

Case one: Salmonella GE

History:

63 years old women admitted to the hospital 2 weeks after she returned home after a visit to Spain. For one week she had intermittent fever and shivers followed by profuse diarrhea for 8-10 times daily. The diarrhea was watery and over the last 72 hours she had noticed fresh blood in the stool. She also complained from colicky abdominal pain relieved by defecation. Her partner had loose stool for 3-4 days on return from holiday, but is now better.

Examination:

T: 38.1 °C Pulse: 82/min RR: 15/min BP: 100/67 mmHg
Abdomen: mid tenderness in the infra-umbilical region with active bowel sound

Investigations:

CBC: leukocytosis
Stool analysis and culture is attached

Tasks:

1. What are the differential diagnosis based on history
2. What is the main finding of stool analysis and culture
3. What other investigation you would like to order
4. Treatment

Case two: E coli O157:H7

History:

A 4-year old girl presents at the emergency room with bloody diarrhea, fever and vomiting. The child's mother reports that the child has had these symptoms for about 24 hours and she has not passed any urine for about 12 hours. The child is enrolled in a day care center and the group had recently made a field trip to a fast food place to learn about different jobs. The children had a lunch of ground beef, fries and cola after meeting with different workers. This field trip was 4 days earlier on Friday.

Examination:

T: 39.1 °C Pulse: 109/min RR: 15/min BP: 95/62 mmHg

Physical signs of dehydration

Abdominal examination was within normal limits

Investigations:

CBC: Leukocytosis

Blood samples drawn showed evidence of greatly reduced kidney function and lysed red blood cells.

Stool analysis and culture is attached

Tasks:

1. What is the differential diagnosis based on history
2. What were the critical features to your diagnosis
3. Other investigation that you would like to order
4. Complications

Case three: Ascaris

History:

A 16 years old boy from village presented to the outpatient department complaining from diarrhea for the last 9 months. He passes 4-5 large volume stools daily which are frothy, greasy and foul smelling. His parents mentioned that he not growing well. Past medical history indicated an attack of fever, bloody stained cough, and generalized itching few months ago.

Examination:

T: 37.4 °C Pulse: 95/min RR: 15/min BP: 110/85 mmHg

Looks tired, thin, short stature, and pale

Abdominal exam is not significant

Investigations:

CBC: low hemoglobin level with mild eosinophilia

Stool analysis and culture are attached

Tasks:

1. What are the differential diagnosis based on history
2. What is the main finding of stool analysis and culture
3. What other investigation you would like to order
4. Treatment

Case Four: Viral GE with hypernatremia

History:

A previously healthy 10-month-old female infant presented to the hospital emergency room with two brief (5 min) and consecutive episodes of generalized tonic clonic convulsions after having bouts of vomiting, watery diarrhea and low-grade fever for the last 2 days.

Examination:

T: 37.8 °C Pulse: 108/min RR: 18/min BP: 102/54 mmHg

Signs of severe dehydration

Abdomen examination show mild tenderness

Investigations:

CBC: mild lymphocytosis

Stool analysis and culture are attached

Tasks:

1. What are the differential diagnosis based on history
2. What is the main finding of stool analysis and culture
3. What other investigation you would like to order
4. Treatment

Case Five: S. aureus food poisoning

History:

A 24 years old male presented with 3 attacks of sever vomiting containing undigested food with central colicky abdominal pain few hours after eating at a local restaurant. 2 hours later he developed watery diarrhea and reported feeling hot and fatigued.

Examination:

T: 39.0 °C Pulse: 125/min RR: 18/min BP: 110/80 mmHg

Looks ill, mildly dehydrated, abdominal examination indicated mild central abdominal tenderness, no rebound, with increased bowel sounds.

Investigations:

CBC: sever leukocytosis

Stool analysis and culture are attached

Tasks:

1. What are the differential diagnosis based on history
2. What is the main finding of stool analysis and culture
3. What other investigation you would like to order
4. Treatment

CASE 6: FISH BONE PERFORATION

History:

The patient was a 74-year-old male with a history of borderline diabetes, hernia repair, and prostate surgery. He weighed 99.8 kg (220 lbs), well developed and well nourished. He developed abdominal cramping and intractable diarrhea 6 hours after ingesting a fish dinner. Later on he presented to the ER with severe generalized abdominal pain and signs of early dehydration. He was admitted to the hospital for treatment. The next day, the patient looked severely ill and on transferring to X-ray, he became unresponsive and CPR was started. Code blue was called however the patient died immediately.

Examination:

T: 38.8 °C Pulse: 130/min RR: 30/min BP: 60/35 mmHg
Sever signs of dehydration with shallow breathing
Abdomen show severe tenderness, rigidity and poor bowel sounds

Investigations:

CBC: severe leukocytosis
Stool analysis and culture are attached

Tasks:

1. What are the differential diagnosis based on history
2. What is the main finding of stool analysis and culture
3. What other investigation you would like to order
4. Treatment