admission Date: 2014/07/20
8. Ward/Bed: Surgical C / 402
9. Provisional Diagnosis: Symptomatic cholelithiasis
10. Information Source: Patient and daughter
11. Chief Complaints:
12. Indigestion for 2 years
13. Lower abdominal pain 1–2 months ago
14. Loss of appetite
15. Present Illness:

The patient reported a two-year history of progressive indigestion, later accompanied by hypogastric abdominal pain. Symptoms were associated with anorexia, diarrhea, nausea on forced eating, and water brash, with notable aggravation after fatty meals. She presented to Kathmandu Model Hospital on 2014/07/20, where she was provisionally diagnosed with symptomatic cholelithiasis and subsequently admitted.

16. Past medical history:

Childhood illness/Diseases	Yes	No
Measles		✓
Mumps		✓
Whooping cough		✓
Polio		✓
Rheumatic fever		✓
TB		✓
Malnutrition		✓
Pneumonia		✓
Others		✓

Adulthood illness	Yes	No
High BP		✓
Heart disease		✓
TB	✓	
Diabetes		✓
Filariasis		✓
Malaria		✓
Cancer		✓
Asthma		✓
Allergies		✓
Others	✓	

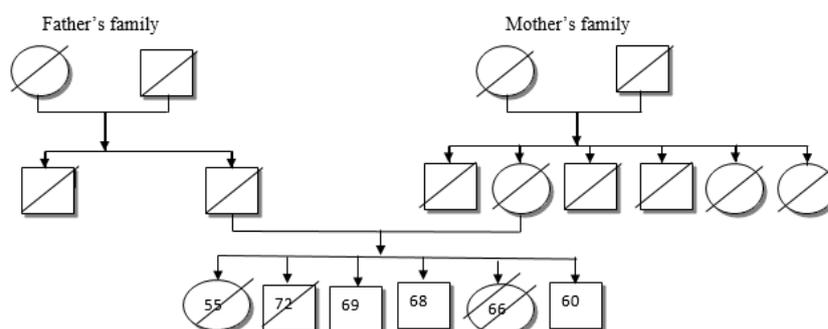
In adulthood illness, she has a history of Pulmonary Tuberculosis 18 years ago. For which she has taken ATT for 9 months. She has a history of gastritis 12 years ago.

- a) Allergies = Patient do not have any allergies with food, drugs, environment and others.
- b) Medication = She had not taken any medicine at home.
- c) Past surgical illness = Patient was operated for Cataract in 2071/03/03 in Tilganga Eye Hospital, Tilganga, KTM.

17. Family history:

Type of family = Joint family

Family tree:



Keys:-

Female =

Male =

Patient =

Dead =

No any significant family history as all the relatives of my patient died naturally due to the old age. But his brother is suffering from DM & hypertension.

Family history of hereditary diseases:-

Diseases	Mother's family	Father's family
High BP	✓	×
Diabetes	✓	×
Cancer	×	×
Arthritis	×	×
Blood disorder	×	×
Cardiovascular problem	×	×
Asthma	×	×
TB	×	×
Psychiatric illness	×	×
Others	×	×

Personal history:-

- A. Place of birth:- Home
- B. Childhood immunization:- Yes
- C. Personal habits:-

My patient used to smoke before 15-20 years ago.

Cultural Background & practices:-

- Ethnic group: Chettri
- Belief about health and illness: She believes that health is everything and said that disease attacked her due to her negligence of food habits.
- Health practices: She follows modern health practices.
- Food practices: She is non-vegetarian.

3. PHYSICAL EXAMINATION

1) Record of vital signs and Anthropometric measurement:

Value	Weight	Height	T	P	R	BP
Client's value	75 kg	58 cm	97 °F	74 beats/min	26 breathes/min	90/60mm of hg
Normal value			97.6 °F	60-100 beats/min	15-20 breathes/min	120/80mm of hg

$$BMI = \frac{\text{Weight in kg}}{\text{Height (in m}^2)} = \frac{75}{58^2} = 222.9 = \text{obesity}$$

2) Head to toe examination:

General Appearance:

SN	Examination	Normal Data	Abnormal Data	Patient's Findings
a.	Gait	Walk straight	Limp	His gate was straight
b.	General state of health	Cheerful, active and appears healthy	Sad, tired, weak appearance	Cheerful, weak and appears healthy
c.	Stature, note the general bodily proportions and look for any deformities		Very short stature in turner's syndrome renal disease, hypo pituitary (dwarfism), long limbs in Marfan's syndrome	
d.	Nutritional status	Appears well nourished	Obese or thin, generalized fat in simple obesity, truncal fat with relatively thin limbs in Cushing's syndrome	Appears well nourished
e.	Behavior	Appropriate reaction to the situation	Unusual behavior, unexpected shaking, movements restlessness	Appropriate reaction to the situation; cooperative
f.	Cleanliness	Good hygiene, clean clothing, well groomed	Dirty clothes, poorly groomed	Good hygiene, clean clothing, well groomed
g.	Speech (listen for pace of speech and its pitch clarity and spontaneity)	Audible voice	Fast speech of hyperthyroidism, lack of spontaneity in depression, asthma. Slow, thick, hoarse voice of myxedema	Audible voice and understandable speech

Skin:

SN	Examination	Normal Data	Abnormal Data	Patient's Findings
a.	<u>Inspect the skin</u> The color. Note the color change all over the body or in a localized area	The color varying from black, brown or fair depending upon the genetic factor	Pallor due to anemia, peripheral cyanosis includes anxiety, cold exposure & venous obstruction. Central cyanosis include lungs disease, congenital heart disease	The color varying from black, brown or fair depending upon the genetic factor
b.	Any patches or lesions or any evidence if itching as shown by scratching	Skin free of lesions or abrasions	Skin patches, lesion or itching present	Skin free of lesions or abrasions
c.	Edema	No edema	Edema	No Edema
d.	Excessive sweating or dehydration	No excessive moisture or dryness	Dryness in hypothyroidism, oiliness in acne	No excessive moisture or dryness
e.	Hair distribution, color, cleanliness	Clean, smooth & dry hair, color of hair varying from black, brown & white depending upon genetic factor, no color change in the hair	Loss of hair, dirty hair, change in hair, e.g.: fine hair in hyperthyroidism coarse hair in hypothyroidism	Clean, smooth & dry hair, white color of hair depending upon old age
f.	The evidence of injury	No bleeding, bruising or laceration of skin	Bleeding, bruising or laceration of skin	No bleeding, bruising or laceration of skin
g.	<u>Palpitation</u> Temperature: Feel it with the back of finger.	Warm skin even temperature	Generalized warmth in fever, hyperthyroidism & coolness in hypothyroidism, local warmth in inflammation	Warm skin even temperature
h.	Texture: Feel the skin for smoothness	Smooth, soft skin	Roughness in hypothyroidism	Smooth, soft skin
i.	Edema: press the skin with index & middle finger & then leave & watches the depression	Quickly depression recovers	Depression recovers slowly	Quickly depression recovers
j.	Dehydration: Dehydrated skin loses its elasticity, check the elasticity of skin by pinching the skin just below the clauide in adults & the abdomen skin in children	Elastic skin: the skin quickly comes back to its previous state	Comes back to its previous state slowly	Comes back to its previous state slowly due to his old age.

Lymph node:

SN	Examination	Normal data	Abnormal data	Patient's Findings
a.	<u>Inspection</u> Redness/enlargement of lymph nodes	Lymph nodes not visible , no redness	Enlargement & redness of lymph nodes	Lymph nodes not visible , no redness
b.	<u>Palpitation</u> Enlargement and tenderness	Lymph nodes are not palpable & tenderness	Hard, fixed nodes. Suggest malignancy	Lymph nodes are not palpable & tenderness

Head:

SN	Examination	Normal data	Abnormal data	Patient's Findings
a.	<u>Inspection</u> <i>Scalp:</i> Scaliness, lumps or other lesions	No lumps or other lesions	Redness & scaling in seborrheic dermatitis, psoriasis. Enlarged skull in hydrocephalus	No lumps or other lesions
b.	<i>Skull</i> General size and contour of the skull. Note any deformities, lumps or tenderness	No any deformities, lumps and tenderness in skull.	Hydrocephalous Deformities, lumps and tenderness present in skull.	No any deformities, lumps and tenderness in skull.
c.	<i>Face</i> Involuntary movement, edema & masses	Uniform movement of sides of face, no edema & masses	One side of the face moves differently from other side	Uniform movement of sides of face, no edema & masses. Presence of lump on forehead due to fall from window 15 years ago.
d.	<u>Palpation</u> Swelling, tenderness and depression	No swelling, tenderness & depression	Swelling, tenderness and depression	No swelling, tenderness & depression

Eyes:

SN	Examination	Normal data	Abnormal data	Patient's Findings
a.	<u>Inspection:</u> Eyebrow, eyelashes, eyelids, swelling, conjunctiva, sclera cornea, pupils reaction to light, visual fields	-Equal distribution in both sides -No infection, sty -No swelling, redness	-Absent or abnormally distribution -Present infection sty	-Equal distribution in both sides -No infection, sty -No swelling, redness
b.	Accommodation of eyes, visual problems, use of power lenses	-No bulges -Dark pink in color, no redness, paleness, discharge, foreign body -White in color with few small blood vessels -Transparent, no abrasion or white spot -Pupils are round & uniform in size & shape -As the torch approaches the eye, the pupils constricts & as the torch is removed the pupils dilate - Transparent	-Present swelling, redness or lesions -Bulging, staring or sunken eyes -Pale palpebral conjunctiva indicate anemia & redness indicate conjunctivitis -Yellow sclera indicates jaundice -Cloudy appearance abrasions or white spots - Irregular size or shape of pupils -Pupil remain constricted even after the torch is removed -White, cloudy lens	-No bulges -Dark pink in color, no redness, discharge, foreign body -Normal sclera and pupil -As the torch approaches the eye, the pupils constricts & as the torch is removed the pupils dilate -Poor visual acuity and uses power lenses for short & long sightedness. -Lack of accommodation and extra ocular movement due to blurred vision

Ear:

SN	Examination	Normal data	Abnormal data	Patient's Findings
a.	Shape, size, location, lumps or masses, discharge, redness, hearing test by weber & Rinne test • Weber test: • Rinne test:	-The top of the pinna meets or crosses the eye -No lumps or lesions -Smooth rounded outline -No discharge, redness, mass or foreign body, slight cerumen present -No perforation, lesion bulging -Sound is heard in the midline or equal to both ear -The sound is heard, longer through air than through bore	-The top of the pinna does not meet -Dump or lesion -Clear blood or yellow discharge, redness, mass, foreign body, excessive cerumen present -Perforation, lesion, bulging	-The top of the pinna meets or crosses the eye -No lumps or lesions -Smooth rounded outline -No discharge, redness, mass or foreign body, slight cerumen present -No perforation, lesion bulging -Sound is heard in the midline or equal to both ear -The sound is heard, longer through air than through bore

Nose:

SN	Examination	Normal data	Abnormal data	Patient's Findings
a.	Location, size, nasal flaring, injury, any foreign bodies, discharge, bleeding, smelling	-Centrally located -Nostrils are uniform in size and do not flare. -No polyp or deviation. -Dark pink mucous membrane, no discharge or foreign bodies.	-Deviated in location -Asymmetrical in size and do not flaring, nostrils. -Presence of polyp or deviation. -Red swollen mucosa of acute rhinitis, pale mucosa of allergic rhinitis.	-Centrally located -Nostrils are uniform in size and do not flare. -No polyp or deviation. -Dark pink mucous membrane, no discharge or foreign bodies.

Mouth:

SN	Examination	Normal data	Abnormal data	Patient's Findings
a.	Color and condition of lips, missing teeth	-Pink, moist and intact skin, no bluish discoloration, cracks and ulcers.	-Lips bluish in color, cracks, or ulcers present.	-Pink, moist and intact skin, no bluish discoloration, cracks and ulcers.
b.	Hare lips, sore on gums, cleft palate, sore on tongue, dental carrier, condition of oral hygiene, smell and examination of different taste buds	-Symmetrical pink moist, papillae and midline fissure present. -No difficulty in swallowing. -Neither foul odor nor smell.	-Asymmetrical, red or pale, dry, papillae or fissure absent. -Difficulty in swallowing. -Breath odor of alcohol, acetone in diabetes mellitus, pulmonary infection.	-Symmetrical pink moist, papillae and midline fissure present. -No difficulty in swallowing. -Presence of foul odor

Throat and neck:

SN	Examination	Normal data	Abnormal data	Patient's Findings
a.	Pain, swelling, difficulty on swallowing Change in voice, respiratory problems.	-No difficulty in swallowing. -No titling of head. -No masses, scars.	-Difficulty in swallowing -Titling of head. -A scar of post thyroid surgery may be the clue to unsuspected hypothyroidism.	-No difficulty in swallowing. -No titling of head. -No masses, scars.
b.	Cough, blood in sputum, condition of thyroid gland, tenderness, lumps,	-Thyroid gland not visible and enlarged. -No stiffness, swelling	-Enlarged thyroid gland. -Stiffness and swelling.	-Thyroid gland not visible and enlarged. -No stiffness, swelling
c.	neck rigidity, enlargement of tonsils.	-No tight of neck muscles and no tenderness along the neck.	-Muscle tightening, tenderness along the spine lump along the spine.	-No tight of neck muscles and no tenderness along the neck.

Chest (lung & heart):

SN	Examination	Normal data	Abnormal data	Patient's Findings
a.	Shape and size masses, lumps, pain	-Lateral diameter (side to side) is wider than the antero-posterior (front to back) diameter	-Barrel shaped chest (increase antero-posterior diameter) due to pulmonary emphydema -Funnel shaped chest characterized by a depression in the lower portion of the sternum -Pigeon chest: sternum is displaced anteriorly & increasing antero-posterior diameter	-Lateral diameter (side to side) is wider than the antero-posterior (front to back) diameter
b.	Auscultate breathe sounds	-Breathe sound are heard in all area of the lungs -Inspiration longer than expiration -No sales, rhonchi wheezing sound	-Absent or decreased breathe sound - Prolonged expiration -Rales, rhonchi, wheezing sounds, pleural rub, crepitation present	-Breathe sound are heard in all area of the lungs -Inspiration longer than expiration -Wheezing sound
b.	Heart	-No enlargement -Clear and regular heart rate between 60-80beats/min. No murmur sound present	-Enlargement -Decreased or in audible heart sounds irregular or missed heart beats. Heart rate less than 60 or more than 80 beats/min. Murmur sound present.	-No enlargement -Clear and regular heart rate between 60-80beats/min. No murmur sound present

Gastro-Intestinal:

SN	Examination	Normal data	Abnormal data	Patient's Findings
a.	Shape, size, swelling distended blood vessels bowel sound, hepatomegaly, splenomegaly, tenderness	-Round or flat and shape, no scare, visible blood vessels. -Bowel sound present in all area (producing every 5-15 sec) -No abdominal masses & tenderness -Spleen is not palpable no enlargement tenderness on palpation -Kidney are not palpable & tender	-Irregular in shape, abdominal scar, swelling & abdomen & distended blood vessels. -High pitch tinkling sound absence of bowel sound -Abdominal masses & tender -Spleen enlarged & tender -Kidney enlarged & tender	-Round or flat and shape, no scare, visible blood vessels. -Bowel sound present in all area (producing every 5-15 sec) -I did not palpate the abdomen due to her surgical incision.

Musculoskeletal system:

SN	Examination	Normal data	Abnormal data	Patient's Findings
a.	Presence of bone, deformities, joint pain	-No bone or joint deformity, no redness, swelling of joint, no muscle wasting	-Presence of bone deformity, joint deformity, joint redness or swelling, muscle wasting	-Presence of knee joint pain
b.	Joint swelling, muscle wasting, joint deformity	-Able to move joints freely no sign of pain while moving joint	-Limited movement of joint, sign of pain when moving the joint	-Limited movement of joint, sign of pain when moving the joint
c.	Muscle weakness, fracture placement & curvature of spine, adduction, abduction	-Spine is in the midline, spine slightly curved out from the neck & gradually curving inward at waist	-Lateral deviated of spine, increased curvature of spine, increased curvature of spine, decreased spinal mobility in osteoarthritis	-Spine is in the midline, spine slightly curved out from the neck & gradually curving inward at waist
d.	Reflexes: Knee jerk reflex Biceps and triceps reflex Planter reflex	-Normal extension of leg -Normal slight flexion and extension of elbow -Normal	-Abnormal extension of leg -Abnormal slight flexion and extension of elbow -Abnormal	-Normal extension of leg -Normal slight flexion and extension of elbow -Normal

Mental health:

SN	Examination	Normal data	Abnormal data	Patient's Findings
a.	Loss of irritability	-No irritation	-Irritation	-No Irritation
b.	Sleeplessness	-No sleeplessness	-Sleeplessness	-Sleeplessness
c.	Fearness	-Fearless	-Fearness	-Fearness

Nervous system:

SN	Examination	Normal data	Abnormal data	Patient's Findings
a.	Muscle strength, sensation, co-ordination of movement, headache, fainting, paralysis, speech, touch	-Equal strength in both hands and ,no muscle weakness -Feels light brush cotton equally on both sides of his body -Co-ordinated movement	-Muscular weakness in one or both hand and feet -Loss of sensation to light brush -Uncoordinated movement	-Equal strength in both hands and ,no muscle weakness -Co-ordinated movement

Genital Anus:

SN	Examination	Normal data	Abnormal data
a.	Irritation on anus, crack, urethral discharge, lumps	-No irritation, fissure, cracks or enlarged blood vessels in the anus -Labia of the same color & size no redness or swelling of the labia. -No redness or discharge at the urethra	-Presence of anal irritation, anal fissure, enlarged blood vessels -Red or swollen labia -Redness at urethra

Abnormal findings:

1. Nutritional status was diminished due to anorexia.
2. She has lump on forehead due to fall from window 15 years ago.
3. Dyspnea
4. Visual acuity is abnormal. She has short-sightedness and long-sightedness.
5. Foul odor was present from mouth.
6. She has difficulty on walking and joint pain.

