

SURGERY VIGNETTE
Acute Cholecystitis Interactive Simulation

| Cover Page | | |
|---|--|--------------------------------------|
| Q1: Facility ID | Q2: Facility Name | Q4b: Time simulation started (HH:MM) |
| Q3: Observer number | Q4a: Today's date (DD/MM/YYYY) ____/____/____ | ____ : ____ AM/PM |
| Q4c: Result <input type="checkbox"/> Interview done <input type="checkbox"/> Person in charge refused interview | | |
| <input type="checkbox"/> Partially completed <input type="checkbox"/> Person in charge is out | | |

THIS TEST IS TO BE ADMINISTERED TO A HEALTH WORKER FROM SURGERY SERVICES. EACH FOLIO (SET OF PAPERS) CORRESPONDS TO ONE HEALTH WORKER ONLY. IF YOU ADMINISTER THIS TEST TO SEVERAL HEALTH WORKERS, YOU NEED A NEW FOLIO FOR EACH HEALTH WORKER. ALSO BE SURE TO RECORD THE STAFF ID NUMBER OF THE HEALTH WORKER ANSWERING THIS TEST, BY REFERRING TO THE STAFF ROSTER TO OBTAIN THE STAFF ID NUMBER.

CHECK THE STAFF ROSTER AND SEE IF THE HEALTH WORKER IS RECORDED AS HAVING GIVEN CONSENT FOR THE RESEARCH. IF NOT YOU MUST READ THE FULL CONSENT FORM AND OBTAIN HIS/HER SIGNATURE. IF YES, REMIND HIM/HER USING THE TEXT BELOW.

Q5a: Has the health worker previously signed a consent form? ☐ Yes → go to Q6a ☐ No → go to Q7a

Q6a: ASK HEALTH WORKER: I would like to ask you some questions about your knowledge of a specific medical case. Your answers will remain confidential, we will not share the result of this interview and it will not have any impact on your work or the assessment of your performance. Do I have your permission to administer this questionnaire?

☐ Yes → go to Q8a ☐ No, consent is not given → observation of this health worker must END; if available, approach another health worker for participation.

Q7a: READ FULL CONSENT SCRIPT TO HEALTH WORKER AND OBTAIN SIGNATURE. Did the health worker sign the form?

☐ Yes → go to Q8a ☐ No, consent is not given → observation of this health worker must END; if available, approach another health worker for participation.

| Q8a Staff Roster ID number | Q9a Gender | Q10a: Health Worker Category Code (see below for codes) |
|----------------------------|---|---|
| | <input type="checkbox"/> Male <input type="checkbox"/> Female | |

READ THE FOLLOWING TO THE HEALTH WORKER:

I will start asking you questions about your knowledge now. Please answer the following questions to the best of your knowledge. Most of the questions I will be asking you will require multiple responses from you. Please provide all responses that come to mind. I will probe sometimes to help you remember some more information. I may also ask you to demonstrate certain actions during the course of this interview. Finally, if you need me to repeat the question, just let me know.

| Health Worker Category Codes | | | | |
|---------------------------------|-----------------------|--|-------------------------|---------------------------------|
| 1. MD-Obstetrician/Gynecologist | 2. MD-Neonatologist | 3. MD-Surgeon | 4. MD- Family Physician | 5. MD - Pediatrician |
| 6. Physician's Assistant | 7. Nurse midwife | 8. Bachelor and Science of Nursing Nurse | 9. Diploma Nurse | 10. Nurse with Associate Degree |
| 11. Licensed Practical Nurse | 12. Certified midwife | 13. Midwife | 14. Nurse aide | 96. Other, please specify: |
| | | | | |

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Management of Acute Cholecystitis

