

Examination: Gastric emptying and GI

Name _____ Date _____

Regarding gastric emptying, indicate whether the following statements are true or false:

1. Liquids empty more slowly than solids? T F
2. Fats in the test meal accelerate gastric emptying? T F
3. Gastric emptying is directly proportional to caloric density of test meal? T F
4. Gastric emptying is directly proportional to volume of test meal? T F
5. Neutral pH test meals empty more slowly than low pH test meals? T F
6. Most discrepancies between published data on gastric emptying relate to meal composition? T F

7. The ideal instrument for the performance gastric emptying studies is:
 - a. A single headed gamma camera T F
 - b. A dual headed gamma camera T F
 - c. A triple headed gamma camera T F
 - d. A rectilinear scanner T F

8. The following are desirable for solid phase gastric-emptying studies:
 - a. Solid phase label elutes T F
 - b. Solid phase label is absorbed from gut T F
 - c. Solid phase label is absorbed to gut wall T F
 - d. Solid phase label is a pure β emitter T F

9. Regarding gastroesophageal reflux studies indicate whether the following statements are true or false:
 - a. In adults the study is best done with acidified liquid test meal? T F
 - b. In infants study is best done with acidified liquid test meal? T F
 - c. In infants study is best done with usual formula? T F
 - d. Reflux may be provoked by epigastric pressure? T F
 - e. Reflux may be provoked by position? T F
 - f. Normal values exceed 10% of ingested dose? T F
 - g. Delayed views of the lung fields are very sensitive for the detection of aspiration? T F

10. The lag phase of a solid phase gastric emptying curve is due to many factors including?
 - a. Intra-gastric migration of tracer? T F
 - b. Anteroposterior migration of tracer? T F

- | | | |
|---|---|---|
| c. Posteroanterior migration of tracer? | T | F |
| d. Physical decay of tracer? | T | F |
| e. Biological decay of tracer? | T | F |

11. Connect the appropriate pairs (a-e may be used more than once):

- | | |
|---------------------------------------|---------------------------------------|
| a. Scrambled egg/sulfur colloid _____ | |
| b. Oatmeal/Tc-chelex resin _____ | |
| c. ^{99m}Tc -DTPA _____ | i. Solid phase gastric emptying |
| d. ^{111}In -DTPA _____ | ii. Liquid phase gastric emptying |
| e. Beef stew/sulfur colloid _____ | iii. Semisolid phase gastric emptying |
| f. Chicken liver/sulfur colloid _____ | iv. Absorption study |
| g. ^{123}I cellulose _____ | v. H Pylori infection |
| h. ^{14}C -Urea _____ | |
| i. ^{57}Co -B12 _____ | |

12. Regarding Meckel's diverticulum:

- | | | |
|---|---|---|
| a. Occurs in 2% of population? | T | F |
| b. Occurs in 20% of population? | T | F |
| c. Usually bleeds after age 40 years. | T | F |
| d. May be better visualized by administration of Pentagastrin | T | F |
| e. May be better visualized by administration of Omeprazole | T | F |
| f. May be better visualized by administration of Somatostatin | T | F |
| g. May be better visualized by administration of H ₂ blocker | T | F |
| h. May be better visualized by administration of H ₁ blocker | T | F |
| i. Never occurs in the left lower quadrant | T | F |

13. Biliary gastric reflux may be diagnosed:

- | | | |
|---|---|---|
| i. Incidentally during hepatobiliary scan | T | F |
| ii. Incidentally during liver/spleen scan | T | F |
| iii. Simultaneous ^{99m}Tc HIDA/ ^{111}In -DTPA study | T | F |
| iv. Multilumen intubation study | T | F |

Answer Key (Don't distribute)

1 F

2 F

3 F

4 T

5 F

6 T

7 a.F,b.T,c.F,d.F

8 a.F,b.F,c.F,d.F

9 a.T,b.F,c.T,d.T,e.T,f.F,g.F

10 a.T,b.F,c.T,d.F,e.F

11 a.i,b.iii,c.ii,d.ii,e.i,f.i,g.i,h.v, i.iv

12 a.T,b.F,c.F,d.T,e.F,f.F,g.T,h.F,i.F

13 a.T,b.F,c.T,d.T