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Author(s): John Williams, M.D., Ph.D., 2009

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 UNIVERSITY OF MICHIGAN



M1 MEDICAL PHYSIOLOGY

Small Group Problem Solving

GASTROINTESTINAL

CASE:

A 65 year old man presents with the complaint of large clay colored greasy stools. On questioning he feels all right but thinks he has lost some weight. He reports a long standing history of lactose intolerance which he controls by avoiding milk. The physical exam is unremarkable.

1. Do you think this man has steatorrhea? How is steatorrhea defined? How would you document it in this patient?
2. What are the potential causes of acquired steatorrhea in an adult? Think first of which organ or systems are involved and then of examples of diseases which might disrupt their function.
3. How would you explain his lactose intolerance? Is it likely related to his steatorrhea?
4. What type of physiological test might you design to evaluate the function of the small intestine to absorb other nutrients than fat? How could this be useful in your evaluation?
5. You order a standard battery of serum measurements. Most are normal but serum bilirubin is 4.2 mg/dl (normal is less than 1). What can cause an increase in serum bilirubin? Would you expect the increase to be conjugated or unconjugated?
6. Can you relate the increase in serum conjugated bilirubin to the color of the stool?
7. When the patient comes back to your office to discuss the tests he has lost more weight and you observe he is now jaundiced. What causes jaundice? Can you now narrow down your most likely diagnostic possibilities?
8. What types of procedures might be utilized to further decide the cause of this patient's problem?
9. A nutritionist recommends that the patient be put on a supplement of medium chain triglycerides to encourage weight gain. What is the rationale behind this therapy?
10. Is this patient at risk for a fat soluble vitamin deficiency? Why? What else will affect the likelihood of vitamin deficiency?