

## **Biliary tract disease. Gallbladder dysfunction. Cholecystitis in children**

### ***Single Choice***

1. SC Select the main etiological factor of acute cholecystitis in children:
  - A. Alimentary factor
  - B. Traumatism
  - C. Physical effort
  - D. Neuropsychological stress
  - E. Bacterial infection
  
2. SC Select the main factor which contribute to stimulation of biliary excretion:
  - A. Secretin
  - B. Amylase
  - C. Cholecystokinin
  - D. Gastrin
  - E. Oddi sphincter
  
3. SC Choose the clinical form of acute cholecystitis in children when surgical treatment is indicated:
  - A. Gangrenous
  - B. Catarrhal
  - C. Erythematous
  - D. Granulomatosis
  - E. Unspecific
  
4. SC The treatment of acute cholecystitis in children does not include:
  - A. Antibiotics
  - B. Non-steroidal antiinflammatory drugs
  - C. Antispastic drugs
  - D. Analgesic drugs
  - E. Hygiene-dietetic regime
  
5. SC Select the clinical form of acute cholecystitis with a mild evolution:
  - A. Phlegmonous
  - B. Gangrenous
  - C. Unspecific
  - D. Catarrhal
  - E. Specific
  
6. SC. With what clinical manifested deficiencies can be associated the prolonged biliary obstruction of the secondary hepatic cirrhosis:
  - A. A, D and k vitamin
  - B. B and C vitamin
  - C. Proteins
  - D. Carbohydrates
  - E. Potassium
  
7. SC Mark the first choice investigation to detect gallstones:
  - A. Oral cholecystography
  - B. Abdominal simple X-ray
  - C. Gallbladder ultrasonography
  - D. Radioisotopic scintigraphy
  - E. abdominal computer tomography

**8. SC** Determine the modification of the complete blood count in patients with chronic cholecystitis in remission:

- A. Increased ESR
- B. Leukocytosis
- C. Anemia
- D. Normal values
- E. It presents unspecific changes

**9. SC** The ultrasonography criteria of chronic cholecystitis are all of following, except:

- A. Increased of gallbladder's dimensions
- B. Thickening ( $\geq 3\text{mm}$ ) and deformation of gallbladder walls
- C. Forbearance and/or stratification on gallbladder's walls
- D. Decreased of gallbladder's dimensions
- E. Nonhomogeneous of gallbladder's cavity

**10. SC** Complaints of patients with chronic cholecystitis are following, except:

- A. Headache
- B. Feverish
- C. Nausea
- D. Stool instability
- E. Fever  $39-40^{\circ}\text{C}$

**11. SC** Specify clinical situation when a regime to bed is indicated in chronic cholecystitis:

- A. In case of fever and pain syndrome
- B. At the disappearance of fever and pain syndrome
- C. At fever disappearance
- D. At pain syndrome disappearance
- E. In remission

**12. SC** Determine what can be present in the complete blood count of patients with biliary dyskinesia:

- A. Increased ESR
- B. Leukocytosis
- C. Anemia
- D. With normal indices
- E. It presents unspecific modifications

**13. SC** Specify the characteristic of hypertonic-hyperkinetic biliary dyskinesia in children:

- A. Hypotonic Oddi sphincter
- B. Increased tonus of the gallbladder and Oddi sphincter
- C. Hypotonic gallbladder
- D. Increased volume of gallbladder
- E. Dull and annoying pain

**14. SC** Select the characteristic of hypotonic-hypokinetic biliary dyskinesia in children:

- A. The spasm of the Oddi sphincter
- B. Continuous hyper tonus of gallbladder
- C. Decreased tonus of the gallbladder and Oddi sphincter
- D. Decreased volume of gallbladder
- E. Intrahepatic biliary ducts atresia

**15. SC** Specify which of following clinical signs are not specific for hypotonic biliary dyskinesia in children:

- A. A dull right hypocondrium pain

- B. Nausea, lack of appetite
- C. Bitter taste in the morning
- D. Violent, acute pain
- E. Flatulence, constipation

**16. SC** The etiology of biliary dyskinesia in children is the following, except:

- A. Neurovegetative dysfunction
- B. supported viral hepatitis
- C. Traumatism
- D. Food allergy
- E. Endocrine diseases