4. DEVELOPMENT NEED AND TASK

As the age of my patient is 66 years old, she comes under the older adulthood. In older adulthood, different physiological changes and psychosocial changes occur.

Physical needs of older adulthood are:

SN	According to the book	According to my patient
1	Adaptation to chronic illness	My patient has no any history of chronic illness. So, adaptation to chronic illness is absent.
2	Adaptation to sensory /perceptive losses	Present as my patient have shortsightedness and long sightedness and she uses glasses with power for adaptation.

Developmental tasks of older adults are:

SN	According to the book	According to my patient
1	Adjusting to decreasing health and physical strength.	Present as she had the concept that at older age illness occurs and physical strength decreases.
2	Adjusting to reduce or fixed income.	Absent as she have no retired life.
3	Adjusting to death of a spouse.	Present as she have adjusted after the death of spouse.
4	Accepting oneself as an ageing person.	Present as she thinks that she have become old, so disease attacked her.
5	Maintaining satisfactory living arrangement.	Present as she is maintaining and living satisfied life with her family members.
6	Realigning relationship with adult children.	Present as she is living happily with her family member.
7	Finding meaning in life.	Present as she told that life is everything.

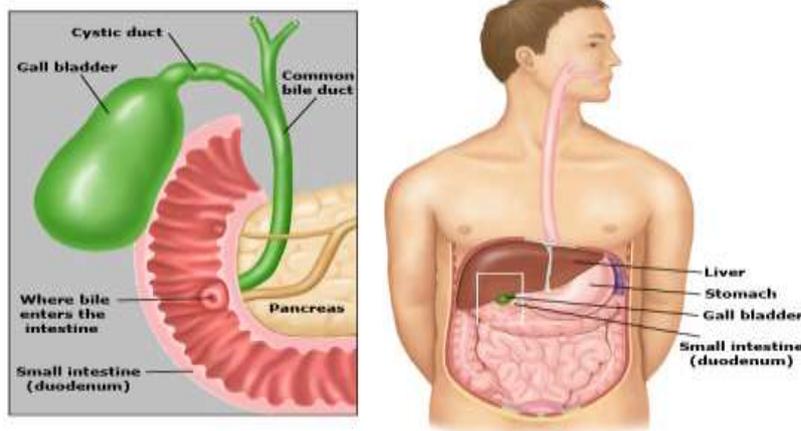
5. CHOLELITHIASIS

ANATOMY AND PHYSIOLOGY OF GALL BLADDER:

Gallbladder is a muscular organ that serves as a reservoir for bile, present in most vertebrates. In humans, it is a pear-shaped membranous sac on the undersurface of the right lobe of the liver just below the lower ribs. It is generally about 7.5 cm (about 3 in) long and 2.5 cm (1 in) in diameter at its thickest part; it has a capacity varying from 1 to 1.5 fluid ounces. The body (corpus) and neck (collum) of the gallbladder extend

backward, upward, and to the left. The wide end (fundus) points downward and forward, sometimes extending slightly beyond the edge of the liver. Structurally, the gallbladder consists of an outer peritoneal coat (tunica serosa); a middle coat of fibrous tissue and unstriped muscle (tunica muscularis); and an inner mucous membrane coat (tunica mucosa).

The function of the gallbladder is to store bile, secreted by the liver and transmitted from that organ via the cystic and hepatic ducts, until it is needed in the digestive process. The gallbladder, when functioning normally, empties through the biliary ducts into the duodenum to aid digestion by promoting peristalsis and absorption, preventing putrefaction, and emulsifying fat. Digestion of fat occurs mainly in the small intestine, by pancreatic enzymes called lipases. The purpose of bile is to; help the lipases to work, by emulsifying fat into smaller droplets to increase access for the enzymes, enable intake of fat, including fat-soluble vitamins: Vitamin A, D, E, and K, rid the body of surpluses and metabolic wastes cholesterol and bilirubin.

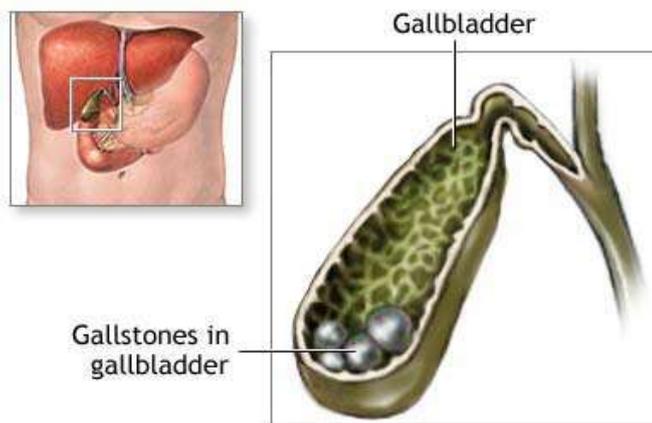


CHOLELITHIASIS:

1) Introduction:

Cholelithiasis is the process of stone formation in the gall bladder. Cholecystitis is an inflammation of the gall bladder which can be acute and chronic and usually precipitated by gall stone impacted in the cystic duct, causing distension of the gall bladder. Stone are made up of cholesterol, calcium bilirubinate, or a mixture caused by changes in the bile composition. Gall stones can develop in the common bile duct, cystic duct, hepatic duct, small bile duct and pancreatic duct. Crystals can also form in the submucosa of the gall bladder causing widespread inflammation.

Cholelithiasis is one of the very common health problems in Nepal and all over the world. It is four times more common in women than in men. It occurs frequently in middle ages or in old age group. It is the most common disorder of the biliary tract. It is more common in obese person, those who have diabetes mellitus and other endocrine problem.

