GRADY HARRIS IHUMAN CASE STUDY "TUMMY ACHE" WITH THE SOLUTION AS PER THE MARKING SCHEME

## Questions (to mother) - Yields 100%

- 1. How can I help him today?
  - a. He isn't himself. He's been whining and refusing to eat. I think he's saying that his tummy hurts. When I took a look at his tummy, it had a big bruise.
- 2. Does he have any other symptoms or concerns we should discuss?
  - a. Yeah, he vomited once last night, and he just keeps rubbing his entire stomach. He's not his usual, cheerful self. He's really low in energy and withdrawn. He pees less you know, I'm not changing so many wet diapers, and his pee is dark and strong smelling. Um, oh, and you can see, he's still kind of sweaty and clammy. He seemed to be breathing fast maybe he's nervous.
- 3. When did his abdominal pain start?
  - a. About 2 days ago.
- 4. What are the events surrounding the start of his abdominal pain?
  - a. My boyfriend says my baby fell from the bed during a nap and the problems started after that. I don't really know what he hit when that happened, but all his problems started: whining, being really low energy or withdrawn, not eating, and peeing less. He even vomited once last night.
- 5. Does anything make the pain in his abdomen better or worse?
  - . He seems to be worse when I touch him, or pick him up.
- 6. How many wet diapers does your child make per day?
  - a. Usually? I'm not always there to change them, but now there seems to be fewer. Also, his pee smells strong and it looks dark.
- 7. How many stool diapers does your child have per day?
  - a. Normally? He usually poops once a day. I haven't changed one in at least a day now. I'm a bit worried about that.
- 8. What childhood illnesses has he had?
  - a. Other than all the fuss with his heart defect, he's been a pretty healthy little guy. I mean, he's slow but that's what you get with Down Syndrome. Everything's affected...his growth, he doesn't really say many words yet, and he doesn't pick new things up very quickly. That can be kind of frustrating, you know.
- 9. Are his immunizations up to date?
  - a. Yeah, they are, except for the last ones.
- 10. Is he taking any prescription medications?
  - a. Uh...no. Not anymore. He used to take medication for his heart problems, but since they fixed that he doesn't need them anymore.
- 11. Is he taking any over the counter or herbal medications?
  - a. No, I don't give him any of those things.
- 12. Has he had pain in his abdomen before?
  - a. No, not like this. He has always eaten well and he's never acted like this before. I can tell you that for sure.
- 13. Has he had any trauma to his abdomen?
  - a. Maybe. He fell out of bed maybe that's the cause.
- 14. Does he have any allergies?
  - a. No, he doesn't have allergies.
- 15. Has he had any significant traumatic injuries or accidents?

- a. He's a real clumsy little guy. Always falling down, tripping over things, bumping into things and stuff. Doesn't look where he's going. I wouldn't call that a huge, big accident though. He's never had any broken bones.
- 16. How is his family and family life?
  - a. It's just me and my three kids: my 6-month-old, my 5-year-old and my two year old. The father of my two-year-old is out of the equation, and never has been with us. Sometimes my boyfriend, who's the father of my 6-month-old, stays over. I'm a cashier at a retail shop I mean I only graduated from high school and so I don't make that much money and I can't afford daycare, so my neighbors really help me out. Sometimes my boyfriend looks after them, but he doesn't really like to because you know kids they whine or cry at the same time it seems and he gets really on edge about it.
- 17. What and when did he last drink?
  - a. I tried to give him some water two hours ago. He won't take anything.
- 18. Can you tell me about any current or past medical problems he has had?
  - a. He was born with Down Syndrome and when he was a baby he had a problem with his heart. Part of that was he also used to have CHF and took medications, but that got better after his operation. He is a bit slower to learn things than some other children. But he has the biggest heart, and he just loves everybody. And he's otherwise healthy. Please help my baby!
- 19. Does he have diarrhea?
  - a. No, I haven't seen any.
- 20. Is there any blood in his stools or with his bowel movements?
  - a. He hasn't pooped in a while. So actually, I'm not totally sure about that, but I don't think so.
- 21. How long does the pain in his abdomen last?
  - a. It's been going on since it started. I mean, I wouldn't bring him here if I thought it was going away.
- 22. Tell me about the health of his grandparents, parents, and children.
  - a. I've got anemia. My oldest has asthma. His birth father? I know nothing about his health. Don't care to be honest.
- 23. Any previous medical, surgical, or dental procedures?
  - a. My son had surgery to close a hold in his heart. I think they call the surgery "ASD". I haven't taken him to the dentist, though. I really should do that.
- 24. Does he bruise or bleed easily?
  - a. Yes, he seems to get bruises really easily. He's also a clumsy little guy, tripping over stuff all the time.
- 25. Does he have any skin problems?
  - a. No, uh, that is, he's a baby you know so he can get some diaper rash, but I think he's fine.
- 26. Has he recently had an upper respiratory infection?
  - a. Not recently...but he always seems to be congested.
- 27. Has he had any seizures?
  - a. No, nothing like that. I think my boyfriend and neighbors would have told me that for sure.
- 28. Were there any complications with his birth?
  - a. You mean besides his Down Syndrome? No, the birth itself was okay, I guess.
- 29. Has he had any trauma to his head?
  - a. No. Well, I mean, I don't truly know. He could have hit his head when he fell. I'm really worried, do you think he hit his head hard or something?
- 30. Is he exposed to secondhand smoke?
  - a. Well...uh...I guess so. I do smoke and so does my boyfriend but we try to keep it away from the kids and we don't smoke in the same room as them.
- 31. Have you noticed a sudden change of behavior or personality in him?

