

Case Study

Cholelithiasis / Cholecystitis

T.W. is a 42-year-old Native American who works part-time as an accountant. She is admitted to the medical unit from the emergency department with a diagnosis of rule out cholecystitis. She is complaining of severe right upper quadrant pain that radiates to her back and vomiting for the past 10 hours. She has had several similar episodes over the last three months that were unrelieved by commercial antacids. Last night she had a hamburger and french fries at a fast food restaurant and developed the acute onset of pain. She weighs 210 pounds and is 5'4" tall. She periodically uses crash diets with fasting or liquid diet preparations for this failed in long-term weight loss. She has mild hypertension which she monitors and she tries to reduce the salt intake.

Your initial assessment findings include awake, alert, and oriented times three; sclera appear slightly yellow; breath sounds clear throughout all the fields; normal, regular heart sounds; bowel sounds active in all four quadrants; abdominal guarding with severe pain on light palpation to right side; skin moist was slightly decreased turgor, no jaundice this notice in skin, but has bruises on her arms and legs; peripheral pulses 3+. Her vital signs are as follows: low-pressure, 152 over 90 mmHg, heart rate 108 beat/min, respiratory rate, 26 breaths/min, and temperature 100.6°F. She reports that her stools have become lighter over the last week and are “frothy”.

The physicians admitting orders include nasogastric tube to low suction, NPO, an Iv of D51/2NS with 20 mEq KCL at 125ml/hr, meperidine 100 mg IM prn q3-4 hr, abdominal ultrasound, CBC, electrolytes, blood chemistries, PT and PTT, and UA.

You know, for a murder mystery that she has at least five risk factors for cholecystitis or cholelithiasis. List these risk factors below:

1. Female
2. Extensive fasting
3. Native American
4. Obese
5. Over 40

Her ultrasound reveals an enlarged gallbladder filled with stones and multiple stones in the assisted in common bile ducts, establishing the diagnosis of cholelithiasis. You review your lab results in no that they are characteristic of cholelithiasis cholecystitis. Indicate whether the following lab tests would be increased (I), decreased (D), or unchanged (U).

I Alkaline phosphatase

I AST

I direct bilirubin

U Hb

U Hct

I indirect bilirubin

I prothrombin time

U RBC

I urinary bilirubin

D urine urobilinogen

I WBC

She inquires about the advantages and disadvantages of each conversion procedure. Match the characteristics of the procedures with the procedure.

#	Procedure
1	Cutaneous ureterostomy
2	Ileal Conduit
3	Continent urinary diversion
4	Orthotopic bladder substitution
5	Ureteroileosigmoidostomy

Characteristics of Procedure	Procedure #
Urine diverted to bowel where it is eliminated with stool	5
Requires self-catheterization q 4-6 hours	3
Requires external drainage device	1,2
Incontinence often a problem	4
Urine drains constantly from an ileal stoma	2
Most complex procedure with highest risk	4
Risk for a sending infections to kidneys	5
Strictures and scarring may include urine flow	1

The physician orders, intravenous antibiotics and plans surgical treatment after the inflammation of the gallbladder is relieved. Based on her history and diagnostic findings, you anticipate that this surgical procedure will be used is a:

- a. Cholecystectomy

She undergoes an incisional cholecystectomy with a common duct exploration and returns to the surgical unit with an IV, a dressing over a high right upper abdominal incision, and a T-tube to gravity drainage. Select all of the appropriate statements related to the T-tube:

- a. Is used when there has been trauma and possible postoperative swelling of the common bile duct
- b. Drainage from the T-tube should average about 300 to 1000 mL the first postoperative day
- c. The tube allows excess bile to drain while the small intestine is adjusting to receiving a continuous flow of bile

The patient outcome that is important to achieve during the postoperative period is:

- a. has clear breath sounds in both lungs

To prepare her for discharge, you teach her about her dietary needs that include:

- a. the reduced-calorie diet with low-fat intake because of her obesity and hypertension