Treating colon cancer surgically

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Members: $6 per CE, nonmembers: $10 per CE

1. The majority of colon cancers are ______
   a. lymphomas
   b. adenocarcinomas
   c. sarcomas
   d. basal cell carcinomas

2. The purpose of preoperative lab work is
   a. identify factors that could pose a threat to patient during surgery
   b. predict patient's postoperative recovery
   c. determine patient's stage of cancer
   d. identify patient allergies

3. ________ is administered to relax the patient.
   a. morphine
   b. benzodiazepine
   c. narcotic analgesic
   d. inhalation anesthesia

4. Prior to performing the skin prep, the circulator:
   a. visually inspected the skin
   b. cleaned the incision site with an iodine solution
   c. placed sterile towels around patient to create a sterile boundary
   d. all of the above

5. The surgeon lysed adhesions to:
   a. free the peritoneum from existing scar tissue
   b. establish clean margins of healthy tissue
   c. restore gastrointestinal continuity
   d. prevent infection and bleeding

6. Personnel in the PACU evaluate a patient’s:
   a. coordination
   b. speech rhythms
   c. respiration
   d. eye movements

7. An __________ controls nausea and vomiting.
   a. depolarizing muscle relaxant
   b. antiprotozoal
c. antiemetic
   d. benzodiazepine

8. Which of these is not a specific risk of colon surgery?
   a. incisional hernias
   b. excessive adhesions
   c. punctured intestine
   d. bilious drainage

9. An important element in staging cancer is:
   a. location of the primary tumor
   b. tolerance of anticancer drugs
   c. white blood cell count
   d. family history

10. Time-out procedures verify
    a. correct patient
    b. correct site
    c. correct surgery
    d. all of the above

Mark one box next to each number. Only one correct or best answer can be selected for each question.
**Blood components**

1. Blood is classified as __________ tissue.
   - A. myeloid
   - B. osseous
   - C. connective
   - D. regulatory

   - A. 8%
   - B. 45%
   - C. 55%
   - D. 90%

3. The formed elements of the blood are called the __________.
   - A. plasma
   - B. serum
   - C. hemocytoblasts
   - D. corpuscles

4. The normal pH of blood is approximately 7.4, which is __________.
   - A. slightly acidic
   - B. slightly alkaline
   - C. extremely acidic
   - D. neutral

5. Hemoglobin synthesis depends on __________ and several vitamins.
   - A. antigens
   - B. iron
   - C. antibodies
   - D. Rh factor

6. Which is a false statement about red blood cells?
   - A. They are not capable of division.
   - B. Their life span is only 120 days.
   - C. Approximately 2.5 million cells are replaced per hour.
   - D. Their production is triggered by a mechanism in the kidney.

7. Where does the destruction of old, damaged or abnormal red blood cells take place?
   - A. bone marrow
   - B. lymph nodes
   - C. spleen and liver
   - D. All of the above

8. Which statement is false?
   - A. Leukocytes migrate to extravascular tissues.
   - B. Eosinophils and basophils destroy cancer cells and parasites.
   - C. Neutrophils ingest and destroy bacteria, foreign particles and other cells.
   - D. Basophils accumulate at the site of infection.

9. Which is involved in the blood clotting process?
   - A. thrombocytes
   - B. killer T-cells
   - C. B-lymphocytes
   - D. monocytes

10. The largest component of plasma is __________.
    - A. protein
    - B. vitamins
    - C. water
    - D. electrolytes

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Mark one box next to each number. Only one correct or best answer can be selected for each question.
1. Which is not a concept of medical futility?
   a. Beneficence and physiological
   b. Clinical or overall
   c. Inevitable demise
   d. Religious affiliation

2. Qualitative futility can be ascertained if:
   a. The quality the benefit will produce is exceedingly poor by minimum standards
   b. Treatment involves life-sustaining intervention for patients in PVS
   c. Treatment results in a quality of life that is unacceptable to the patient
   d. All of the above

3. An example of _____futility is a doctor who prescribes amoxicillin to treat a patient ill with the flu virus.
   a. Strict
   b. Clinical
   c. Quantitative
   d. Qualitative