Physical Assessment - Yields 94%		
Respiratory Rate	50, normal, unlabored	
Blood Pressure on one arm	68/40, normal, hypotensive	
Brachial pulse on both arms	160, normal rhythm, weak	
Cognitive	Verbal	
Inspect skin overall	Skin cool, sweaty, and slightly mottled. Thoracotomy scar consistent with history of AV-septal repair. Diffuse diaper rash. Faint circumferential macular discolorations at wrists consistent with aging ligature marks.	
Capillary refill (fingers)	Less than 3 seconds	
Capillary refill (toes)	4 seconds	
Quinke's Test	Blanching observed	
Inspect/palpate scalp	No visible scaliness, edema, masses, lumps, deformities, scars, rashes, nevi, or other lesions, non-tender.	
Inspect/palpate head	No signs of head trauma. Down syndrome facies: flat face, up slanting eyes.	
Inspect eyes	No conjunctival pallor. No scleral icterus.	
Fundoscopic exam with ophthalmoscope	No signs of papilledema.	
Look at pupils (do it twice)	Left and right: normal reactive.	
Inspect ears	Normal appearing external structures. No deformities or edema. No discharge noted.	
Inspect nose	No discharge or polyps. No edema or tenderness over the frontal or maxillary sinuses.	
Inspect nostrils	No polyps or discharge.	
Inspect mouth/pharynx	No hoarseness: oropharynx not injected, clear mucosa, tonsils without exudate. Tongue normal color, symmetrical, no swelling or ulcerations. Normal gag reflex. Dental caries noted.	
Inspect neck	No visible scars, deformities, or other lesions. Trachea is midline and freely mobile. No asymmetry or accessory respiratory muscle use with quiet breathing.	

a. He's become very withdrawn, and that's really unlike him. He's usually so happy and just loves everybody. I'm really worried. He's usually such a good boy, we hardly ever have to send him to bed without dinner for misbehaving.

Palpate Neck	Thyroid firm, an acceptable size for patient gender and age. No nodules palpated.
Palpate all lymph nodes	No pathologically enlarged lymph nodes in the cervical, supraclavicular, axillary, or inguinal chains.
Chest wall and lungs (visual inspection)	Unlabored movement of chest wall. Thoracotomy scar consistent with history of AV septal repair. Thorax atraumatic per gross inspection.
Auscultate abdominal sounds	Hypoactive bowel sounds in all four quadrants.
Percuss abdomen	No tympany or shifting dullness.
Visually inspect abdomen	Ecchymosis overlying the epigastric measuring 10 cm in longest diameter and oval in shape, abdomen distended, 2 cm umbilical hernia.
Auscultate lungs	Normal in all fields bilaterally
Auscultate heart	Murmur, early systolic.
Palpate for PMI	PMI nondisplaced.
Palpate abdomen	Abdomen distended, firm. Diffuse tenderness to palpation with associated guarding and rebound. Reducible umbilical hernia.
Visually inspect extremities	No overt limb deformities or bony crepitus. Moves all extremities spontaneously but weakly; no evident focal deficits. Faint circumferential macular discolorations at wrists consistent with aging ligature marks.
GU male exam	Atraumatic, diffuse diaper rash, normal circumcised male, testes descended; nontender, no evidence of inguinal herniation.
Inspect for muscle/bulk tone	normal bulk, no rigidity, no signs of trauma.
Inspect/palpate back/spine	Nontender to vertebral palpation, no overt back deformities.
Palpate extremities	No localized musculoskeletal pain to palpation of extremities.
Look in ears with otoscope	Tympanic membranes intact, no hemotympanum, no signs of otitis media.
Look for involuntary	None of the following involuntary movements:
movements	fibrillations, fasciculations, asterixis, tics, myoclonus, dystonia's, chorea, athetosis, hemiballismus, nor seizures.

MSAP - Not graded			
Abdominal pain following a minor fall	MSAP		
Poor appetite	Related		