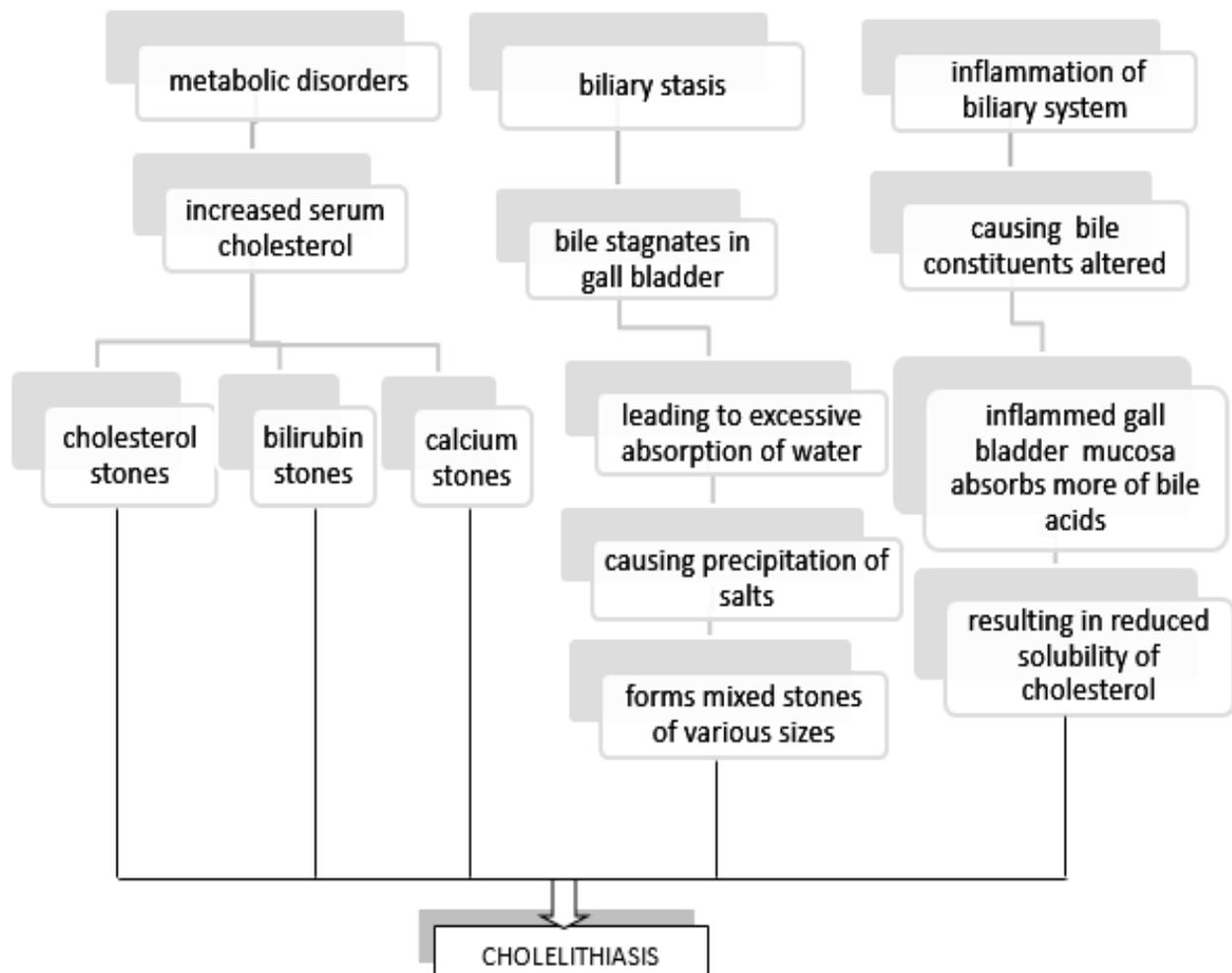


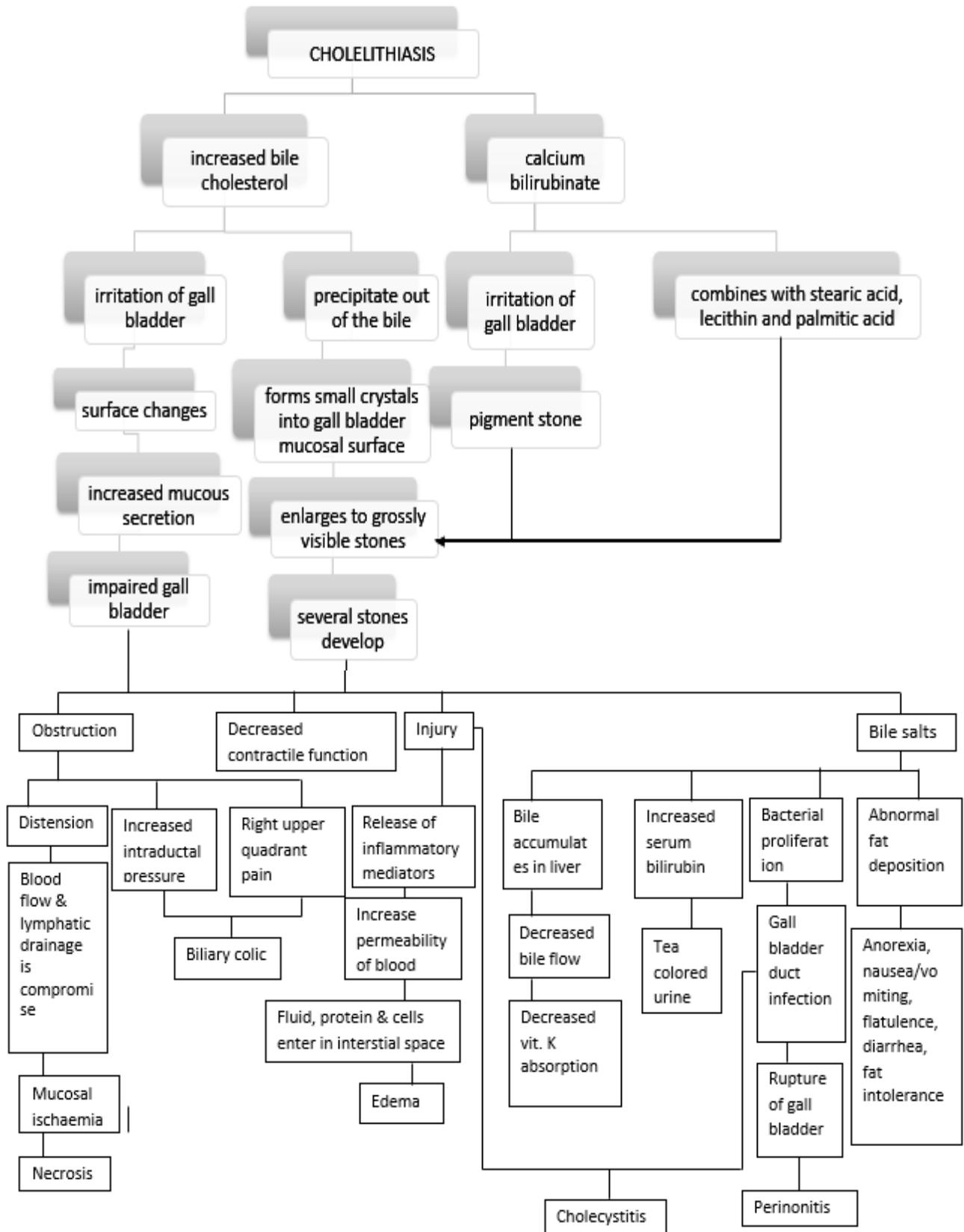
2) *Etiology:*

- Hereditary
- Diet pattern – especially excessive fatty consumption
- Obese person may be due to impaired fact metabolism
- Birth control period-alters hormone levels
- Multiple pregnancy
- Inflammation of biliary tract
- Stagnant bile in gall bladder

3) *Pathophysiology:*

Gallstones are composed of cholesterol, bile salts, calcium, bilirubin and proteins. However, the exact cause of gallstone formation is not clearly understood. There are 3 specific factors which appear to contribute to the formation of gall stones.





4) *Clinical features:*

SN	According to the book	According to my patient
1	Acute abdominal pain in right hypochondriac region.	Abdominal pain was on hypogastric region before 1-2 months ago.
2	Tachycardia	Absent as the pulse rate was 68 beats/min.
3	Diaphoresis	Present
4	Nausea / vomiting	Nausea was present after the forceful intake of food.
5	Chills and rigor	Absent
6	Jaundice	Absent
7	Stool will be clay colored due to loss of urobilinogen.	Absent
8	Dyspepsia	Present as patient said that indigestion occurs after the intake of fatty meal.
9	Bilirubin will be excreted in urine.	Absent as bilirubin was found in urine R/E and M/E.
10	Sometimes a sausage – shaped mass may be felt when abdomen is palpated.	Absent

5) *Investigations:*

SN	According to the book	According to my patient
1	Blood for TC, DC, ESR, Hb%	Present as the result was: TC= 6900 /cumm DC: Neutrophil= 74% Lymphocytes=26% ESR= not done Hb%= 11.7%
2	Abdominal plain X-ray	Absent
3	USG	Present as in USG, mild fatty liver and cholelithiasis (multiple) was found.
4	CT Scan of Hepatobiliary system	Absent
5	Cholecystography	Absent
6	Cholescintigraphy	Absent
7	Endoscopic retrograde cholangiopacreatography	Absent
8	Percutaneous transhepatic cholangiography	Absent

6. *Findings of Investigations:*

SN		Finding rate	Normal rate
1	<u>Hematology:</u> Hb WBC TC DC Neutrophil Lymphocytes Platelets Blood group / Rh	11.7gm/dl 6,900/cumm 74% 26% 157,000 /cumm B +ve	12 – 16 gm/dl 4,000 – 11,000 /cumm 40 – 75% 25 – 40% 150,000 – 400,000 /cumm
2	<u>Biochemistry</u> Glucose random	5.4 mmol/l	3.5 – 7.8 mmol/l
3	<u>RFT / KFT</u> Blood urea Serum creatinine Na K	4.2 mmol/l 67 µmol/l 143 mEq/l 4.3 mEq/l	2.5 – 7.5 mmol/l 40 – 110 µmol/l 135 – 145 mEq/l 4.3 mEq/l
4	<u>LFT</u> Total bilirubin Direct bilirubin Serum alkaline phosphate SGPT SGOT	22 µmol/l 6 µmol/l 117 U/L 59 U/L 64 U/L	3 – 21 µmol/l 0 - 6 µmol/l 38 – 126 U/L 13 – 79 U/L 15 – 46 U/L
5	<u>Immunology</u> Rapid card HIV HBsAg Anti HCV	Non-reactive Non-reactive Non-reactive	
6	<u>Urine R/E M/E</u> <u>Physical examination</u> Color	Light yellow	

	Appearance <u>Chemical examination</u> pH Sugar Protein <u>Microscopic examination</u> WBC RBC Epithelial cell Crystal Cast	Clear Acidic - - 10-15 0-2 Plenty Nil Nil	
7	<u>Urine C/S</u> No growth in 48 hours at 37°C incubation period.		
8	<u>USG</u> (In 14 th July) Abdomen and pelvic	1) Mild fatty liver 2) cholelithiasis (multiple)	

