

MENINGOCOCCAL INFECTION

Single choice

1. Indicate the elective drug in the treatment of febrile seizures in children:
A. Diazepam
B. Prednisolone
C. Paracetamol
D. Dimedrol
E. Hydrocortisone

2. Indicate the most common sequelae of meningococcal infection in children:
A. Hydrocephaly
B. Epileptiform seizures
C. Intracranial hypertension
D. Psychomotor retardation
E. Paresis, spastic paralysis

3. Indicate the suspect clinical sign for meningitis in infants:
A. Fever
B. Repeated vomiting
C. Neck stiffness
D. Refusing feed
E. Diarrhea

4. Indicate the investigation that confirms the etiological diagnosis of generalized meningococcal infection:
A. Cultures of CSF
B. urine culture
C. Nasopharyngeal cultures
D. CBC
E. General analysis of cerebrospinal fluid

5. Indicate the initial location of the rash in meningococcal infection:
A. Thorax
B. Face
C. Buttocks and legs
D. Oral mucosa
E. Sclera

6. Select the characteristic rash for meningococcemia:
A. Hemorrhagic, star like rash
B. Vesicles
C. Crusts
D. Confluent macules and papules
E. Roseola

7. Indicate the difference between meningococcal rhinopharyngitis and viral rhinopharyngitis in children:
A. Fever
B. Nasal obstruction
C. Cough
D. Leukocytosis
E. Leukopenia

8. Specify what confirms the diagnosis of meningococcal rhinopharyngitis in children:
- A. Clinical signs
 - B. Changes in blood count
 - C. Isolation of meningococcal bacteria in rhinopharynx
 - D. Analysis of cerebrospinal fluid
 - E. Rhinoscopy
9. Specify which drugs will usually include pre-hospital emergency care in meningococcal infection with toxic-infectious shock in children
- A. Antipyretics
 - B. Anticonvulsants
 - C. Corticosteroids
 - D. Diuretics
 - E. I/V infusions
10. Indicate the frequent clinical form of meningococcal infection in young children:
- A. Meningitis, meningoencephalitis
 - B. Meningococcemia
 - C. Meningitis and meningococcemia
 - D. Polyradiculoneuropathy
 - E. Pneumonia
11. Specify based on which data the diagnosis of meningococcal meningitis in infants can be confirmed:
- A. Presence of positive meningeal signs
 - B. Bulging fontanella
 - C. Positive Lesage Symptom
 - D. Analysis of cerebrospinal fluid
 - E. Analysis of the cerebrospinal fluid and the isolation of *Neisseria meningitidis* from the cerebrospinal fluid
12. Specify what bacterioscopically represents meningococcus:
- A. Gram-positive diplococcus with extracellular location
 - B. Gram-negative diplococcus situated intra- and extracellular
 - C. Encapsulated gram-positive diplococcus
 - D. Gram-negative bacillus
 - E. Gram-positive bacillus
13. Indicate the recommended antibiotic in meningococcal infection with toxic-infectious shock in children at pre-hospital stage:
- A. Ceftazidime
 - B. Chloramphenicol
 - C. Amoxicillin
 - D. Ofloxacin
 - E. Tobramycin
14. Indicate the most common heart disorder in meningococcal infection in children:
- A. Prolapse of the mitral valve
 - B. Myocarditis
 - C. Endocarditis
 - D. Pericarditis
 - E. Conductivity disorders

15. Indicate the age when meningococcal infection occurs most frequently:

- A. Infants
- B. Newborns
- C. Toddlers (1-3 years)
- D. Adolescents (14-18 years)
- E. Small schoolchildren (7 / 8-10 / 11 years)

16. Specify the type of inflammation of the meninges in meningococcal meningitis in infants:

- A. Erythematous
- B. Fibrinous
- C. Purulent
- D. Croupous
- E. Ulceronecrotic

17. Choose the most representative meningian sign in meningococcal meningitis in infants

- A. Kernig
- B. Brudzinski
- C. Lesage
- D. Neck stiffness
- E. Babinski

18. Note the clinical syndrome present in children with meningococcal infection due to which they **CAN NOT** be transported:

- A. Toxic shock syndrome, I degree
- B. Acute cerebral edema, II, III degree
- C. Meningococcemia
- D. Meningitis and meningococcemia
- E. Meningococcemia and arthropathy

19. Indicate the affection recorded in the meningococcal infection in infants, unlike older children and adults, who require urgent assistance:

- A. Acute cerebral edema
- B. Ventricular collapse (acute cerebral hypotension)
- C. Toxic-infectious shock
- D. Cardiorespiratory insufficiency
- E. Acute renal failure

20. Specify after which meningitis in children occurs sensory deafness:

- A. H. influenza
- B. With Pneumococcus
- C. With Staphylococcus
- D. With Meningococcus
- E. With Gram-negative bacillus

21. Select the investigation to be performed in case of suspected meningitis in children:

- A. EEG
- B. Computed tomography (CT)
- C. Lumbar Puncture
- D. Cranial X-ray
- E. Electrocardiogram

Multiple choice

1. Indicate the clinical features of meningococcal infection in infants:
 - A. The acute onset with agitation, fever and repeated vomiting
 - B. Frequent pneumonia
 - C. Dissociated meningeal signs
 - D. Bulging anterior fontanelle
 - E. Lesage positive sign

2. Select generalized clinical forms of meningococcal infection in children:
 - A. Septicopyemia
 - B. Meningitis
 - C. Meningococcemia
 - D. Pneumonia
 - E. Meningitis and meningococcemia

3. Select complications of meningococcal infection in children:
 - A. Acute cerebral edema
 - B. Suppurate lymphadenopathy
 - C. Toxic-infectious shock
 - D. Peritonsillitis
 - E. Acute renal failure

4. Choose the cases where the meningeal position in meningococcal meningitis occurs most frequently:
 - A. In infants
 - B. In older children
 - C. 1st -2nd day of the disease
 - D. In case of delayed antibiotic therapy
 - E. In the presence of encephalitis

5. Mark the cases in which the meningococcal infection in infants will evolve unfavorably
 - A. Fulminant form of the disease
 - B. Acute cerebral edema
 - C. Pneumonia
 - D. Meningoencephalitis
 - E. Nasopharyngitis

6. Choose diseases for meningococcemia differentiation:
 - A. Measles
 - B. Rubella
 - C. Septicemia
 - D. Chickenpox
 - E. Herpes zoster

7. Indicate the clinical forms of meningococcemia in children:
 - A. Moderate
 - B. Severe
 - C. Fulminant
 - D. Chronic and recurrent
 - E. Persistent

8. Specify the skin rash at the onset of meningococcemia in infants:

- A. Macules
- B. Papules
- C. Vesicles
- D. Roseola
- E. Petechiae

9. Indicate medications to combat acute cerebral edema in meningococcal infection in children:

- A. Corticosteroids
- B. Antibiotics
- C. Diuretics
- D. Antivirals
- E. Anti-parasite drugs

10. Mark the suspected clinical signs of meningitis in infants:

- A. Absence of fever
- B. Vomiting and liquid stools without pathological adding
- C. Psychomotor agitation
- D. Encephalic scream
- E. Refusing feeds

11. Specify the character of eruption in meningococcal infection in young children:

- A. Macules
- B. Roseola
- C. Vesicles
- D. Hemorrhagic rash with central necrosis
- E. Pustules

12. Choose complications that are possible in young children with meningococcal meningitis (meningoencephalitis) treated late:

- A. Hydrocephaly
- B. Pyocephalus
- C. Paresis, paralysis
- D. Pyelonephritis
- E. Pyoderma

13. Choose the type of rash that occurs in meningococcal infection in infants:

- A. Macules
- B. Papules
- C. Pustules
- D. Punctiform roseola on the hyperemic background of the skin
- E. Hemorrhagic rash with central necrosis