4. Guidelines of futility should incorporate
   a. Evaluations for success
   b. Considerations of cost
   c. Life expectancy
   d. All of the above

5. The _______ should possess the initial authority to consider treatment futile.
   a. Patient's minister
   b. Physician
   c. Family
   d. Personal attorney

6. The Patient Self-Determination Act resulted in:
   a. Physicians defining futility of care
   b. Families demanding aggressive treatment that was inappropriate
   c. Patients dictating their plan of treatment
   d. More patients participating in clinical trials

7. The GCAT collects relevant information crucial to:
   a. Formulation of goals of care at the end of life
   b. Tracking DNR orders and advance directives
   c. Administering appropriate pain relief
   d. All of the above

8. The main argument used to successfully prove the right-to-die in the case of Helen Wanglie involved:
   a. Cessation of antibiotics
   b. Terminating the respirator
   c. DNR order
   d. Withdrawal of the feeding tube

9. According to ________, physicians have no obligation to suggest futile intervention based on beneficence.
   a. American Medical Society
   b. AMA's Code of Ethics
   c. Hippocratic Oath
   d. The Golden Rule

10. _________ or _______________ should have the right to refuse inappropriate or extraordinary treatment.
    a. Physicians or institutions
    b. Spouses or children
    c. Ministers or counselors
    d. Lawyers or judges

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**The challenges of medical futility**

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Mark one box next to each number. Only one correct or best answer can be selected for each question.
An historical look at the origins and early years of general anesthesia

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The origins and early years of general anesthesia

- Patients who endured early operations without a flinch were called _____.
  - a. masochists
  - b. stoks
  - c. insane
  - d. dead

- In the early 1800s, approximately how many surgeries were performed weekly in hospitals?
  - a. 1-2
  - b. one per day
  - c. 10-15
  - d. 16-20

- Which was the first to be used as a local anesthetic?
  - a. opium
  - b. cocaine
  - c. alcohol
  - d. none of the above

- Sweet Vitriol was an early name for _____.
  - a. opium
  - b. cocaine
  - c. alcohol
  - d. ether

- _____ was rejected as anesthesia because it often took several hours to take effect.
  - a. nitrous oxide
  - b. hypnotism
  - c. ice
  - d. alcohol

- Who coined the term anesthesia?
  - a. Humphry Davy
  - b. Horace Wells
  - c. Oliver Wendell Holmes
  - d. William TG Morton

- Who first successfully demonstrated anesthesia at Massachusetts General?
  - a. Horace Wells
  - b. Henry J Bigelow
  - c. John C Warren
  - d. William TG Morton

- Which was not an advantage of chloroform over ether?
  - a. lower death rate
  - b. easier to transport
  - c. better smell
  - d. less flammable

- Which is an early criticism of anesthetic gasses?
  - a. difficult to control dosage
  - b. high death rates
  - c. highly addictive
  - d. all of the above

- Sir James Young Simpson argued _____ was the first true anesthesiologist and surgeon.
  - a. William TG Morton
  - b. Paracelsus
  - c. Frobenius
  - d. God
IBD and abdominal surgery: a patient's perspective

1. What did Wilks do in 1859?
   a. Documented UC symptoms for the first time.
   b. Treated the first UC patient.
   c. Recognized UC as a disease entity.
   d. Treated UC for the first time with sulfadiazine.

2. Which is a false statement about IBD?
   a. Complications can result from vitamin and nutrient deficiencies.
   b. Inflammation of the bowel is characteristic.
   c. Stress plays a role in the disease.
   d. IBD is a psychosomatic disease.

3. UC starts out as ulcerative proctitis in approximately _______ of cases.
   a. 30%
   b. 20%
   c. 80%
   d. 25%

4. What is primary difference between UC and Crohn's?
   a. UC is more dangerous than Crohn's.
   b. Crohn's causes more stress than UC.
   c. Crohn's only affects children.
   d. UC symptoms are contained to the colon and rectum.

5. What characteristics are unique to Crohn's?
   a. Skip patterns and little pain.
   b. Finger clubbing and skip patterns.
   c. String sign and skip patterns.
   d. Both B and C are correct.