THE FOLLOWING QUESTIONS CORRESPOND TO A CLINICAL CASE SCENARIO THAT THE HEALTH WORKER COULD EXPECT TO OBSERVE IN THE HOSPITAL. READ THE CASE SCENARIOS AND QUESTIONS EXACTLY AS THEY ARE WRITTEN. **DO NOT READ THE OPTIONS OF ANSWERS.** FOR CERTAIN QUESTIONS, MULTIPLE ANSWERS ARE POSSIBLE; IN THIS CASE, CIRCLE ALL ANSWERS GIVEN BY THE HEALTH WORKER. AFTER THE HEALTH WORKER HAS FINISHED ANSWERING THE QUESTION, ASK “ANYTHING ELSE?” IF ADDITIONAL ANSWERS ARE GIVEN AT THAT TIME, MAKE DUE RECORD OF THEM ON THE SURVEY FORM. BE CAREFUL TO FOLLOW THE SKIPS AS THEY ARE MARKED. MAKE SURE THE HEALTH WORKER CANNOT SEE THE FORM YOU ARE FILLING.

ATTENTION: IN THE “INFORMATION” COLUMN, THERE IS INFORMATION ON THE CURRENT STATE OF THE PATIENT. THIS INFORMATION HAS TO BE PROVIDED, **IF AND ONLY IF** THE CLINICIAN SAYS HE WOULD ASK THE QUESTION OR PERFORM THE ACTION LISTED. IF THE CLINICIAN DOES NOT MENTION HE WILL ASK THE QUESTION OR PERFORM THE ACTION, THEN THE RESULT OF THAT QUESTION OR ACTION **SHOULD ABSOLUTELY NOT** BE SHARED WITH THE HEALTH WORKER. FOR EXAMPLE IN Q101, IF THE HEALTH WORKER SAYS S/HE WOULD ASK ABOUT THE MEDICAL HISTORY, THEN YOU HAVE TO ASK THEM “WHAT KIND OF HISTORY WOULD YOU ASK ABOUT?”. IF THE HEALTH WORKER DOES NOT SAY HE WOULD ASK ABOUT THE MEDICAL HISTORY, THEN YOU MUST NOT ASK THEM WHAT KIND OF HISTORY THEY WOULD ASK ABOUT. STILL IN Q100, IF THE HEALTH WORKER SAYS S/HE WOULD ASK WHETHER SHE EXPERIENCED THIS PAIN BEFORE, THEN YOU HAVE TO TELL THEM THE PATIENT HAS HAD THIS PAIN THREE TIMES BEFORE. IF THE HEALTH WORKER DOES NOT SAY HE WOULD ASK WHETHER THE PATIENT EXPERIENCED THIS PAIN BEFORE, THEN YOU MUST NOT TELL THEM SHE HAS HAD THE PAIN THREE TIMES BEFORE. MAKE SURE THE HEALTH WORKER CANNOT READ IT ON THE FORM EITHER.

DO NOT READ OPTIONS ALOUD. FOR EACH OPTION, NOTE WHETHER THE HEALTH WORKER MENTIONED THIS ACTION OR NOT.

RECORD TIME OF BEGINNING OF THE SIMULATION (HH:MM) | ____ : ____ AM/PM

Scenario: A 41 year old woman complains of abdominal pain in the right upper quadrant and has experience nausea and vomiting since eating dinner the night before. Health care shows she is the mother of four children, aged 2, 5, 8 and 12. She is obese, but otherwise presents as healthy.

