

Test Bank - Chapter 01

Q1: A patient has recently been exposed to group A hemolytic Streptococcus and subsequently developed a pharyngeal infection. Their clinic examination reveals an oral temperature of 102.3°F, skin rash, dysphagia, and reddened throat mucosa with multiple pustules. They report a sore throat, malaise, and joint stiffness. A throat culture is positive for Streptococcus, and antibiotics have been prescribed. The etiology of the patient's disease is

- A. a sore throat.
- B. streptococcal infection. (Correct)**
- C. genetic susceptibility.
- D. pharyngitis.

Rationale: Etiology refers to the proposed cause or causes of a particular disease process. A sore throat is the manifestation of the disease process. Genetic susceptibility refers to inherited tendency to develop a disease. Pharyngitis refers to inflammation of the throat and is also a clinical manifestation of the disease process.

Q2: A 17-year-old college-bound student receives a vaccine against an organism that causes meningitis. This is an example of

- A. primary prevention. (Correct)**
- B. secondary prevention.
- C. tertiary prevention.
- D. disease treatment.

Rationale: Primary prevention is prevention of disease by altering susceptibility or reducing exposure for susceptible individuals, in this case by providing vaccination. Secondary prevention is the early detection, screening, and management of the disease. Tertiary prevention includes rehabilitative and supportive care and attempts to alleviate disability and restore effective functioning. Disease treatment involves management of the disease once it has developed.

Q3: An obese but otherwise healthy teen is given a prescription for a low-calorie diet and exercise program. This is an example of

- A. primary prevention.
- B. secondary prevention. (Correct)**
- C. tertiary prevention.
- D. disease treatment.

Rationale: Secondary prevention is the early detection, screening, and management of the disease such as prescribing diet and exercise for an individual who has already developed obesity. Primary prevention is prevention of disease by altering susceptibility or reducing exposure for susceptible individuals. Tertiary prevention includes rehabilitative and supportive care and attempts to alleviate disability and restore effective functioning. Disease treatment involves management of the disease once it has developed.

Q4: A patient diagnosed with high blood pressure who is otherwise healthy is counseled to restrict sodium intake. This is an example of

- A. primary prevention.
- B. secondary prevention. (Correct)**
- C. tertiary prevention.
- D. disease treatment.

Rationale: Secondary prevention is the early detection, screening, and management of the disease, such as by prescribing sodium restriction for high blood pressure. Primary prevention is prevention of disease by altering susceptibility or reducing exposure for susceptible individuals. Tertiary prevention includes rehabilitative and supportive care and attempts to alleviate disability and restore effective functioning. Disease treatment involves management of the disease once it has developed.

Q5: After suffering a heart attack, a middle-aged man is counseled to take a cholesterol-lowering medication. This is an example of

- A. primary prevention.
- B. secondary prevention.
- C. tertiary prevention. (Correct)**
- D. disease treatment.

Rationale: Tertiary prevention includes rehabilitative and supportive care and attempts to alleviate disability and restore effective functioning such as prescribing a cholesterol-lowering medication following a heart attack. Primary prevention is prevention of disease by altering susceptibility or reducing exposure for susceptible individuals. Secondary prevention is the early detection, screening, and management of the disease. Disease treatment involves management of the disease once it has developed.

Q6: A patient has been exposed to meningococcal meningitis but is not yet demonstrating signs of this disease. This stage of illness is called the _____ stage.

- A. prodromal
- B. latent (Correct)**
- C. sequela
- D. convalescence

Rationale: Incubation refers to the interval between exposure of a tissue to an injurious agent and the first appearance of signs and symptoms. In infectious diseases, this period is often called the incubation (latent) period. Prodromal refers to the appearance of the first signs and symptoms indicating the onset of a disease. These are often nonspecific, such as headache, malaise, anorexia, and nausea, which are associated with several different diseases. Sequela refers to subsequent pathologic condition resulting from a disease. Convalescence is the stage of recovery after a disease, injury, or surgical operation.