14. Select suspicious signs of meningitis in newborns:

- A. Seizures
- B. Eye capping
- C. Muscular hypertonia
- D. Hepatosplenomegaly
- E. Bulging of anterior fontanelle

15. Determine the microscopic features of meningococcus, unlike pneumococcus:

- A. Gram-negative
- B. Gram-positive

C. Situated intra-and extracellular

D. Non-capsulate

E. Capsulate

16. Select the antibiotics to which *Neisseria meningitidis* is sensitive:

A. Penicillin

B. Tetracycline

C. Erythromycin

D. Chloramphenicol

E. Ceftriaxone

17. Specify situations where the child is not allowed to be transported to the hospital with generalized meningococcal infection without being given urgent assistance at the pre-hospital stage:

A. Acute cerebral edema

B. Seizures

C. Toxic-infectious shock

D. Meningitis

E. Meningococcemia

18. Mark the signs that occur in the onset of generalized meningococcal infection in infants:

A. Fever

B. Respiratory catarrh

C. Repeated vomiting, diarrhea

D. Positive meningeal signs

E. Constipation

19. Mark possible associations of meningococcal meningitis in young children:

A. Encephalitis

B. Ependimatitis

C. Pyelonephritis

D. Meningococcemia

E. Otitis

20. Mark the rash types that are **NOT** characteristic of meningococcemia in children:

A. Hemorrhagic rash

B. Petechiae

C. Erythema nodosum

D. Vesicles

E. Pustules

21. Specify the particularities of rash in meningococcemia in children:

A. Confluent Macules and papules

B. Punctiform roseola on the hyperemic background of the skin

C. Hemorrhagic star-like eruptions with central necrosis

D. Situated on the legs and thighs

E. Hemorrhagic without central necrosis

22. Specify how and when rash occurs in meningococcal infection in children:

A. Simultaneously

B. In stages (during 3 days)

C. On the 1st -2nd days of the disease

D. On the 4th day

E. In severe forms it spreads rapidly on skin and mucosa

23. Indicate meningococcal nervous system disorders in young children:

- A. Meningitis
- B. Subarachnoid hemorrhage
- C. Meningoencephalitis
- D. Ependymitis
- E. Ischemic cerebral stroke

24. Select pathogenic factors in meningococcal infection in children:

- A. Infectious
- B. Autoimmune
- C. Toxic
- D. Allergic
- E. Hereditary

25. Name rare clinical forms as separate forms of meningococcal infection in children:

- A. Tonsillitis
- B. Endo-, myo- and pericarditis
- C. Iridocyclitis, iridocyclochorioiditis
- D. Mono-, polyarthritis
- E. Laryngotracheitis

26. Select meningeal signs that usually occur in meningitis in infants:

- A. Kernig
- B. Brudzinski
- C. Lesage
- D. Neck stiffness
- E. Head in retroflexion

27. Indicate the clinical signs that mark the presence of III-degree toxic-infectious shock in meningococcal infection in children:

- A. Fever
- B. Consciousness disorders
- C. Hepatic coma
- D. Hypotonia, absence of pulse
- E. Anuria

28. Indicate factors that will increase the permeability of hematoencephalic barrier:

- A. Low temperature
- B. Craniocerebral trauma
- C. Radiation
- D. Chemical toxins
- E. Antibiotics

29. Specify the appearance of CSF in acute bacterial meningitis in children:

- A. Xanthochromic
- B. Purulent
- C. Clear
- D. Opalescent
- E. Hypertensive

30. Select diseases for differential diagnosis of acute bacterial meningitis in young children:

- A. Shigellosis
- B. ARVI with neurotoxic syndrome
- C. Infectious mononucleosis
- D. Enteroviral meningitis
- E. Craniocerebral trauma

31. Mark the signs that occur in the onset of meningitis in infants:

- A. General intoxication
- B. Digestive
- C. Hoarse voice
- D. Catarrhal signs
- E. Lymphadenopathy