**Congenital heart diseases**

**Single Choice**

1. **CS.** Choose the most frequent congenital heart disease found in premature new-borns:

A. Atrioventricular septal defect

B. Ventricular septal defect

C. Patent ductus arteriosus

D. Coarctation of the aorta

E. Tetralogy of Fallot

2. **CS.** Which of the following congenital heart diseases does not develop in left-to-right shunt?

A. Ventricular septal defect

B. Atrial septal defect

C. Tetralogy of Fallot

D. Atrioventricular septal defect

E. Patent ductus arteriosus

3. **CS.** Congenital heart disease with decreased pulmonary flow is:

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.** The optimal age for surgical closing of large ventricular septal defect is:

A. The age of 5 years

B. The age of 1 year

C. 3 years old

D. 15 years old

E. After the age of 5 years

6. **CS.** In ductus dependent congenital heart disease, the maintenance of open arterial channel is performed by the administration of:

A. Indometacin

B. Prostaglandin E

C. Immunoglobulin

D. Ibuprofen

E. Oxygen therapy

7. **CS.** In Tetralogy of Fallot the common clinical signs of chronic hypoxia are the following, except:

A. Digital hyppocratism

B. Polyglobulia

C. Cerebral abscess

D. Leukocytosis

E. Hypoxic accesses

8. **CS.** The major surgical indication for correction of aortic stenosis in children is:

A. Appearance of clinical manifestations

B. The value of transvalvular pressure gradient over 70 mm Hg

C. Right ventricle hypertrophy

D. Considerable poststenotic dilation

E. Diastolic murmur

9. **CS.** In the diagnosis of congenital heart disease the gold standard test is:

A. Electrocardiography

B. Cardiopulmonary radiography

C. Bidimensional Doppler echocardiography

D. X-ray computed tomography

E. Coronarography

10. **CS.** In children with syntetic prosthesis the obligatory postoperative procedure is:

A. Prophylaxis of infectious endocarditis throughout life

B. Anticoagulant treatment under the coagulation control once a month

C. Cardiac catheterism every 6 months

D. Control of coagulation once in 2 weeks throughout life

E. Obligatory hemoculture once in 3 months

11. **CS.** Which of the following drugs has the fastest diuretic action:

 A. Hypothiazide

B. Furosemide

 C. Acetazolamide (diacarb)

D. Spironolactone (verospiron)

E. Triampur

12. **CS.** Choose 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.** The drug which does not induce orthostatic collapse is:

A. Nifedipine

B. Atenolol

C. Anaprilin

D. Prednisolone

E. Izoptin

14. **CS.** Which of the following drugs is not recommended in acute heart failure:

A. Dopamine

B. Prednisolone

C. Mesatone

D. Dobutamine

E. Adrenaline

15. **CS.** Choose the drug that is not recommended in the emergency therapy in Adams Morgan Stokes crises in III degree AV block:

A. Digoxin

B. Dopamine

C. Dobutamine

D. Adrenaline

E. Atropine

16. **CS.** Choose the drug that is not recommended for children with Tetralogy of Fallot and "tet spells":

A. Digoxin

B. Oxygen

C. Propranolol

D. Diazepam

E. Infusion therapy

17. **CS.** Choose the clinical sing that is nonspecific for a six-month-old child with large ventricular septal defect:

A. Dyspnoea

B. Malnutrition

C. Tachycardia

D. Emphasis II sound of pulmonary artery

E. Seizures

18. **CS.** Organic murmurs can occur in, except:

A. Tetralogy of Fallot

B. Minor heart abnormalities

C. Transposition of great vessels

D. Ventricular septal defect

E. Coarctation of the aorta

19. **CS.** What is indicated after surgical/interventional treatment for coarctation of the aorta (adult tip):

A. Surgical aortoplasty

B. β-blocker

C. Angiotensin converting enzyme inhibitors

D. Limitation of exercise

E. Aldosterone receptor antagonists

20. **CS.** Choose 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. Chest X ray

**Multiple choice**

1. **MC.** Choose anatomic anomalies in Tetralogy of Fallot:

A. Ventricular septal defect

B. Pulmonary stenosis

C. Atrial septal defect

D. Right ventricle hypertrophy

E. Dextrapozition of aorta

2. **MC.** Characteristic clinical signs of large ventricular septal defect:

A. Dyspnea

B. Difficulties of alimentation

C. Diastolic murmur

D. Malnutrition

E. Recurrent respiratory infections

3. **MC.**  Vascular malformations are:

A. Ebstein anomaly

B. Coarctaion of the aorta

C. Anomalies of coronarian arteries

D. Anomaly of aortic arch

E. Unique ventricle

4. **MC.**  Hemodynamic factors responsible for the natural history of ventricular septal defect are:

A. Dimensions of defect

B. Direction of interventricular shunt

C. Localization of defect

D. Pressure in pulmonary artery

E. Thickness of the left ventricle wall

5. **MC.**  Echocardiographic criteria of complete atrioventricular channel are:

A. Ostium primum atrial septal defect

B. Ventricular septal defect located high

C. Pulmonary artery stenosis

D. Unique atrioventricular valve

E. Muscular ventricular septal defect

6. **MC.** Choose cyanotic congenital heart diseases:

A. Unique ventricle

B. Common arterial trunk

C. Transposition of great vessels

D. Ventricular septal defect

E. Patent ductus arteriosus

7. **MC.** Postductal (adult) type coarctation of aorta is characterized by the following clinical signs:

A. Lower extremity arterial pressure is lower that the upper extremity

B. Diffuse cyanosis

C. Systemic arterial hypertension

D. Diminished pulse on lower extremity

E. Lower extremity blood pressure is higher than that of the upper extremity

8. **MC.**  Cyanotic congenital heart disease with hypervascularization in pulmonary circulation are:

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.**  In congenital heart disease with left-to -right shunt postsurgical complications are:

A. Disorders of cardiac rhythm and conductibility

B. Frequent respiratory infections

C. Residual shunts

D. Bacterial endocarditis

E. Intestinal hemorrhages

10. **MC.**  Clinical sings of small atrial septal defect are:

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.**  Typical radiological signs of diminished pulmonary vascularity (bright lung fields) are:

A. Pulmonary stenosis

B. Tetralogy of Fallot

C. Pulmonary embolism

D. Eisenmenger syndrome

E. Large ventricular septal defect with chronic heart failure

12. **MC.** Changes of P-wave (P pulmonale”right-heart”) are detected in:

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.** Radiological signs of increased left heart are revealed in case of:

A. Dilated left ventricle on myocarditis

B. Dilated cardiomyopathy

C. Mitral insufficiency

D. Heart failure

E. Tetralogy of Fallot

14. **MC.**  Diseases producing syncopal states are:

 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.** Clinical sings of syncope are:

 A. Marked decrease of heart rate

 B. Absence of pulse

 C. Marked bradypnea until apnea

 D. Collapse of blood presure

 E. Presence of pulse

16. **MC.** 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.**Whichof the following tests are applied in the diagnosis of congenital heart diseases:

A. Coronary angiography

B. Ventriculography

C. Endomyocardial biopsy

D. Pericardiocentisis

E. Echocardiography

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

A. Small ventricular septal defect (<5 mm)

B. Small atrial septal defect

C. Large aortic stenosis

D. Large pulmonary artery stenosis

E. Large ventricular septal defect

19. **MC.** Congenital heart malformations with severe evolution are:

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. Pale**  congenital heart malformations are:

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.**  Cyanotic congenital heart malformations are:

A. Ebstein anomaly

B. Double outlet right ventricle

C. Total anomalous venous drainage

D. Aortic stenosis

E. Pulmonary artery stenosis

22. **MC.**  Anomalies of tract outlet left ventricle tract are:

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.**  Anomalies of tract outlet right ventricle are:

A. Isolated pulmonary valvular stenosis

B. Stenosis of pulmonary artery branches

C. Atresia pulmonary artery

D. Tetralogy of Fallot

E. Ebstein anomaly

24. **MC.**  Atrioventricular valve abnormalities are:

A. Congenital mitral stenosis

B. Atresia tricuspid valve

C. Ebstein anomaly

D. Anomalous origin of great vessels

E. Atrial septal defect

25. **MC.**  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.**  Anatomical forms of congenital aortic stenosis are:

A. Valvular aortic stenosis

B. Supravalvular aortic stenosis

C. Subaortic aortic stenosis

D. Unicuspid aortic valve

E. Tricuspid aortic valve

27. **MC.**  Cardiac malformations with left-to-right shunt are:

A. Atrial septal defect

B. Ventricular septal defect

C. Aortopulmonary septal defect

D. Permeable ductus arteriosus

E. Ebstein anomaly

28. **MC.** Identify 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

29. **MC.** Specify pathophysiological mechanisms of Tetralogy of Fallot:

A. Right-left flow in relation with the degree of stenosis

B. Systemic vascular resistance

C. Size of ventricular septal defect

D. Aortic position

E. Additional left ventricular trabeculae

30. **MC.**  Cardiopulmonary X-ray changes in Tetralogy of Fallot are:

A. Normal or slightly increased heart

B. Sabot heart

C. Decreased pulmonary vascularity

D. Pulmonary hypervascularisation

E. Spherical form of the heart

31. **MC.**  The natural progression and prognosis for common atrioventricular canal are:

A. Favorable

B. Unfavorable

C. They depend on left-right shunt

D. They depend on the level of pulmonary vascular resistance

E. They depend on atrioventricular valve insufficiency

32. **MC.**  Pathological types of total anomalous pulmonary venous return are:

A. Supracardiac

B. Cardiac

C. Infracardiac

D. Mixed

E. Supradiaphragmatic

33. **MC.**  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

**Congenital heart diseases**

**Simple 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 choice**

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,E
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
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
31. B,C,D,E
32. A,B,C
33. A,B,C