Q7: A disease that is native to a particular region is called

- A. epidemic.
- B. endemic. (Correct)**
- C. pandemic.
- D. ethnographic.

Rationale: A disease that is native to a particular region is called endemic. An epidemic is a disease that spreads to many individuals at the same time. Pandemics are epidemics that affect large geographic regions, perhaps spreading worldwide. Ethnographic does not describe a disease distribution pattern.

Q8: In general, with aging, organ size and function

- A. increase.
- B. decrease. (Correct)**
- C. remain the same.
- D. are unknown.

Rationale: In general, with aging, organ size and function decrease.

Q9: The stage during which the patient functions normally, although the disease processes are well established, is referred to as

- A. latent.
- B. subclinical. (Correct)**
- C. prodromal.
- D. convalescence.

Rationale: The stage during which the patient functions normally, although the disease processes are well established, is called the subclinical stage. The interval between exposure of a tissue to an injurious agent and the first appearance of signs and symptoms may be called a latent period or, in the case of infectious diseases, an incubation period. The prodromal period, or prodrome, refers to the appearance of the first signs and symptoms indicating the onset of a disease. Convalescence is the stage of recovery after a disease, injury, or surgical operation.

Q10: Your patient's red blood cell count is slightly elevated today. This might be explained by (Select all that apply.) (Select all that apply.)

- A. gender difference. (Correct)**
- B. situational factors. (Correct)**
- C. normal variation. (Correct)**
- D. cultural variation.
- E. illness. (Correct)**

Rationale: Gender, situations (e.g., altitude), normal variations, and illness may all determine red blood cell count. Culture affects how manifestations are perceived (normal versus abnormal).

Q11: Socioeconomic factors influence disease development because of (Select all that apply.)
(Select all that apply.)

- A. genetics.
- B. environmental toxins. (Correct)**
- C. overcrowding. (Correct)**
- D. nutrition. (Correct)**
- E. hygiene. (Correct)**

Rationale: Socioeconomic factors influence disease development via exposure to environmental toxins (occupational) and overcrowding, nutrition (over- or undernutrition), and hygiene (e.g., in developing countries). Genetics is not influenced by socioeconomic factors.

Q12: When determining additional data to gather before making a diagnosis, what factors need to be considered? (Select all that apply.) (Select all that apply.)

- A. Reliability (Correct)**
- B. Expense
- C. Validity (Correct)**
- D. Generalizability
- E. Repetition

Rationale: Two considerations one must use when choosing additional data to gather include the reliability and validity of the tests being weighed. Reliability, or precision, is the ability of a test to give the same result in repeated measurements. Validity, or accuracy, is the degree to which a measurement reflects the true value of the object it is intended to measure. Expense, generalizability, and repetition are not characteristics that are typically considered.

Q13: Which of the following statements are accurate when considering diagnostic testing for an individual with a possible medical condition? (Select all that apply.) (Select all that apply.)

- A. The more often a patient has a test, the more accurate the average result is.
- B. Sensitivity is the chance the test will be positive if the hypothesized disease is present. (Correct)**
- C. Testing is generally not accurate during the prodromal stage to make a diagnosis.
- D. Specificity shows that a test will be negative if the person does not have the disease. (Correct)**
- E. Reliability demonstrates a test is accurate under several different conditions.

Rationale: Sensitivity is the probability that the test will be positive when applied to a person with the condition. Specificity is the probability that a test will be negative when applied to a person who does not have a given condition. Test results are usually not aggregated and averaged. A disease process is well established during the prodromal phase of illness, so some diagnostic testing would indicate its presence. Reliability, or precision, is the ability of a test to give the same result in repeated measurements.

Review Questions - Chapter 01

Q1: What is the study of specific characteristics and functions of a living organism and its parts called?

- A. Psychiatry
- B. Physiology (Correct)**
- C. Homeostasis
- D. Pathophysiology

Rationale: Physiology is the study of the mechanical, physical, and biochemical functions of living organisms. Psychiatry is a branch of medicine dealing with mental illness. Homeostasis is a dynamic steady state. Pathophysiology refers to the disorder or breakdown of the human body's function.