**17. SC** Risk factor to develop biliary dyskinesia in children are the following, except:

- A. Sedentary life
- B. Solar plexus trauma
- C. Anomalies of gallbladder and biliary tract
- D. Hereditary predisposition
- E. Cystitis

**18. SC** Which clinical signs are not characteristic for hypertonic (hyperkinetic) biliary dyskinesia in children:

- A. Nausea, bile vomiting
- B. Acute, colicative, violent pain in the right hypocondrium
- C. Acute, colicative pain in the left hypocondrium
- D. Epigastric heartburns
- E. The pain arises postprandial, after stress

**19. SC** The treatment of biliary hypotonic dyskinesia in children will not include:

- A. Antispastic drugs
- B. Biliary drainage (sounding)
- C. Hygienic-dietetic regime
- D. Tonus increasing physiotherapy
- E. Prokinetic medication

**20. SC** The treatment of hypertonic biliary dyskinesia in children will not include:

- A. Hygienic-dietetic regime
- B. Biliary drainage (sounding)
- C. Antispastic drugs
- D. Choleric drugs
- E. Neurotropic – sedative drugs

### **Multiple choices**

**1. MC** Specify which can be the etiology of acute cholecistitis:

- A. Bacteria
- B. Viral
- C. Parasitic
- D. Autoimmune
- E. Alimentary

**2. MC** Mark the ways of infection transmission to the gallbladder:

- A. Hematogenous
- B. Lymphogenous
- C. Ascendant from duodenum
- D. Transcutaneous

E. By direct inoculation

**3. MC** Mark risk factors to develop acute cholecystitis:

- A. Inflexion at different level of the gallbladder
- B. Intravesical septum
- C. Normokinetic biliary ducts
- D. Exocrinous pancreas hypofunction
- E. Gastric hypermotility

**4. MC** Select clinical syndromes describing a typical case of acute cholecystitis in children:

- A. Abdominal pain syndrome
- B. Hemorrhagic syndrome
- C. Dyspeptic syndrome
- D. Intoxication syndrome
- E. Edematous syndrome

**5. MC** Specify the characteristic of the abdominal pain syndrome in case of acute cholecystitis in children:

- A. Suprapubic pain
- B. Left hypocondrium pain
- C. Right hypocondrium pain
- D. The pain radiates to the right side of the thorax
- E. The pain radiates to the left side of the thorax.

**6. MC** Mark positive clinical signs of acute cholecystitis in children:

- A. Murphy
- B. Ortner
- C. Kehr
- D. Lepine
- E. Giordano

**7. MC** Select clinical forms of acute cholecystitis in children:

- A. Catarrhal
- B. Phlegmonous
- C. Gangrenous
- D. Granulomatosis
- E. Erosive

**8. MC** Specify laboratory findings in the complete blood count characteristic for acute bacterial cholecystitis in children:

- A. Erythrocytosis
- B. Anemia
- C. Leukocytosis
- D. Neutrophilia
- E. Increased ESR

**9. MC** Determine which are ultrasonography modifications expected in case of acute cholecystitis in children:

- A. Increased volume of gallbladder and thickening of its walls more than 3 mm
- B. Thickening and splitting of gallbladder's walls
- C. Thinning of gallbladder's walls
- D. Motility disorders with biliary stasis
- E. Possible gallbladder's development anomalies are present

**10. MC** Select treatment components in mild forms of acute cholecystitis in children:

- A. Regime at bed
- B. Nr 5 alimentary regime according Pevsner
- C. Infusion therapy
- D. Antibiotics
- E. Spasmolytic drugs

**11. MC** Mark etiological types of chronic cholecystitis:

- A. Genetics
- B. Non-infectious
- C. Thermics
- D. Infectious
- E. Actinic

**12. MC** Select etiological factors of infectious chronic cholecystitis:

- A. Virus
- B. Mycotic
- C. Bacteria
- D. Protozoa
- E. Chlamydia

**13. MC** Select non-infectious causes of chronic cholecystitis:

- A. Biliary lithiasis
- B. Duodenal-gastric reflux
- C. Duodenal-biliary reflux
- D. Allergic reactions in atopic diathesis
- E. Chronic colitis

