

Congenital heart diseases
Single Choice

1. **CS.** Select the most frequent congenital heart disease found in premature new-borns:
 - A. Atrial septal defect
 - B. Ventricular septal defect
 - C. Patent ductus arteriosus
 - D. Coarctation of the aorta
 - E. Tetralogy of Fallot

2. **CS.** Specify which of congenital heart disease don't evolve with left-right shunt:
 - A. Ventricular septal defect
 - B. Atrial septal defect
 - C. Tetralogy of Fallot
 - D. Atrioventricular septal defect
 - E. Patent ductus arteriosus

3. **CS.** Specify congenital heart disease with decreased pulmonary flow:
 - A. Atrial septal defect
 - B. Tetralogy of Fallot
 - C. Ventricular septal defect
 - D. Atrioventricular septal defect
 - E. Aortopulmonary window

4. **CS.** Classification of ventricular septal defects does not include the following type:
 - A. Infundibular
 - B. Muscular
 - C. Infantile
 - D. Atrioventricular (subaortal) septal defect
 - E. Perimembranous

5. **CS.** Select the optimal age for surgical closing of large ventricular septal defect:
 - A. Until 5 years
 - B. Until 1 year
 - C. 3 years
 - D. 15 years
 - E. After 5 years

6. **CS.** In ductus dependent congenital heart disease, the maintaining of open arterial channel is performing through the administration of:
 - A. Indometacin
 - B. Prostaglandin E
 - C. Immunoglobulin
 - D. Ibuprofen
 - E. Oxygen therapy

7. **CS.** The frequent clinical signs of chronic hypoxia in Tetralogy of Fallot are the follows, except:
 - A. Digital hyppocratism
 - B. Polyglobulia
 - C. Cerebral abscess
 - D. Leucocytosis

E. Hypoxic accesses

8. **CS.** Select the major surgical indication for correction in aortic stenosis in children:

- A. Appearance of clinical manifestations
- B. The value of transvalvular pressure gradient more than 70 mm Hg
- C. Right ventricle hypertrophy
- D. Considerable poststenotic dilation
- E. Diastolic murmur

9. **CS.** Specify which is golden standard in diagnosis of congenital heart disease:

- A. Electrocardiography
- B. Cardiopulmonary radiography
- C. Bidimensional Doppler echocardiography
- D. X-ray computed tomography
- E. Coronarography

10. **CS.** Mark the obligatory postoperative procedure in children with syntetic prosthesis:

- A. Prophylaxis of infectious endocarditis during all life
- B. Anticoagulant treatment under the coagulation control one time per month
- C. Cardiac catheterism one time in 6 months
- D. Control of coagulation one time in 2 weeks during all life
- E. Obligatory hemoculture one time in 3 months

11. **CS.** Specify which of following drugs has fastest diuretic action:

- A. Hypothiazide
- B. Furosemide
- C. Acetazolamide (diacarb)
- D. Spironolactone (verospiron)
- E. Triampur

12. **CS.** Select the unspecific clinical sign for acute heart failure:

- A. Pale skin
- B. Thready pulse
- C. Lower blood pressure
- D. Skin redness
- E. Dyspnea

13. **CS.** Select the drug which will not induce the orthostatic collapse:

- A. Nifedipine
- B. Atenolol
- C. Anaprilin
- D. Prednisolone
- E. Izoptin

14. **CS.** Specify which of following drugs is not recommended in acute heart failure:

- A. Dopamine
- B. Prednisolone
- C. Mesatone
- D. Dobutamine
- E. Adrenaline

15. **CS.** Select the drug that is not recommended in the emergency therapy in crises Adams Morgan Stokes in the third degree AV block:
- A. Digoxin
 - B. Dopamine
 - C. Dobutamine
 - D. Adrenaline
 - E. Atropine
16. **CS.** Select the drug that is not recommended at the child with Tetralogy of Fallot in the "tet spells":
- A. Digoxin
 - B. Oxygen
 - C. Propranolol
 - D. Diazepam
 - E. Infusion therapy
17. **CS.** Select unspecifically clinical sings for a 6 months old child with large ventricular septal defect:
- A. Dyspnoea
 - B. Malnutrition
 - C. Tachycardia
 - D. Emphasis II sound of pulmonary artery
 - E. Seizures
18. **CS.** Specify when can occur organic murmurs:
- A. Tetralogy of Fallot
 - B. Minor heart abnormalities
 - C. Transposition of great vessels
 - D. Ventricular septal defect
 - E. Coarctation of the aorta
19. **CS.** Appreciate what method of treatment is absolute indication in coarctation of the aorta:
- A. Surgical aortoplasty
 - B. β -blocker
 - C. Angiotensin converting enzyme inhibitors
 - D. Limitation of exercise
 - E. Aldosterone receptor antagonists
20. **CS.** Mark the first choice investigation to detect congenital heart malformations:
- A. Electrocardiography
 - B. Echocardiography
 - C. Computed tomography of the heart
 - D. Magnetic resonance examination of the cardiovascular system
 - E. X ray chest

Multiple choices

1. **MC.** Select the anatomic anomalies on Tetralogy of Fallot:
- A. Ventricular septal defect
 - B. Pulmonary stenosis
 - C. Atrial septal defect
 - D. Right ventricle hypertrophy

E. Dextraposition of aorta

2. **MC.** Specify characteristic clinical signs in large ventricular septal defect:

- A. Dyspnea
- B. Difficulties of alimentation
- C. Diastolic murmur
- D. Malnutrition
- E. Recurrent respiratory infections

3. **MC.** Select the vascular malformations:

- A. Ebstein anomaly
- B. Coarctation of the aorta
- C. Anomalies of coronarian arteries
- D. Anomaly of aortic arch
- E. Unique ventricle

4. **MC.** Specify hemodynamic factors responsible for the natural history of ventricular septal defect:

- A. Dimensions of defect
- B. Direction of interventricular shunt
- C. Localization of defect
- D. Pressure in pulmonary artery
- E. Thickness of left ventricle wall

5. **MC.** Select echocardiographic criteria in complete atrioventricular channel:

- A. Ostium primum atrial septal defect
- B. Ventricular septal defect high located
- C. Pulmonary artery stenosis
- D. Unique atrioventricular valve
- E. Muscular ventricular septal defect

6. **MC.** Select cyanotic congenital heart disease:

- A. Unique ventricle
- B. Common arterial trunk
- C. Transposition of great vessels
- D. Ventricular septal defect
- E. Patent ductus arteriosus

7. **MC.** Select clinical signs in coarctation of aorta by postductal (adult) type:

- A. Arterial pressure on inferior members less than on superior members
- B. Diffuse cyanosis
- C. Systemic arterial hypertension
- D. Diminished pulse on inferior members
- E. Blood pressure on inferior members more than on superior members

8. **MC.** Specify cyanotic congenital heart disease with hypervascularization in pulmonary circulation:

- A. Tetralogy of Fallot
- B. Complete transposition of great vessels (D-transposition)
- C. Atrial septal defect
- D. Total anomaly of pulmonary venous return
- E. Patent ductus arteriosus

9. **MC.** Select postsurgical complications in congenital heart disease with left-right shunt:

- A. Disorders of cardiac rhythm and conductivity
- B. Frequent respiratory infections
- C. Residual shunts
- D. Bacterial endocarditis
- E. Intestinal hemorrhages

10. **MC.** Specify clinical signs on small atrial septal defect:

- A. Continuous murmur on aorta
- B. Asymptomatic
- C. Discrete systolic murmur with auscultative maximum at basis of heart
- D. Splitting of II sound
- E. Dyspnea on effort

11. **MC.** Specify typical radiological signs of diminished pulmonary vascularity (bright lung fields):

- A. Pulmonary stenosis
- B. Tetralogy of Fallot
- C. Pulmonary embolism
- D. Eisenmenger syndrome
- E. Large ventricular septal defect with chronic heart failure