7. Medical management:

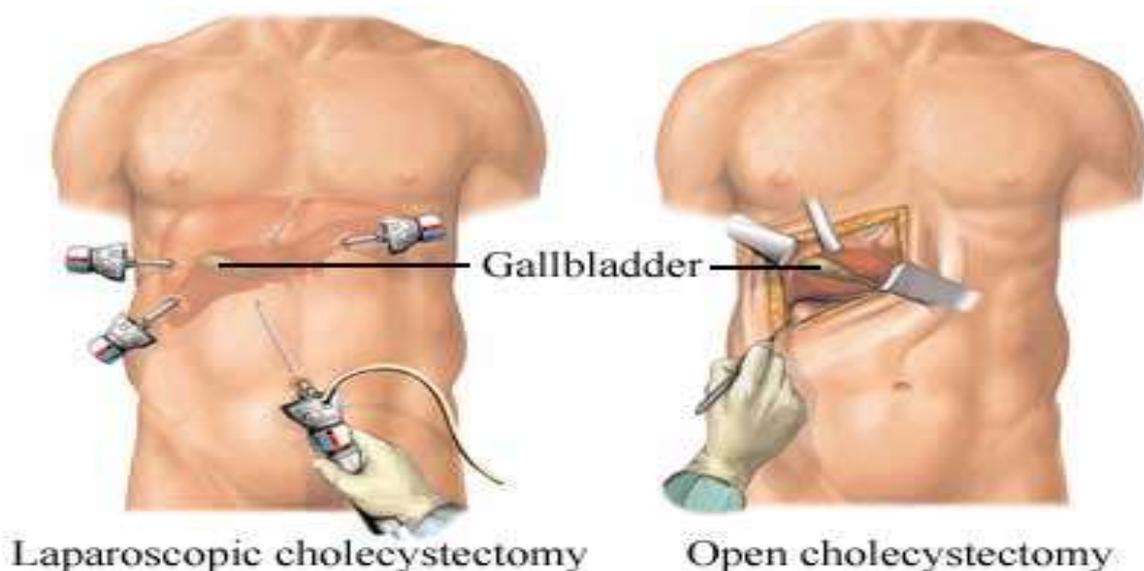
SN	According to the book	According to my patient
1	<u>Nutritional and supportive therapy</u> Rest, IV fluids, NG suction, analgesic and antibiotic agents. Diet	My patient was encouraged for bed rest. IV fluids: Inj Normal saline II pint and inj Dextrose 5% II pint was given. Low fat diet and liquid diet was given.
2	<u>Pharmacological therapy</u> Ursodeoxycholic acid (UDCA) Chenodeoxycholic acid (CDCA)	Not given Not given
3	<u>Non-surgical removal of gallstones</u>	Absent

8. Surgical management:

SN	According to the book	According to my patient
1	Cholecystectomy, open or laparoscopic	Laparoscopic Cholecystectomy was done in 2014/07/20.
2	Intraoperative cholangiography and choledochoscopy	Absent
3	Placement of a T tube in the common bile duct to decompress the biliary tree and allow access into the biliary tree postoperatively.	Absent

I. Cholecystectomy:

Cholecystectomy is the surgical removal of the gallbladder. It is a common treatment of symptomatic gallstones and other gallbladder conditions. Surgical options include the standard procedure, called laparoscopic cholecystectomy, and an older more invasive procedure, called open cholecystectomy. Its indications are: cholecystitis, biliary colic, risk factors for gall bladder cancer, and pancreatitis caused by gall stones. The most serious complication of cholecystectomy is damage to the common bile duct. This occurs in about 0.25% of cases.

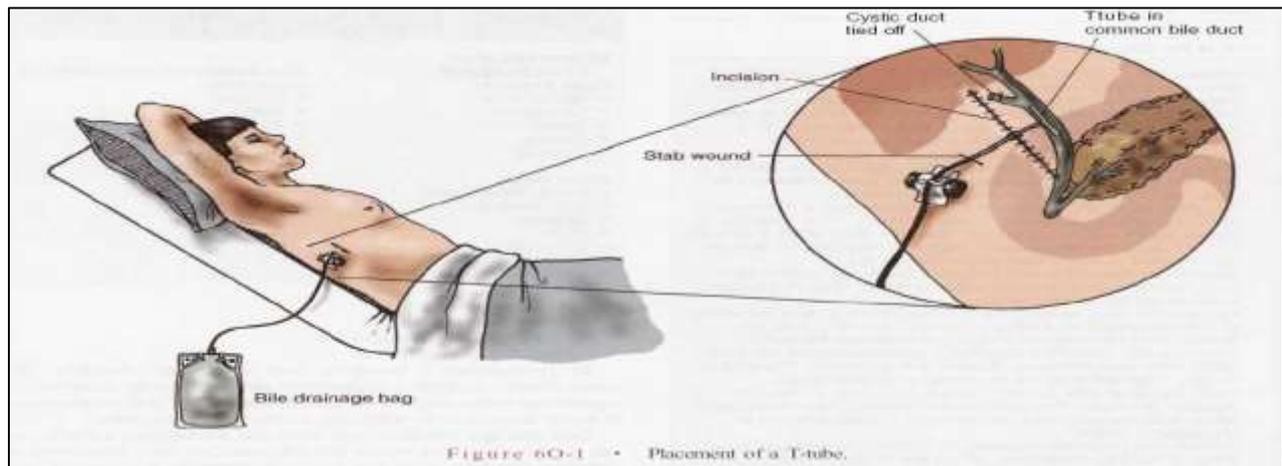


II. Intraoperative cholangiography and choledochoscopy:

Intraoperative cholangiography is an examination of the bile ducts following administration of a radiopaque contrast medium during operation. Choledochoscopy is the direct visualization of the biliary tract with an endoscope through a T-tube or incision into the common bile duct. Small calculi can be removed from the common bile duct during this procedure.

III. Placement of a T-tube:

In this procedure, T tube is placed in the common bile duct to decompress the biliary tree and allow access into the biliary tree postoperatively.



MEDICINES USED IN MY PATIENT:

A. Tab. Cefixime 200mg BD

- **Trade name:** Cefixime, suprax
- **Generic name:** Cephalosporin
- **Classification:** Antibiotic
- **Mechanism of action:**

It is a third generation cephalosporin. The bactericidal action of cephalosporin is due to the inhibition of cell wall synthesis. It binds to one of the penicillin binding proteins (PBPs) which inhibit the final transpeptidation step of the peptidoglycan synthesis in the bacterial cell wall, thus inhibiting biosynthesis and arresting cell wall assembly resulting in bacterial cell death.

- **Route:**

Oral route

- **Preparation:**

- Powder for Suspension
- Tablet, Chewable
- Tablet
- Capsule

- **Doses:**

200-400 mg/day PO in single daily dose or divided q12hr

- **Pharmacokinetics:**

- Absorption:

Bioavailability: 40-50%

- Distribution:

Distributed widely throughout body and reaches therapeutic concentration in most tissues and body fluids, including synovial, pericardial, pleural, and peritoneal; bile, sputum, and urine; bone, myocardium, gallbladder, skin, and soft tissue

- Half-life: 3-4 hour
- Excretion: Urine (50% as unchanged drug), feces (10%)

➤ **Indications:**

- Cefixime treats infections of the:

Ear: Otitis caused by *Haemophilus influenzae*, *Moraxella catarrhalis* and *Streptococcus pyogenes*.

Sinuses: Sinusitis.

Throat: Tonsillitis, pharyngitis caused by *Streptococcus pyogenes*.

Chest and lungs: Bronchitis, pneumonia caused by *Streptococcus pneumoniae* and *Haemophilus influenzae*.

- Typhoid fever
- Acute bronchitis and acute exacerbations of chronic bronchitis
- Uncomplicated gonorrhea
- Uncomplicated urinary tract infections

➤ **Contraindications:**

Hypersensitivity to cephalosporin class of antibiotics

➤ **Side effects:**

- Most Common - Diarrhea, loose or frequent stools, abdominal pain, nausea, stomach upset and flatulence.
- Hypersensitivity - Skin rashes, hives, fever, itching and facial swelling.
- Liver - Elevated liver enzymes level, jaundice and liver inflammation.
- Genitourinary - Transient elevations in BUN or creatinine levels and kidney failure.
- Central Nervous System- Headache, dizziness and seizures.
- Blood - Decrease in blood cell counts.
- Other - Genital itching, vaginal inflammation/fungal infection and skin disorders.

➤ **Nursing considerations:**

- Use cefixime cautiously in patients with impaired renal function or a history of GI disease, especially colitis. Also use drug cautiously in patients who are hypersensitive to penicillin because cross-sensitivity has occurred in about 10% of such patients.
- Be aware that allergic reaction may occur a few days after therapy starts.
- Assess bowel pattern daily; severe diarrhea may indicate pseudomembranous colitis.
- Assess for signs of super infection, such as perineal itching, fever, malaise, redness, and pain, rash and cough or sputum changes.

Patient teaching:

- Instruct patient to complete the prescribed course of therapy.
- Tell patient to immediately report severe diarrhea or prescriber.
- Inform patient that yogurt and buttermilk can help maintain intestinal flora and decrease diarrhea.
- Teach patient to recognize and report signs of super infection.