**14. MC** Select clinical forms of chronic cholecystitis:

- A. Calculous
- B. Icteric
- C. Non-calculous
- D. Non-specified
- E. Anicteric

**15. MC** Mark risk factors to develop chronic cholecystitis:

- A. Intestinal dysbacteriosis
- B. Discholia
- C. Reflux esophagitis
- D. Development anomalies of gallbladder and biliary ducts
- E. Chronic colitis

**16. MC** Select the principal clinical syndrome identified in case of chronic cholecystitis:

- A. Dyspeptic syndrome.
- B. Pain syndrome.
- C. hepatic insufficiency syndrome
- D. Astheno-vegetative syndrome
- E. Intoxication syndrome

**17. MC** Specify the characteristic of pain syndrome from chronic cholecystitis in children:

- A. Annoying, dull pain, compression
- B. Acute, violent
- C. Accentuated at 20-30 min after cold, fatty and spicy food
- D. Accentuated after intense physical effort

E. Can be localized in the right hypocondrium

**18. MC** Determine what we can expect on clinical examination in chronic cholecystitis in children:

- A. Slowly increased liver
- B. Pallor of the skin
- C. Jugular turgescence
- D. Positive Ortner sign
- E. Acrocyanosis

**19. MC** Select positive indices to confirm diagnosis in gallbladder diseases in children:

- A. Anamnesis
- B. Complete blood count, serum biochemical indices
- C. Coproculture
- D. Ultrasonography
- E. Cholecystography, hepato-bilio-scintigraphy

**20. MC** Specify ultrasonography criteria for chronic cholecystitis:

- A. Increased gallbladder dimensions
- B. Thickening (> 3mm) and deformation of gallbladder's walls
- C. Induration and/or stratification of gallbladder's walls
- D. Decreased gallbladder dimensions
- E. Non-homogenous gallbladder cavity

**21. MC** The differential diagnosis of chronic cholecystitis in children is performing with following diseases:

- A. Gastroduodenitis;
- B. Appendicitis;
- C. Ulcerative disease;
- D. Cystitis;
- E. Proctosigmoiditis

**22. MC** Select categories of drugs used for the treatment of chronic cholecystitis in children:

- A. Antiemetic
- B. Antifungal
- C. Antibiotics
- D. Choleric
- E. Nr 5 alimentary regime according Pevsner

**23. MC** Specify prevent methods for chronic cholecystitis in children:

- A. Increased consumption of fatty food (animal origin of lipids)
- B. Treatment of chronic infectious sources
- C. Rational alimentation according the age
- D. Prophylactic administration of antibiotics
- E. Active style of life

**24. MC** Mark CBC findings present in case of chronic cholecystitis in acute phase:

- A. Reticulocytosis
- B. Poikilocytosis
- C. Some cases of anemia
- D. Leukocytosis
- E. Increased ESR

**25. MC** Select gallbladder dyskinesias:

- A. Hypertonic gallbladder

- B. Normotonic gallbladder
- C. Biliary stasis
- D. Hypotonic gallbladder
- E. Hypertonic Oddi sphincter

**26. MC** Select which are dyskinesias of principal biliary ducts:

- A. Normotonic Oddi sphincter
- B. Hypertonic gallbladder
- C. Hypertonic Oddi sphincter
- D. Hypotonic Oddi sphincter
- E. Biliary stasis

**27. MC** Mark etiological factors of biliary dyskinesias:

- A. Antecedents of acute viral hepatitis
- B. Various etiologies of neurocirculatory dysfunction
- C. Endocrine diseases
- D. Chronic diseases of gastrointestinal tract
- E. Pneumonia

**28. MC** Select characteristics of pain syndrome in hypertonic dyskinesias:

- A. Localized in the right hypocondrium
- B. Manifested by short time accesses
- C. Post-prandial appearance or related to psychoemotional stress
- D. Dull pain as weight sensation in the right hypocondrium
- E. Manifested like a “punched in the gut” sensation

**29. MC** Select characteristics of pain syndrome in hypotonic dyskinesias:

- A. Localized in the right hypocondrium
- B. Manifested by short time accesses
- C. Post-prandial appearance or related to psychoemotional stress
- D. Dull pain as weight sensation in the right hypocondrium
- E. Manifested like a “punched in the gut” sensation