| Question | Yes | No | Information | Go to | Verify Present/ Not Present |
|--|-----|----|---|-------|-----------------------------|
| Q101: What do you do to assess this woman? | | | | | |
| A. History taking | 1 | 0 | What kind of history would you ask about? | | N/A |
| a. I would ask the woman to describe the pain and indicate with her hands. | 1 | 0 | Pain comes from the right upper quadrant and that it moves up to the right scapular region. | | N/A |
| b. I would ask the woman what she ate for dinner last night. | 1 | 0 | Palm Butter Soup | | N/A |
| c. I would ask her what else she ate | 1 | 0 | Vegetables | | N/A |
| d. I would ask her if she has experienced this pain before. | 1 | 0 | Yes, three times before. | | N/A |
| i. What happened those times? | 1 | 0 | Came to see the doctor each of those times and the pain went away after he gave her some medicines. | | N/A |
| ii. I would ask what medicines she received. | 1 | 0 | Does not remember the name, she took the pills only once before the pain went away. | | N/A |
| iii. I would ask if she was hospitalized. | 1 | 0 | No, she was not. | | N/A |
| B. Physical examination | 1 | 0 | Please describe the things you would do. | | N/A |
| a. Overall assessment | 1 | 0 | Responsive but in pain. | | N/A |
| b. I would check the vital signs | 1 | 0 | Tachycardia, Fever (38.6 degrees) | | N/A |
| c. Signs of Jaundice | 1 | 0 | Absent | | N/A |
| d. I would palpate the abdomen | 1 | 0 | Marked tenderness in the upper right quadrant, with localized guarding. | | N/A |
| e. Palpate the subcostal region | 1 | 0 | Sudden inspiration arrest on the right side but not on the left. | | N/A |
| f. I would check for Murphy’s sign | 1 | 0 | Murphy’s sign noted, right side. | | N/A |
| C. Lab tests | | | Please list the tests you would ask for. | | |
| a. Full blood count (Complete blood count) | 1 | 0 | | | 1 0 |
| i. Hemoglobin/HCT | 1 | 0 | Normal, 42% or 14 gr/dl | | 1 0 |
| ii. White Blood Cell (WBC) | 1 | 0 | Elevated White Blood Cell count: 15,500/mm3 | | 1 0 |
| iii. Red Blood Cell (RBC) | 1 | 0 | Normal | | 1 0 |
| iv. Platelets | 1 | 0 | Normal | | 1 0 |

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| b. Hemoglobin/HCT (alone) | 1 | 0 | Normal, 42% or 14 gr/dl | | 1 | 0 |
| c. Microscopy | | | | | | |
| i. Malaria smear, M/S | 1 | 0 | Normal, Negative | | 1 | 0 |
| ii. Malaria rapid diagnostic test (RDT) | 1 | 0 | Normal, Negative | | 1 | 0 |
| d. Immunologic | | | | | | |
| i. HIV rapid testing | 1 | 0 | Normal, Negative | | 1 | 0 |
| ii. Hepatitis B (HBsAG) and Hepatitis C (HCV) tests | 1 | 0 | Normal, Negative | | 1 | 0 |
| e. Chemistry panels (Automatic analyzer) | | | | | | |
| i. AST and ALT (liver enzymes) | 1 | 0 | Normal | | 1 | 0 |
| ii. Amylase and Lipase (pancreatic enzymes) | 1 | 0 | Normal | | 1 | 0 |
| iii. Chemistry (sodium, potassium, chloride, bicarbonate) | 1 | 0 | Normal | | 1 | 0 |
| iv. BUN and creatinine (renal function) | 1 | 0 | Normal | | 1 | 0 |
| v. Serum bilirubin | 1 | 0 | biilirubin and alkaline phosphatase slightly elevated | | 1 | 0 |
| vi. Blood glucose, RBS (fasting or random) | 1 | 0 | Normal, 135 gr/dl | | 1 | 0 |
| f. Blood gas analysis or Electrolyte Panel | 1 | 0 | Normal | | 1 | 0 |
| g. Urinalysis, U/A | 1 | 0 | Normal, Negative | | 1 | 0 |
| h. Pregnancy test, MTT | 1 | 0 | Normal, Negative | | 1 | 0 |
| i. Imaging | | | | | 1 | 0 |
| i. RUQ Ultrasound | 1 | 0 | gallbladder wall thickening (>4 mm), pericholic fluid and sonographic Murphy sign | | 1 | 0 |
| j. Other Tests and imaging | 1 | 0 | Normal | | 1 | 0 |
| i. Other, specify: _____ _____ _____ _____ | 1 | 0 | | | 1 | 0 |
| D. I would call for assistance from another person | 1 | 0 | Who? | | N/A | |
| a. Specify title _____ | | | [ALSO ASK THEM IF THEY WOULD DO ANYTHING ELSE] | | | |
| Q102: What is your overall assessment of the woman's conditions (Stable, Guarded, Unstable, Critical, etc.) and what is her differential diagnosis? | | | | | | |
| A. Overall assessment(CHECK ALL ANSWERS GIVEN) | | | | | | |
| a. Stable | 1 | 0 | | | N/A | |
| b. Guarded | 1 | 0 | | | N/A | |
| c. Unstable | 1 | 0 | | | N/A | |
| d. Critical | 1 | 0 | | | N/A | |
| B. Differential diagnosis(CHECK ALL ANSWERS GIVEN) | | | | | | |
| a. Gastroeneteritis | 1 | 0 | | | N/A | |
| b. Biliary Colic | 1 | 0 | | | N/A | |
| c. Gallstones | 1 | 0 | | | N/A | |
| d. Hepatitis | 1 | 0 | | | N/A | |
| e. Helminthic Infection | 1 | 0 | | | N/A | |
| f. Acute cholecystitis | 1 | 0 | | | N/A | |
| g. Appendicitis | 1 | 0 | | | N/A | |
| h. Peritonitis | 1 | 0 | | | N/A | |
| i. Acute Abdomen (Can you be more specific? What is the differential diagnosis?) | 1 | 0 | | | N/A | |
| j. Empyema | 1 | 0 | | | N/A | |
| k. Perforation | 1 | 0 | | | N/A | |
| l. Acalculous Cholecystitis | 1 | 0 | | | N/A | |
| m. Pancreatis | 1 | 0 | | | N/A | |
| n. Diverticulitis | 1 | 0 | | | N/A | |
| o. Trauma | 1 | 0 | | | N/A | |