B. Tab. Pantop 40mg BD

- **Trade name:** Pantop, Protonix
- **Generic name:** Pantoprazole
- **Classification:** Proton pump inhibitors
- **Mechanism of action:**

Pantoprazole is a proton pump inhibitor drug that binds to H⁺/K⁺-exchanging ATPase (proton pump) in gastric parietal cells, resulting in blockage of acid secretion

- **Route:**

Oral route

Intravenous route

- **Preparation:**

Tablet—20, 40 mg;

Powder for injection—40 mg/vial

- **Doses:**

40 mg PO qDay for 8-16 weeks

- **Pharmacokinetics:**

- Absorption:
Bioavailability: 77%
- Metabolized extensively by hepatic
- Elimination
Half-life: 1 hour
Excretion: Urine (71%); feces (18%)

- **Indications:**

- Peptic ulcer
- Duodenal ulcer
- Gastric ulcer
- Erosive esophagitis associated with GERD
- Zollinger-Ellison Syndrome
- Gastroesophageal reflux disease

- **Contraindications:**

Hypersensitivity to pantoprazole or other proton pump inhibitors (PPIs)

➤ Side-effects:

- Gastrointestinal: Abdominal pain, diarrhea, flatulence
- Neurologic: Headache
- Gastrointestinal: atrophic gastritis, clostridium difficile diarrhea
- Hematologic: thrombocytopenia
- Immunologic: Stevens-Johnson syndrome, toxic epidermal necrolysis
- Musculoskeletal: Muscle disorders, bone fracture and infection, Clostridium difficile, osteoporosis-related, hip fracture
- Renal: Interstitial nephritis (rare)

➤ Nursing considerations:

- Assessment:
 - History: Hypersensitivity to any proton pump inhibitor or any drug components; pregnancy; lactation
 - Physical: Skin lesions; urinary output, abdominal examination; respiratory auscultation
- Interventions:
 - Administer once or twice a day. Caution patient to swallow tablets whole; not to cut, chew, or crush them.
 - **WARNING:** Arrange for further evaluation of patient after 4 weeks of therapy for gastroreflux disorders. Symptomatic improvement does not rule out gastric cancer; gastric cancer did occur in preclinical studies.
 - Maintain supportive treatment as appropriate for underlying problem.
 - Switch patients on IV therapy to oral dosage as soon as possible.
 - Provide additional comfort measures to alleviate discomfort from GI effects and headache.
- Teaching:
 - Take the drug once or twice a day. Swallow the tablets whole—do not chew, cut, or crush them.
 - Arrange to have regular medical follow-up care while you are using this drug.
 - Maintain all of the usual activities and restrictions that apply to your condition. If this becomes difficult, consult with your nurse or physician.
 - You may experience these side effects: Dizziness (avoid driving a car or performing hazardous tasks); headache; nausea, vomiting, diarrhea, cough
 - Report severe headache, worsening of symptoms, fever, chills, blurred vision, and periorbital pain.

C. Tab. Voveron 75mg BD

- **Trade name:** aclonac, cataflam, voltren
- **Generic name:** diclofenac
- **Classification:** Non-steroidal anti-inflammatory drug (NSAID)
- **Mechanism of action:**

Inhibits cyclooxygenase (COX)-1 and COX-2, thereby inhibiting prostaglandin synthesis

May also inhibit neutrophil aggregation/activation, inhibit chemotaxis, decrease proinflammatory cytokine level, and alter lymphocyte activity.

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 ➤ **Route:**

- Oral route
- Topical route
- Intramuscular route
- Rectal route
- Intravenous route

 ➤ **Preparation:**

- Oral - tablets, dispersible tablets or capsules.
- Injection.
- Suppositories
- Gel.

 ➤ **Doses:**

Adult: 100 - 150 mg / day in 2 - 3 divided doses

 ➤ **Pharmacokinetics:**

- Absorption

~100% absorbed

Bioavailability: 50-60%

- Distribution

Protein bound: 99-99.8%

- Metabolized in liver

- Elimination

Half-life: 1.2-2 hours

Excretion: Urine (50-70%), feces (30-35%)

 ➤ **Indications:**

- Rheumatoid arthritis
- Osteoarthritis
- Ankylosing spondylitis
- Dysmenorrhea
- Mild to moderate acute pain
- Acute migraine

 ➤ **Contraindications:**

- Porphyria
- Active peptic ulceration
- Hypersensitivity including hypersensitivity to other NSAIDs or aspirin.

Cautions

- Severe renal disease
- Severe hepatic disease
- History of peptic ulceration.
- Breastfeeding.
- Older people.
- Coagulation problems.

➤ Side-effects:

- Gastrointestinal problems including ulceration.
- Hypersensitivity reactions.
- Headache.
- Dizziness.
- Depression.
- Drowsiness.
- Sleeping problems.
- Hearing disturbance.
- Photosensitivity.
- Hematuria.
- Fluid retention.
- Raised blood pressure.
- Papillary necrosis.
- Hepatic damage.
- Alveolitis.
- Pulmonary eosinophilia.
- Pancreatitis

➤ Nursing considerations:

- Evaluate therapeutic response by assessing pain, joint stiffness, joint swelling and mobility.
- Assess any worsening of asthma in appropriate patients.
- Regular full dosage has both lasting analgesic and anti-inflammatory effects, making it useful for continuous pain associated with inflammation.
- Nurses should refer to manufacturer's summary of product characteristics and to appropriate local guidelines.

Patient teaching

- Onset of pain relief is about one hour depending on route of administration. Full anti-inflammatory effect may take up to three weeks.

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- Take oral preparations with food and keep alcohol consumption low to decrease risk of stomach irritation.
- If using as a long-term treatment for arthritis, consult the prescribing professional before stopping it.
- Do not take any other NSAIDs.

 9) *Nursing management:*

a. Pre-operative management:

SN	According to the book	According to my patient
1	Remove all jewelry and hand over them to the relatives. Remove lipstick and nail polish.	Removed all jewelry and hand over them to the relatives.
2	Shave the area to be operated. After shaving ask the patient wear clean clothes.	Shaved the area to be operated. After shaving asked the patient wear clean clothes.
3	Reassure the patient to prevent anxiety and fear of operation.	Reassured the patient to prevent anxiety and fear of operation.
4	Note allergies according to institutional policy.	No any allergies were found.
5	Take and record the vital signs, assess and report the abnormalities for elevated temperature.	Taken and recorded the vital signs, all vital signs were normal.
6	Take the written consent.	Taken the written consent.
7	Check for the carry out any special orders, such as administering enema/starting IV line, record pervious recording, inserting NG tube, giving medications.	No any special orders were ordered.
8	Keep the patient at NPO for the last 8 hours.	Kept the patient at NPO for the last 8 hours from 12 AM.
9	Ask the patient to void; measure and record the amount of urine.	Asked the patient to void.
10	Remove all hair clips and comb hair and cover it with cap.	Removed all hair clips and combed hair and covered it with cap.
11	Remove all prosthesis like dentures, eye glasses, partial plates and contact lenses and store them safely.	No any prosthesis was found.
12	If the patient is wearing hearing aid, notify the OT nurse. Leave it in a place so that operating room personnel know it is there and can communicate with the client.	Absent as patient do not have any hearing problem.
13	Inform patient about the pre-operation holding area and give the location of the waiting room for support person.	Informed patient about the pre-operation holding area and gave the location of the waiting room for support person.
14	Fill out the pre-op checklist and tick the tasks performed for patient.	Filled out the pre-op checklist and ticked the tasks performed for patient.
15	Sent the patient to OT room along with patient chart, operation chart, ECG, X-ray, investigation reports, drugs and needed items and handover to OT nurse.	Sent the patient to OT room along with patient chart, operation chart, investigation reports, drugs and needed items and handover to OT nurse.
16	Record and report: departure of the patient's time, medication given, note if the patient's belongings were handover to patient's relatives.	Recorded and reported: departure of the patient's time, medication given, note if the patient's belongings were handover to patient's relatives.

b. Post-operative management:

SN	According to the book	According to my patient
1	Receive the patient in a warm comfortable bed.	Present as I received the patient in a warm, wrinkle free bed with the help of other health assistants.
2	Position the patient in supine with face turned to one side.	Positioned the patient in supine with face turned to one side.
3	Attach the supportive equipment such as oxygen, IV infusion, catheter, etc.	Attached the oxygen 4 liter, inj. Ringer Lactate 500 ml was infused at 1:15 PM, Inj. Metron 100 mg was infused in IV site. Urobag was hanged in proper place.
4	Assess the level of consciousness and orientation to time, place and person. Assess ability to move extremities.	Assessed the level of consciousness. The patient was semi-conscious.
5	Assess vital signs every ½ hourly, 2-4 hours depending upon the improvement in the condition of the patient then every 4 hourly.	Assessed the vital signs in 15 minutes interval for 3 times and then every 4 hourly.
6	Check IV infusion rate frequently.	Checked IV infusion rate frequently and maintained as prescribed.
7	Give medicine according to the doctor's instruction and record in an appropriate place.	Medicines were given according to the doctor's instruction and recorded in an appropriate place.
8	Avoid noise and bright light in the ward.	Present as noise was avoided by keeping visitors out and light was turned off.
9	Encourage foot and leg exercise as soon as possible within 24 hours.	Present as soon as I reached at my morning duty, I encouraged the patient to move her foot and legs.
10	Give mouth care every 4 hourly.	I gave oral care in the morning.
11	Ambulation on the 1 st post-op day.	Present as I assisted the patient for ambulation on the 1 st post-operative day.

