Clinical Vignettes: What's Your Call?

Diagnosis and Management of Foodborne Illnesses

A Primer for Physicians

Clinical Vignettes

What's Your Call?

American Medical Association
Centers for Disease Control and Prevention
Center for Food Safety and Applied Nutrition,
Food and Drug Administration
Food Safety and Inspection Service,
US Department of Agriculture

January 2001

Patient Vignettes – What's Your Call?

The following clinical vignettes are provided for your self-evaluation. All are possible situations that may present at your practice. The **Clinical Considerations** booklet and the **Foodborne Illnesses Tables** that are also part of this primer will provide the information necessary for you to adequately address these clinical situations. Note that these vignettes include both infectious and noninfectious forms of foodborne illness.

For the following clinical vignettes, choose the best answer from the choices listed at the end of the vignettes:

A – likely diagnosis; choose the best possible answer listed on "answer selections" page under **A** selections.

B – most appropriate choice to confirm the diagnosis (there may be more than one correct answer—list all of them). Choose from the possible answers listed on "answer selections" page under the **B** section.

Finally, decide whether the situation warrants reporting to the local or state health department.

Clinical Vignettes

I. You receive a long-distance call from a patient who is an outdoorsman. He is with a group that collected and ate some wild mushrooms less than 2 hours ago. Several members of the group have since developed vomiting, diarrhea, and some mental confusion.

A – likely diagnosis: _____

B – most appropriate test to confirm etiology/follow-up action: _____

_____

Report to the health department? ☐ Yes ☐ No

II. A newborn child has symptoms of sepsis. Cerebrospinal fluid studies are consistent with meningitis. The mother had a flu-like syndrome prior to delivery.

A – likely diagnosis: _____

B – most appropriate test to confirm etiology/follow-up action: _____

_____

Report to the health department? ☐ Yes ☐ No

III. This patient has just returned today from Latin America following a 2-day business trip where he reports eating several meals of fish that he bought from street venders around his hotel. He feels very ill with profuse, watery diarrhea and vomiting.

A – likely diagnosis: _____

B – most appropriate test to confirm etiology/follow-up action: _____

_____

Report to the health department? ☐ Yes ☐ No

IV. An 18-month child is brought to your office with fever, bloody diarrhea, and some vomiting. She has been drinking unpasteurized milk in the last 48 hours. No other family members are ill.

A – likely diagnosis: _____

B – most appropriate test to confirm etiology/follow-up action: _____

_____

Report to the health department? ☐ Yes ☐ No

V. A patient calls and states that he and several family members are ill with severe vomiting. They ate at a church picnic 4 hours earlier.

A – likely diagnosis: _____

B – most appropriate test to confirm etiology/follow-up action: _____

_____

Report to the health department? ☐ Yes ☐ No

VI. A patient calls and states that most family members have developed severe vomiting, about 1 hour after eating at a picnic. They ate barbecued beef, chips, potato salad, and homemade root beer. Some are complaining of a metallic taste.

A – likely diagnosis: _____

B – most appropriate test to confirm etiology/follow-up action: _____

_____

Report to the health department? ☐ Yes ☐ No

VII. A patient has had chronic intermittent diarrhea for about 3 weeks. There is no fever or vomiting and no blood in the stool. The patient travels to Latin America and Eastern Europe frequently, most recently 2 weeks ago.

A – likely diagnosis: _____

B – most appropriate test to confirm etiology/follow-up action: _____

_____

Report to the health department? ☐ Yes ☐ No

VIII. The parents of a 6-month old infant are concerned because she is listless and weak. The infant is feeding poorly, has poor head control, and is constipated. There is no fever or vomiting.

A – likely diagnosis: _____

B – most appropriate test to confirm etiology/follow-up action: _____

_____

Report to the health department? ☐ Yes ☐ No

IX. A businessman who travels frequently is ill with fatigue, jaundice, abdominal pain and diarrhea. About 1 month ago, he returned from an international trip during which he consumed raw oysters.

A – likely diagnosis: _____

B – most appropriate test to confirm etiology/follow-up action: _____

_____

Report to the health department? ☐ Yes ☐ No

X. Several members of a single family are ill with abdominal cramps and watery diarrhea. They just returned from visiting friends on the East Coast of the United States where they consumed raw oysters 48 hours ago.