**30. MC** Which are clinical signs expected in case of biliary dyskinesia:

- A. Giordano
- B. Koher
- C. Ortner
- D. Kehr
- E. Murphy

**31. MC** Select investigations which can establish positive diagnostic of biliary dyskinesia in children:

- A. Ultrasonography
- B. Endoscopic examination
- C. Abdominal X-ray investigation
- D. Complete blood count
- E. Biochemical blood exam

**32. MC** Mark ultrasonography signs of hypotonic-hypokinetic biliary dyskinesia in children:

- A. Increased volume of gallbladder
- B. Decreased gallbladder's volume more than  $\frac{1}{2}$ , 1 hour after the breakfast
- C. Triangularly configuration of the urinary vesicle
- D. Decreased gallbladder's volume less than  $\frac{1}{2}$ , 1 hour after eating
- E. Small gallbladder

**33. MC** Mark ultrasonography signs of hypotonic-hypokinetic biliary dyskinesia in children:

- A. Decreased biliary excretion
- B. Decreased gallbladder's volume more than  $\frac{1}{2}$ , 1 hour after eating
- C. Decreased gallbladder's volume more than  $\frac{2}{3}$ , 1 hour after the breakfast
- D. Small gallbladder;
- E. Abdominal flatulence

**34. MC** The differential diagnosis of biliary dyskinesia in children is performing with following diseases:

- A. Perforated gastric ulcer
- B. Cholecystitis
- C. Biliary lithiasis
- D. Basal pneumonia on the right side
- E. Acute pyelonephritis

**35. MC** Select treatment component of hypertonic dyskinesia:

- A. Nr 5 alimentary regime according Pevsner
- B. Stimulating neurotrope drugs
- C. Sedative neurotrope drugs
- D. Spasmolytic drugs
- E. Mineral water with low level of mineralization, non-sparkling, warm

**36. MC** Select treatment components of hypotonic dyskinesias:

- A. Nr 5 alimentary regime according Pevsner
- B. Stimulating neurotrope drugs
- C. Sedative neurotrope drugs
- D. Spasmolytic drugs
- E. Mineral water with medium and high level of mineralization

**37. CM** Mark the effects of cholecystokinin:

- A. Stimulating gallbladder contraction
- B. Stimulating Oddi sphincter contraction
- C. Stimulating biliary secretion
- D. Inhibiting Oddi sphincter tonus
- E. Inhibiting gallbladder contraction

**38. CM** Specify biliary components:

- A. biliary acids
- B. Cholesterol
- C. Immunoglobulin A
- D. Hemoglobin
- E. Lecithin

**39. MC** Determine possible complications of chronic cholecystitis in children:

- A. biliary lithiasis
- B. Dermatitis
- C. Hepatitis
- D. Urethritis
- E. Duodenitis

**40. MC** Select risk factors for biliary dyskinesia appearance in children:

- A. Sedentary life style
- B. Solar plexus trauma

- C. Gallbladder and biliary ducts anomalies
- D. Hereditary predisposition
- E. Cystitis

**Maladiile căilor biliare la copii. Disfuncția vezicii biliare. Colecistitele la copii**  
**Complement simplu**

1. E
2. C
3. A
4. B
5. D
- 6.A
- 7.C
8. D
9. A
- 10.E
- 11.A
- 12.D
- 13.B
- 14.C
- 15.D
- 16.C
- 17.E
- 18.C
- 19.A
- 20.B

**Complement multiplu**

- |            |            |
|------------|------------|
| 1. A,B,C   | 18.A,B,D   |
| 2. A,B,C   | 19.A,B,D,E |
| 3. A,B     | 20.B,C,D,E |
| 4. A,C,D   | 21.A,B,C   |
| 5. C,D     | 22.C,D,E   |
| 6. A,B,C,D | 23.B,C,E   |
| 7. A,B,C   | 24.C,D,E   |
| 8. C,D,E   | 25.A,D     |
| 9. B,D,E,A | 26.C,D     |
| 10.B,D,E   | 27.A,B,C,D |
| 11.B,D     | 28.A,B,C   |
| 12.A,C     | 29.A,D     |
| 13.A,C,D   | 30.C,D,E   |
| 14.A,C     | 31.A,B     |
| 15.A,B,D   | 32.A,D     |
| 16.A,B,D,E | 33.C,D     |
| 17.A,C,D,E | 34.B,C     |

35. A, C, D, E

36. A, B, E

37. A, C, D

38. A, B, C, E

39. A, B, E

40. A, B, C, D