6. What surgical intervention is contraindicated for Crohn's?
   a. Surgery is always contraindicated.
   b. Brooke ileostomy
   c. Resection
   d. Continent ileostomy

7. Which of the following is not an autoimmune disease?
   a. UC
   b. IBS
   c. Celiac sprue
   d. All are autoimmune diseases

8. What is the primary treatment for pouchitis?
   a. Flagyl
   b. Methylprednisone
   c. Diazepam
   d. Belladonna alkaloids

9. Which is true regarding karate and the ileostomates?
   a. Some ileostomates take karate.
   b. Karate should never be taken due to possible blunt trauma.
   c. Exercise care and protect the stoma from blunt trauma.
   d. Both A and C are correct.

10. What is the partial pressure at 66 feet underwater?
    a. 14.7 psi
    b. 29.4 psi
    c. 44.1 psi
    d. 73.5 psi

Members: $6 per CE, nonmembers: $10 per CE
1. In 1999-2000, what percentage of adult Americans were considered overweight?
   a. 20%
   b. 30%
   c. 50%
   d. 64%

2. Obesity is defined as a Body Mass Index of:
   a. 20 or more
   b. 25 or more
   c. 30 or more
   d. 50 or more

3. Which is not a comorbidity of obesity?
   a. GERD
   b. Type 2 diabetes
   c. Sleep apnea
   d. All are comorbidities

4. Which of the following procedures is considered the gold standard by the ASBS?
   a. Roux-en-Y
   b. Adjustable band gastroplasty
   c. Bilipancreatic diversion with duodenal switch
   d. Adjustable bilipancreatic bypass

5. To be considered a candidate for gastric bypass, the patient must have a BMI of at least:
   a. 30
   b. 40
   c. 50
   d. 60

6. Postoperative follow-up programs are recommended for a minimum of:
   a. 6 months
   b. 1 year
   c. 18 months
   d. 5 years

7. Which tissue and staple are mismatched?
   a. stomach: 4.8 mm
   b. bowel: 2.5 mm
   c. mesentery tissue: 2.0 cm
   d. stomach: 4.5 mm

8. What percentage of detected leaks will require surgery?
   a. 70%
   b. 60%
   c. 30%
   d. 0%

9. Small leaks in the bowel may heal themselves if the patient remains NPO for:
   a. 24 hours
   b. 36 hours
   c. 48 hours
   d. 72 hours

10. A potential complication of this surgery is:
    a. hair loss
    b. kidney stones
    c. pulmonary embolism
    d. all of the above
When unexpected complications arise during surgery

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Note this exam awards 3 Continuing Education credits.
Members: $18, nonmembers: $30

1. Which ligaments hold the ovaries in place?
   a. Suspensory
   b. Broad
   c. Ovarian
   d. All of the above

2. _______ epithelium consists of flat, platelike cells.
   a. Germinal
   b. Squamous
   c. Stratified
   d. Cubic

3. _____ attempts were made to close the vaginal cuff by suture.
   a. 27
   b. 18
   c. 23
   d. 31

4. TAH is not indicated for which of the following?
   a. Uterine sarcoma
   b. Asbestos
   c. Tubal malignancy
   d. Dysfunctional uterine bleeding

5. The round ligament terminates at the _________.
   a. Anterior cul-de-sac
   b. Vestibule
   c. Labia majora
   d. Fallopian-uterine attachment

6. Care was taken to avoid the ________ when the initial midline incision was made.
   a. Falciform ligament
   b. Xiphoid process
   c. Symphysis pubis
   d. Umbilicus

7. The ________ was/were placed on the back table for use once the peritoneum was opened.
   a. Bookwalter retractor
   b. Free ties
   c. Tonsil clamps
   d. Oval ring

8. Estimated blood loss up to the first time the patient was transported to the ICU:
   a. 16,000 cc
   b. 17,000 cc
   c. 18,000 cc
   d. 19,000 cc

9. The triangular space at the base of the bladder is called _________.
   a. Trikates
   b. Trikate
   c. Trigone
   d. Trilobe

10. The uterine sac was incised with _________.
    a. Straight Mayo scissors
    b. Metzenbaum scissors
    c. A #10 blade on a #3 knife
    d. Curved Mayo scissors