A – likely diagnosis: _____

B – most appropriate test to confirm etiology/follow-up action: _____

_____

Report to the health department? ☐ Yes ☐ No

XI. A minister at a local church calls to report that many members began developing watery diarrhea on the morning after the annual ham dinner fundraiser. Some people also reported nausea and abdominal cramps, but no one has fever or bloody stools.

A – likely diagnosis: _____

B – most appropriate test to confirm etiology/follow-up action: _____

_____

Report to the health department? ☐ Yes ☐ No

XII. You receive a long-distance call from a patient on a fishing vacation off the coast of Belize. Her family has been eating a variety of local fish and shellfish that they caught. She reports that several family members developed abdominal pain, severe diarrhea, and weakness the morning after they consumed the seafood for dinner. One family member began having difficulty speaking later on that same night.

A – likely diagnosis: _____

B – most appropriate test to confirm etiology/follow-up action: _____

_____

Report to the health department? ☐ Yes ☐ No

XIII. A family in a rural community is worried that their father may be having a stroke. He is complaining of double vision and is having trouble swallowing. They have a large garden and eat home-canned vegetables.

A – likely diagnosis: _____

B – most appropriate test to confirm etiology/follow-up action: _____

_____

Report to the health department? ☐ Yes ☐ No

XIV. A 2-year-old child who attends day care presents with abdominal cramps and severe bloody diarrhea, which has been present for 2 days. He has no fever.

A – likely diagnosis: _____

B – most appropriate test to confirm etiology/follow-up action: _____

_____

Report to the health department? ☐ Yes ☐ No

Answers

Question number	Choice for A	Choice(s) for B	Report to health department?
I	12	11	Yes
II	8	12	Yes
III	6	5, 6	Yes
IV	3	2	Yes
V	1	1, 3	Yes
VI	11	9	Yes
VII	14	8	Yes
VIII	7	5	Yes
IX	16	7, 13, 14	Yes
X	5	5, 6, 7	Yes
XI	2	1, 5	Yes
XII	13	10	Yes
XIII	7	5	Yes
XIV	4	5, 6	Yes

Answer Choices

A: Choose from any of these possible etiologies:

1. Intoxication from preformed toxins of *Staphylococcus aureus* or *Bacillus cereus*
2. Intoxication from toxins produced *in vivo* by *Clostridium perfringens*
3. *Salmonella* or *Campylobacter* are possible.
4. *E. coli* O157:H7
5. Norwalk-like viruses, *Vibrio parahemolyticus,* and other *Vibrio* infections
6. *Vibrio cholerae* infection
7. Botulism must be ruled out
8. *Listeria monocytogenes* sepsis
9. *Cryptosporidium parvum*
10. *Cyclospora cayetanensis*
11. A form of metal poisoning
12. A form of mushroom poisoning
13. Likely fish/shellfish toxin
14. *Giardia lamblia*
15. *Trichinella spiralis*
16. Hepatitis A virus

B: Choose from any of these following tests/actions

1. Clinical diagnosis; laboratory tests may not always be indicated.
2. Generally detected on routine stool cultures.
3. Generally, a reference laboratory is needed to identify the toxin from food, stool, or vomitus.
4. Important to identify causative organism for public health reasons.
5. Send stool samples to health department (*Vibrio cholerae,* other *Vibrios, E. coli* O157:H7, special toxin tests, *Clostridium perfringens, Clostridium botulinum*).
6. Not detected by routine stool cultures (*E. coli* O157:H7, *Vibrio cholerae,* other *Vibrios*).
7. Should test for viral agents.
8. For cysts, ova, and parasite detection, at least 3 stool samples must be collected. Sometimes the organism may still be missed; thus sampling via endoscopy may be necessary.
9. Test for appropriate metal.
10. Special test needed to identify a fish toxin.
11. Consult a mycologist to identify the mushroom.
12. Blood culture is the best source for diagnosis.
13. Blood test helpful to identify the agent.
14. May need acute and convalescent serum or viral cultures.