12	Encourage bladder and bowel movement.	I encouraged the patient to take liquid and soft diet to enhance bowel and bladder movement. Normal bladder pattern was returned.
13	Provide steam inhalation.	Absent
14	Watch for wound soakage.	I watched for wound soakage immediately after reaching the hospital.
15	Record the client's time of arrival and all assessment record, intake output including any oral fluid, IV fluid as well as drainage, voiding and emesis.	Recorded the client's time of arrival and all assessment record, intake output including any oral fluid, IV fluid as well as drainage, voiding and emesis.

c. Care in Surgical ward:

SN	According to the book	According to my patient
1	Receive the patient in warm, comfortable bed.	Received the patient at 4:30 PM from post-operative ward by the staff sisters.
2	IV fluids should be continued.	As my patient was taking liquid and soft diet, IV fluid was stopped.
3	Administer medicine according to the doctor's advice.	Tab. Cefixime 200mg BD Tab. Pantop 40mg BD Tab. Voveron 75mg BD was given.
4	Ambulate the patient.	I ambulated the patient as I reached in my morning duty.
5	Provide stem inhalation and encourage deep breathing and coughing exercises.	Absent
6	Watch for wound soakage.	I watched for wound soakage and there was no any soakage present at wound site.
7	Provide routine care depending upon the patient's condition.	I provided hair care, back care and assisted for oral care and skin care.
8	Discharge the patient the day after if everything goes well.	Discharged the patient on 3 rd post-operative day (2014/07/23) at 3:00 pm as everything was normal.

10) Summary of client's daily progress in the hospital:-

DATE: 2014/07/20

OT DAY

As the patient was conscious and vital signs were stable before the OT procedure. Pre-operative care was given and then she was transferred to the OT with all documents. In OT procedure, general anesthesia was given and patient was positioned in reverse trendelenberg and incision was done in 4 parts in abdomen and with the help of laparoscope, the gall bladder was cut off and multiple greenish colored stones are found, largest measuring 5×5 cm. The patient was transferred to post-operative ward.

In post-operative ward, patient's general condition seems poor as she was semi-conscious and vital signs were taken. IV fluid was continued, no any soakage and bleeding in surgical incision site, NPO till 6 hours then sips of liquid was planned to be given.

T	P	R	BP	SPO2
96°F	90 beats/min	22 breathes/min	110/70mm of Hg	97%

DATE: 2014/07/21

1ST POST-OP DAY

Patient's general condition seems fair. Patient is conscious & well oriented to person, place & time. Vitals are monitored & recorded. No any soakage & bleeding in surgical incision site. Patient was in soft diet. Bladder habit was normal. Patient was complaining about headache & dyspnea. So, oxygen was administered at 4liter by mask.

T	P	R	BP	SPO2
98.8°F	84 beats/min	22 breathes/min	80/50mm of Hg	85%

Date: 2014/7/12

2ND POST-OP DAY

Patient's general condition seems fair. Patient is conscious & fully oriented to person, place & time. Vitals are monitored & recorded. No any soakage & bleeding in surgical incision site. Patient was in soft diet. Bladder habit was normal. Oxygen was administered at 1liter.

DATE: 2014/07/23

T	P	R	BP	SPO2
97°F	74 beats/min	26 breathes/min	90/60mm of Hg	96%

3RD POST-OP DAY

Patient’s general condition seems fair. Patient is conscious and fully oriented to person, place and time. Vitals are monitored and normal. Oxygen saturation was stable. So, oxygen was not administered. Bladder habit was normal. No any chief complain.

T	P	R	BP	SPO2
97°F	84 beats/min	22 breathes/min	110/70mm of Hg	93%

11) DIVERSIONAL THERAPIES:

Diversional therapies are the therapies or treatment used to divert the mind of patient away from the disease conditions & problems causing discomfort to the patient.

I carried out the following diversional therapies for my patient:

- 1) Individual therapies: I talked a lot with the patient and encouraged her to express her feeling of anxiety related to operation procedure. I asked her about her brief introduction, her family members and her likes and dislikes.
- 2) Group therapies: I explained the patient about other patients who have already gone through the same procedure. In the post-operative ward, I introduced her with other patients gone through the surgery.
- 3) Nutritional therapy: I encouraged the patient to take nutritious food and excessive water and semi-solid diet.
- 4) Physical therapy: Since, it was OT case of cholecystectomy; I encouraged her to walk and assisted her to walk around the ward. I gave head massage for relieving headache. I gave her back care.

12) Application of appropriate nursing theory:

OREM’S SELF CARE DEFICIT THEORY

According to Orem, “Nursing has its special concern; the individual’s need for self-care action and the provision and management of it on a continuous basis in order to sustain life and health, recover from disease or injury and cope with their effects. “Orem developed her general theory of nursing in 3 related parts which are:

- i. Self-care
- ii. Self-care deficit
- iii. Self-care system

Self-care deficit:

As my patient was gone through the surgical incision, she can’t take care of herself. So, she was unable to meet her own self-care requisites like maintenance of air, water, food, elimination, etc. resulting a “self-care deficit”. As a nurse, it was my job to determine these deficits and define a support modality.

The theory of self-care deficit is the care of Orem’s general theory of nursing because it delineates when nursing is needed. Deflect arises when agency cannot meet self-care requisites. Nurses meet the requisites by following these five methods of helping identified Orem:

- 1) Acting for or doing for another
- 2) Giving another
- 3) Supporting another
- 4) Providing an environmental that promotes personal development in relation to becoming able to meet present or future demands for action
- 5) Teaching another.

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Nursing system theory:-

There are three classifications of nursing system to meet the self-care requisites of the patient. These systems are:-

- a) Wholly compensatory system
- b) Partly compensatory system
- c) Supportive-educative system.

As my patient was unable to perform some self-care activities because she was post-operative patient; I used partially compensatory system and supportive educative system.

Partly compensatory system:-

- I performed some self-care measures like assisted for mouth wash, oral care and dress change.
- Administered oxygen due to low oxygen saturation.
- Ambulated the patient.
- Maintained the drainage of catheter for urine output.
- Encouraged the patient to take fluid and food.

Supportive educative system:-

- Encouraged the patient for ambition
- Accomplish self-care
- Regulated the exercise & development of self-care agency.

13) NURSING CARE PLAN:

Problems in my patient:

- Pain
- Imbalanced fluid volume
- Imbalanced nutrition
- Lack of knowledge

Nursing Priorities

- Relieve pain and promote rest.
- Maintain fluid and electrolyte balance.
- Prevent complications.
- Provide information about disease process, prognosis, and treatment needs.

Nursing diagnosis:

1. Acute pain related to surgical incision.
2. Risk for deficient fluid volume related to medically restricted intake.
3. Risk for Imbalanced Nutrition related to impaired fat digestion due to obstruction of bile flow
4. Deficient Knowledge related to lack of knowledge.

1. Acute pain related to surgical incision.

Assessment	Nursing diagnosis	Nursing goal	Planning	Implementation	Rationale	Evaluation
<p>Subjective data: The patient said, "I have a pain at incision site." Objective data: The patient seems irritated and felt tenderness around the surgical incision site.</p>	<p>Acute pain related to surgical incision</p>	<p>Pain will be relieved.</p>	<p>Observe and document location, severity, and character of pain (e.g., steady, intermittent, colicky).</p>	<p>Observed and documented location, severity, and character of pain (e.g., steady, intermittent, colicky).</p>	<p>Assists in differentiating cause of pain, and provides information about disease progression/resolution, development of complications, and effectiveness of interventions.</p>	<p>Goal was fully met as pain was relieved after giving inj. Voveron 75mg.</p>
			<p>Note response to medication, and report to physician if pain is not being relieved.</p>	<p>Noted response to medication.</p>	<p>Severe pain not relieved by routine measures may indicate developing complications/need for further intervention.</p>	
			<p>Promote bed rest, allowing patient to assume position of comfort.</p>	<p>Promoted bed rest, allowing patient to assume position of comfort.</p>	<p>Bed rest in low-Fowler's position reduces intra-abdominal pressure; however, patient will naturally assume least painful position.</p>	
			<p>Use soft/cotton linens; oil back care, cool/moist compresses as indicated.</p>	<p>Used soft/cotton linens; oil back care, cool/moist compresses as indicated.</p>	<p>Reduces irritation/dryness of the skin and itching sensation.</p>	
			<p>Encourage use of relaxation techniques, e.g., guided imagery, visualization, deep-breathing exercises. Provide diversional activities.</p>	<p>Encouraged use of relaxation techniques, e.g., deep-breathing exercises. Provided diversional activities.</p>	<p>Promotes rest, redirects attention, may enhance coping.</p>	
			<p>Maintain NPO status; insert/maintain NG suction as indicated.</p>	<p>Maintain NPO status till 6 hours.</p>	<p>Removes gastric secretions that stimulate release of cholecystokinin and gallbladder contractions.</p>	
			<p>Administer medications as indicated</p>	<p>Administered medications as indicated.</p>	<p>Relieves reflex spasm/smooth muscle contraction and assists with pain management. Promotes rest and relaxes smooth muscle, relieving pain. Given to reduce severe pain.</p>	