Q2: Restoration and rehabilitation of effective function are the goals of which level of prevention?

- A. Primary
- B. Tertiary (Correct)**
- C. Clinical
- D. Secondary

Rationale: Tertiary prevention (appropriate in the stage of advanced disease or disability) includes rehabilitative and supportive care and attempts to alleviate disability and restore effective functioning. Primary prevention is prevention of disease by altering susceptibility or reducing exposure for susceptible individuals. Clinical is a stage referred to in early disease prevention (secondary). Secondary prevention is the early detection, screening, and management of the disease.

Q3: Which organ shrinks with age?

- A. Gums (Correct)**
- B. Heart
- C. Prostate
- D. Sweat glands

Rationale: The gums shrink with age. The heart enlarges with age. The prostate enlarges with age. Sweat glands become fewer in number with age but individual glands do not shrink.

Q4: Which statement is true about the normal biological variations related to age?

- A. An infant will have a slower heart rate than an adult.
- B. Older persons have better temperature sensations.
- C. There are more sweat glands in an elderly person.
- D. There is less thirst perception in the elderly. (Correct)**

Rationale: Aging does usually result in diminished thirst perception. Adults have slower heart rates than infants. The elderly have fewer sweat glands. The elderly have diminished temperature sensations.

Q5: Which statement is true?

A. Women have a lower hemoglobin level than men. (Correct)

B. Men have a lower creatinine level than women.

C. Men have a higher calcium level than women.

D. Women snore more than men.

Rationale: Women generally have lower hemoglobin levels than men. Women have higher calcium levels than men. Women have higher creatinine levels than men. Men tend to snore more than women.

Q6: The increase in a normal adaptive response to the decreased availability of oxygen at high altitudes is referred to using which term?

A. Diurnal

B. Circadian

C. Population

D. Acclimatization (Correct)

Rationale: Acclimatization is the normal adaptive response to the decreased availability of oxygen at a high altitude. Circadian rhythm and diurnal variation are terms that refer to factors that are similar depending on the time of day. Population refers to a group of people or may be referred to as a population mean when using statistics.

Q7: Which term refers to the “cause of the disease?”

A. Etiology (Correct)

B. Risk factor

C. Pathogenesis

D. Clinical manifestations

Rationale: Etiology is the cause or reason for a phenomenon. When the link between an etiologic factor and development of a disease is less than certain, but the probability is increased when the factor is present, it is termed a risk factor. The mechanism of disease development is called pathogenesis. The functional consequences of these changes are the clinical manifestations.

Q8: What term is used to describe when the cause of a disease is because of unintended or unwanted medical treatment?

A. Genotype

B. Idiopathic

C. Ecogenetics

D. Iatrogenic (Correct)

Rationale: Iatrogenic means that the cause was medical intervention. Genotype refers to the genetic inheritance for a condition. Idiopathic is when the cause of the condition is unknown. Ecogenetics is a struggle between genetic makeup and environment.

Q9: Signs and symptoms of a disease first occur during what period of the disease process?

- A. Acute phase
- B. Latent period
- C. Subclinical stage
- D. Prodromal period (Correct)**

Rationale: The prodromal period, or prodrome, refers to the appearance of the first signs and symptoms indicating the onset of a disease. During the acute phase, the disease reaches its full intensity, and signs and symptoms attain their greatest severity. If the disease has a latent period, the signs and symptoms may become mild or even disappear for a time. A number of diseases have a subclinical stage, during which the client functions normally, although the disease processes are well established.

Q10: Which term is used to describe an objectively identifiable aberration of the disease?

- A. Syndrome
- B. Symptom
- C. Sign (Correct)**
- D. Stage

Rationale: A sign is an objectively identifiable aberration of the disease. A syndrome is a collection of different signs and symptoms that occur together. A symptom is a subjective feeling. The clinical manifestations of some diseases may change significantly over time, resulting in a completely different clinical presentation at different stages (periods in time).