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| p. Other, specify: _____ _____ _____ _____ | 1 | 0 | | | N/A |
| Q103: What immediate steps would you take? | | | | | |
| A. Call the attending physician | 1 | 0 | | | N/A |
| B. Call for consultation with surgeon | 1 | 0 | | | N/A |
| C. Admit | 1 | 0 | | | N/A |
| D. Refer to other facility | 1 | 0 | | | N/A |
| E. IV line | 1 | 0 | | | N/A |
| F. Antibiotics | 1 | 0 | | | N/A |
| G. Prescribe NPO (nothing by mouth) | 1 | 0 | | | N/A |
| H. Nasogastric tube | 1 | 0 | | | N/A |
| I. Put under observation | 1 | 0 | | | N/A |
| J. Schedule a cholecystectomy | 1 | 0 | | | N/A |
| K. Emergent cholecystectomy | 1 | 0 | | | N/A |
| L. Other, specify: _____ _____ _____ _____ | 1 | 0 | | | N/A |
| Q1046: What equipment or medicines would you have used in the management of this case that is either not present, or is not currently working in this facility? | | | | | |
| A. Other, specify: _____ _____ _____ _____ | 1 | 0 | | | 1 0 |
| Q1057: You mentioned the following laboratory tests as part of your examination [...] Can you verify that all of these tests are available at this facility right now? | <u>1</u> | <u>0</u> | | | |
| RECORD TIME OF END OF THE SIMULATION (HH:MM) | __ : __ AM/PM | | | | |
| GO BACK TO EACH ITEM IN THE SIMULATION THAT REQUIRES A PIECE OF EQUIPMENT OR A MEDICATION AND VERIFY THAT THE EQUIPMENT OR MEDICATION IS PRESENT. | | | | | |
| PLEASE PROVIDE ANY FURTHER COMMENTS ON THE QUALITY OF CARE: | | | | | |