2. Risk for deficient fluid volume related to medically restricted intake.

Assessment	Nursing diagnosis	Nursing goal	Planning	Implementation	Rationale	Evaluation
<p>Objective data: The patient</p>	<p>Risk for deficient fluid volume related to medically restricted intake.</p>	<p>Patient will demonstrate adequate fluid balance evidenced by stable vital signs, moist mucous membranes, good skin turgor, capillary refill, individually</p>	<p>Maintain accurate record of I&O, noting output less than intake, increased urine specific gravity. Assess skin/mucous membranes, peripheral pulses, and capillary refill.</p>	<p>Maintained accurate record of I&O. Assessed skin/mucous membranes, peripheral pulses, and capillary refill.</p>	<p>Provides information about fluid status/circulating volume and replacement needs.</p>	<p>Goal was fully met as patient has stable vital signs, good skin turgor after performing oral hygiene.</p>

		appropriate urinary output, absence of vomiting.	Monitor for signs/symptoms of increased/continued nausea or vomiting, abdominal cramps, absent bowel sounds, depressed respirations.	Monitored for signs/symptoms of increased/continued nausea or vomiting, abdominal cramps, absent bowel sounds, depressed respirations.	Prolonged vomiting, gastric aspiration, and restricted oral intake can lead to deficits in sodium, potassium, and chloride.	
			Perform frequent oral hygiene; apply lubricants.	Performed frequent oral hygiene.	Decreases dryness of oral mucous membranes; reduces risk of oral bleeding.	
			Keep patient NPO as necessary.	Kept patient NPO as necessary.	Decreases GI secretions and motility.	
			Insert NG tube, connect to suction, and maintain patency as indicated.	Inserted NG tube, connect to suction, and maintain patency as indicated.	To rest the GI Tract	

3. Risk for Imbalanced Nutrition related to impaired fat digestion due to obstruction of bile flow

Assessment	Nursing diagnosis	Nursing goal	Planning	Implementation	Rationale	Evaluation
	Risk for Imbalanced Nutrition related to impaired fat digestion due to obstruction of bile flow	Patient will demonstrate progression toward desired weight gain or maintain weight as individually appropriate	<p>Weigh as indicated.</p> <p>Consult with patient about likes/dislikes, foods that cause distress, and preferred meal schedule.</p> <p>Provide a pleasant atmosphere at mealtime; remove noxious stimuli.</p> <p>Provide oral hygiene before meals.</p> <p>Ambulate and increase activity as tolerated.</p> <p>Consult with dietitian as indicated.</p> <p>Advance diet as tolerated, usually low-fat, and high-fiber. Restrict gas-producing foods (e.g., onions, cabbage, popcorn) and foods/fluids high in fats (e.g., butter, fried foods, nuts).</p>	<p>Weighed as indicated.</p> <p>Consulted with patient about likes/dislikes, foods that cause distress and preferred meal schedule.</p> <p>Provided a pleasant atmosphere at mealtime; remove noxious stimuli.</p> <p>Provided oral hygiene before meals.</p> <p>Ambulated and increased activity as tolerated.</p> <p>Consulted with dietitian as indicated.</p> <p>Advance diet as tolerated, usually low-fat, and high-fiber. Restricted gas-producing foods</p>	<p>Monitors effectiveness of dietary plan.</p> <p>Involving patient in planning enables patient to have a sense of control and encourages eating.</p> <p>Useful in promoting appetite/reducing nausea.</p> <p>A clean mouth enhances appetite.</p> <p>Helpful in expulsion of flatus, reduction of abdominal distension. Contributes to overall recovery and sense of well-being and decreases possibility of secondary problems related to immobility</p> <p>Useful in establishing individual nutritional needs and most appropriate route.</p> <p>Meets nutritional requirements while minimizing stimulation of the gallbladder.</p>	Goal was fully met after increasing her activities.

4. Deficient Knowledge related to lack of knowledge.

Assessment	Nursing diagnosis	Nursing goal	Planning	Implementation	Rationale	Evaluation
<u>Subjective data:</u> The patient said, "I do not know about my disease condition." <u>Objective data:</u>	Deficient Knowledge related to lack of knowledge as evidenced by questions; request for information.	Patient will verbalize understanding of disease process, prognosis, and potential complications.	Provide explanations of/reasons for test procedures and preparation needed.	Provided explanations of/reasons for test procedures and preparation needed.	Information can decrease anxiety, thereby reducing sympathetic stimulation.	Goal was fully met after explaining her about disease process.
			Review disease process. Discuss hospitalization and prospective treatment as indicated. Encourage questions, expression of concern.	Reviewed disease process. Discussed hospitalization and prospective treatment as indicated. Encouraged questions, expression of concern.	Provides knowledge base from which patient can make informed choices. Effective communication and support at this time can diminish anxiety and promote healing.	
			Review drug regimen, possible side effects.	Review drug regimen, possible side effects.	Gallstones often recur, necessitating long-term therapy. Note: Women of childbearing age should be counseled regarding birth control to prevent pregnancy and risk of fetal hepatic damage.	
			Instruct patient to avoid food/fluids high in fats, gas producers (e.g. Onions, carbonated beverages), or gastric irritants (e.g., spicy foods, caffeine, citrus).	Instructed patient to avoid food/fluids high in fats, gas producers.	Prevents/limits recurrence of gallbladder attacks.	
			Recommend resting in semi-Fowler's position after meals.	Recommended resting in semi-Fowler's position after meals.	Promotes flow of bile and general relaxation during initial digestive process.	
			Suggest patient limit gum chewing, sucking on straw/hard candy, or smoking.	Suggested patient limit gum chewing, sucking on straw/hard candy, or smoking.	Promotes gas formation, which can increase gastric distension/discomfort.	

14) DISCHARGE PLANNING AND HEALTH TEACHING INCLUDING FOLLOW UP:

On 2014/07/23, at 3:00 PM, my patient got discharged from the hospital. I explained my patient about the time of discharge. I told her including her visitors the following things:

- **Diet:** I told her to take regular diet, digestible diet, and exclude the oily and spicy food from diet strictly for 1 week. Encouraged her to avoid fatty and salty foods and encouraged her to increase fluid intake.
- **Exercise and physical activity:** I told her to walk in the morning and evening. I told her to do deep breathing and coughing exercise. I told her to resume her physical activities. Encouraged her to take adequate rest as well.
- **Pain management:** I gave a teaching about pain relieving measures for the relieve of pain at incision site.
- **Medicine:** I explained her with her visitors to take medicine at time and at right dose.
- **Follow up:** I told her to come to the hospital after 7 days in OPD. And if any emergency condition comes, then immediately visit in emergency department.

15) Experience and learning:

Case study is a very good method of learning nursing practice as well as the related diseases in depth. It gives the comprehensive study of one selected patient with books in real situation.

I learned in detail about cholelithiasis, its causes, stages, pathophysiology, sign and symptoms, test, management and prognosis too.

I also get to learn about my patient and her family, their environment, health and family background which helped me to provide nursing care.

It also helped me to grow my skill for professional growth. So, this case study helped me to gain knowledge by observation, findings and conclusion.

During case study I learned the following things:

- I had the opportunity to see the patient suffering from the disease and able to know his experiences during the diseased period.
- Learned about disease in depth along with its causes, symptoms, stages and management.
- Learned to take detailed past and present history which helps to find out the genetic origin.
- Learned to evaluate progress of the patient through maintenance of daily report.
- Helped me to enhance knowledge regarding documentation with the help of different activities.
- I knew that many theoretical things are not applicable in the practical life.
- Learned about the different rules and policy of that hospital.
- Participated in different treatment modalities.
- Develop knowledge and skills about individual and family therapy.

6. CONCLUSION AND SUMMARY OF CLIENT CASE STUDY

A 66 year old woman called Uma K.C who had been experiencing abdominal pain, indigestion, loss of appetite and nausea on forceful intake. After going to the doctors; a number of tests were carried out. Mrs. Uma K.C was diagnosed to having Symptomatic cholelithiasis. Cholelithiasis is the process of stone formation in the gall bladder. She had to go for a laparoscopic cholecystectomy because of her cholelithiasis. A Laparoscopic cholecystectomy is when the gall bladder is removed through “a small incision which is made at the naval and a thin tube carrying the video camera is inserted”.

After the operation, she had the complain of pain at surgical incision for several days which was normal. She recovered very fast after the medical and nursing management. She was very happy with the given care.

On 2014/07/23, at 3:00 PM, she got discharged from the hospital as everything was going well. She received the discharge teaching and went home happily.

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REFERENCES

- [1] Lippincott, Manual Of Nursing Practice, 8th Edition, Page No. : 709-712
- [2] Lippincott, Atlas Of Pathophysiology, 2nd Edition, Page No. : 162-163
- [3] HLMC, Textbook of Adult Nursing, 1st Edition, Page No. : 7-9, Page No. : 97-100
- [4] Brunner and Suddarth's, Medical-Surgical Nursing, 10th Edition, Page No. :1115-1119
- [5] Rai Lalita, Nursing Concept And Theories, 2nd Edition, Page No. : 190-198
- [6] Dr. Sudeep K. Yadav, A Book On Pathophysiology, 2nd Edition, Page No. : 130-135
- [7] Giri M. Essential Fundamentals of Nursing, 1st Edition, Page No. : 89-118
- [8] Pathak S. Devkota R. Fundamentals of Nursing, 2010 Edition, Page No. : 60-75