Mark one box next to each number. Only one correct or best answer can be selected for each question.
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Note this exam awards two continuing education credits.
Members: $12, nonmembers: $20

Obesity

1. A person's ideal weight is established by his or her _______.
   a. Height
   b. Sex
   c. Build
   d. All of the above

2. ________ occurs when excess body fat accumulates to such levels that it affects a person's health.
   a. Obesity
   b. Hypertension
   c. Heart disease
   d. None of the above

3. According to the CDC, ________ is the number one health threat in America.
   a. Obesity
   b. Smoking
   c. Heart Disease
   d. Cancer

4. ________ is not a cause of obesity.
   a. Poor eating habits
   b. Lack of exercise
   c. High leptin levels
   d. Sedentary lifestyle

5. According to Cynthia Ogden's study, ________ percent of American adults are obese.
   a. 65
   b. 59
   c. 31
   d. 15

6. Medical conditions facing obese people include:
   a. Hypertension
   b. Diabetes
   c. Cardiac failure
   d. All of the Above

7. More than 80 percent of overweight people have ________
   a. Heart disease
   b. Type 2 diabetes
   c. High levels of HDL cholesterol
   d. All of the above

8. The state of ________ successfully banned junk food from being sold in its public school system.
   a. Texas
   b. Colorado
   c. Virginia
   d. New York

9. The diet with the highest success rate is ________
   a. Low in carbohydrates
   b. Low in calories
   c. Low in protein
   d. Low in fat

10. Surgery is recommended for patients with ________
    a. A BMI of 40
    b. A BMI of 25–39.9 with serious obesity-related conditions
    c. Aversion to exercise
    d. a&b

Mark one box next to each number. Only one correct or best answer can be selected for each question.
11. __________ involves the injection of fat-melting drugs.
   a. Liposuction
   b. Mesotherapy
   c. Restrictive bariatric surgery
   d. Vertical banded gastroplasty

12. __________ removes fat deposits from under the skin by using a cannula attached to a vacuum.
   a. Liposuction
   b. Mesotherapy
   c. Restrictive bariatric surgery
   d. Vertical banded gastroplasty

13. ____ was developed in the 1970s as a safer alternative to Roux-en-Y gastric bypass.
   a. Liposuction
   b. Mesotherapy
   c. Restrictive bariatric surgery
   d. Vertical banded gastroplasty

14. __________ is the most common weight loss procedure today.
   a. Roux-en-Y gastric bypass
   b. Biliopancreatic diversion
   c. Gastric banding
   d. None of the above

15. On average, __________ leads to a loss of 40 percent of excess weight.
   a. Roux-en-Y gastric bypass
   b. Biliopancreatic diversion
   c. Gastric banding
   d. All of the above

16. __________ is considered the safest and least invasive weight loss surgery.
   a. Roux-en-Y gastric bypass
   b. Biliopancreatic diversion
   c. Gastric banding
   d. Vertical banded gastroplasty

17. In ________, a reduced stomach is created and digestive juices are diverted to the small intestine.
   a. Roux-en-Y gastric bypass
   b. Biliopancreatic diversion
   c. Gastric banding
   d. None of the above

18. About ______ percent of those who undergo vertical banded gastroplasty achieve normal weight, and about ______ percent achieve some degree of weight loss.
   a. 30, 80       c. 50, 30
   b. 30, 50       d. 50, 80

19. __________ percentage of Americans are overweight or obese.
   a. 53          c. 64
   b. 47          d. 35

20. Diabetes is projected to increase by ______ percent in the next 50 years.
    a. 100     c. 145
    b. 125     d. 165
Blood Components

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The Challenges of Medical Futility

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Origins and Early Years of General Anesthesia

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IBD and Abdominal Surgery

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### Role of the Surgical Technologist in Bariatric Surgery

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### When Unexpected Complications Arise During Surgery

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### Obesity: An American Epidemic

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### Directions
Complete all 8 answer keys for the exams. Include your check or money order made payable to AST or complete credit card information with the appropriate amount and mail to Members Services, AST, 6 W Dry Creek Circle, Ste 200, Littleton, CO 80120-8031. If paying by credit card, you can fax in the answer keys and credit card payment to AST at 303-694-9169.