12. **MC.** Select in which disease is detected changes of P-wave (P pulmonale "right heart"):

- A. P sharp, with high amplitude in II, III, aVF in pulmonary stenosis
- B. Severe pulmonary hypertension
- C. Ebstein's anomaly
- D. Mitral insufficiency
- E. Large ventricular septal defect

13. **MC.** Specify in which cases is revealed radiological signs of increased heart left:

- A. Dilated left ventricle on myocarditis
- B. Dilated cardiomyopathy
- C. Mitral insufficiency
- D. Heart failure
- E. Tetralogy of Fallot

14. **MC.** Specify diseases producing syncopal states:

- A. II-III degree of atrioventricular blocks
- B. Coarctation of aorta
- C. Hypertrophic cardiomyopathy
- D. Small atrial septal defect
- E. Patent foramen ovale

15. **MC.** Specify clinical signs on syncope:

- A. Marked decrease of heart rate
- B. Absence of pulse
- C. Marked slowing down until stopping of breathing
- D. Collapse of blood pressure
- E. Presence of pulse

16. **MC.** Select characteristics of chest pain with cardiac substrate:

- A. Coronary insufficiency
- B. Severe aortic stenosis
- C. Coarctation of aorta
- D. Pulmonary hypertension
- E. Minor heart abnormalities

17. **MC.** Appreciate that invasive tests apply in some cases for diagnosis of congenital heart diseases:

- A. Coronary angiography
- B. Ventriculography
- C. Endomyocardial biopsy
- D. Pericardiocentesis
- E. Echocardiography

18. **MC.** Select congenital heart malformations with asymptomatic evolution:

- A. Small ventricular septal defect (<5 mm)
- B. Small atrial septal defect
- C. Aortic stenosis range
- D. Large pulmonary artery stenosis
- E. Large ventricular septal defect

19. **MC.** Specify congenital heart malformations with severe evolution:

- A. Cyanotic anomalies
- B. Large atrial septal defect
- C. Large ventricular septal defect
- D. Critical coarctation of aorta
- E. Patent foramen ovale (2-3 mm)

20. **MC.** Select pale congenital heart malformations:

- A. Atrial septal defect
- B. Transposition of great vessels
- C. Total anomalous venous drainage
- D. Coarctation of the aorta
- E. Ventricular septal defect

21. **MC.** Select cyanotic congenital heart malformations:

- A. Ebstein anomaly
- B. Double outlet right ventricle
- C. Total anomalous venous drainage
- D. Aortic stenosis
- E. Pulmonary artery stenosis

22. **MC.** Specify anomalies of tract outlet left ventricle:

- A. Valvular aortic stenosis
- B. Supravalvular aortic stenosis
- C. Isolated pulmonary valvular stenosis
- D. Stenosis of pulmonary artery branches
- E. Coarctation of the aorta

23. **MC.** Specify anomalies of tract outlet right ventricle:

- A. Isolated pulmonary valvular stenosis
- B. Stenosis of pulmonary artery branches

- C. Atresia pulmonary artery
- D. Tetralogy of Fallot
- E. Ebstein anomaly

24. **MC.** List atrioventricular valve abnormalities:

- A. Congenital mitral stenosis
- B. Atresia tricuspid valve
- C. Ebstein anomaly
- D. Anomalous origin of great vessels
- E. Atrial septal defect

25. **MC.** Specify what laboratory investigations are recommended in pulmonary artery stenosis:

- A. Cardiopulmonary X-ray
- B. Doppler echocardiography
- C. Cardiac catheterization
- D. Angiography
- E. Treadmill

26. **MC.** Specify anatomical forms of congenital aortic stenosis:

- A. Valvular aortic stenosis
- B. Supraaortic stenosis
- C. Subaortic aortic stenosis
- D. Unicuspid aortic valve
- E. Tricuspid aortic valve

27. **MC.** Specify cardiac malformations with right-left shunt:

- A. Atrial septal defect
- B. Ventricular septal defect
- C. Aorto-pulmonary septal defect
- D. Permeable ductus arteriosus
- E. Ebstein anomaly

28. **MC.** Specify complex congenital heart malformations:

- A. Complete transposition of great vessels
- B. Total pulmonary venous drainage
- C. Malpositions heart and visceral site
- D. Anomaly pulmonary venous return
- E. Ventricular septal defect

29. **MC.** List anatomical type of atrial septal defect by anatomic location of the defect:

- A. Secundum atrial septal defect
- B. Ostium primum atrial septal defect
- C. Sinus venosus atrial defect septal
- D. Coronary sinus atrial defect septal
- E. Dehiscence of the anterior leaflet of the mitral valve

30. **MC.** The differential diagnosis of permeable ductus arteriosus is performing with following diseases:

- A Total anomalous pulmonary venous drainage
- B. Rupture of sinus Valsalva
- C. Peripheral pulmonary stenosis
- D. Aorto-pulmonary window

E. Atrial septal defect

31. **MC.** Specify pathophysiological mechanisms in Tetralogy of Fallot:

- A. Right-left flow in relation with degree of stenosis
- B. Systemic vascular resistance
- C. Size of ventricular septal defect
- D. Aortic position
- E. Additional left ventricular trabeculae

32. **MC.** Specify cardiopulmonary X-ray changes in Tetralogy of Fallot:

- A. Normal or slightly increased heart
- B. "Heart in sabot"
- C. Decreased pulmonary vascularity
- D. Pulmonary hypervascularisation
- E. Spherical form of the heart

33. **MC.** Select postoperative complications in Tetralogy of Fallot:

- A. Embolism
- B. Endocarditis
- C. Obstructive pulmonary vascular disease
- D. Right-left shunt
- E. Crisis hypoxic

34. **MC.** Specify etiopathogenic factors in Ebstein's anomaly:

- A. Insufficiency of the tricuspid valve with increased pressure in the right ventricle
- B. Shunt left-right in atrial septal defect or patent foramen ovale
- C. Reducing right ventricular function and pulmonary flow
- D. Arrhythmias
- E. Left-right shunt

35. **MC.** Specify the natural progression and prognosis for common atrioventricular canal:

- A. Favorable
- B. Unfavorable
- C. Depends on left-right shunt
- D. Depends on the level of pulmonary vascular resistance
- E. Depends on atrioventricular valve insufficiency

36. **MC.** Select pathological types of total anomalous pulmonary venous return:

- A. Supracardiac
- B. Cardiac
- C. Infracardiac
- D. Mixed
- E. Supradiaphragmatic

37. **MC.** Select paraclinical investigations recommended in total anomalous venous return in children:

- A. Cardiopulmonary X-ray
- B. 2D Doppler echocardiography
- C. Cardiac catheterization and selective angiography
- D. Electrocardiography
- E. Magnetic resonance imaging of cardiovascular system

38. **MC.** Appreciate histological types of aorto-pulmonary window:
- O. Circular communication between the ascending aorta and pulmonary artery
 - B. Oval communication between the ascending aorta and pulmonary artery located at the bifurcation of the pulmonary artery
 - C. Communication between the ascending aorta and pulmonary artery when the origin of right pulmonary artery is from posterior lateral ascending aorta
 - D. Septal anomaly when the common arterial trunk is not divides
 - E. Abnormality of the mitral valve
39. **MC.** Select groups of drugs used for the treatment of pale congenital heart malformations complicated with congestive heart failure:
- A. Angiotensin converting enzyme inhibitors
 - B. Aldosterone receptor inhibitors
 - C. Diuretics
 - D. Glycosides
 - E. Opioids
40. **MC.** Select which of drugs are contraindicated for the treatment of cyanotic congenital heart malformations:
- A. Glycosides
 - B. Angiotensin converting enzyme inhibitors
 - C. Diuretics
 - D. Calcium antagonists
 - E. Nitrates

Congenital heart diseases
Single Choice

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

Multiple choices

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