

## Cardiovascular Risk Factors

1. About 83% of the population affected by coronary heart disease are aged over:
  - A. 45 years
  - B. 35 years
  - C. 65 years
  - D. 85 years
  - E. 70 years
  
2. Which of the following is the correct definition for body mass index:
  - A. circumference measured at the umbilicus and halfway between costal margin and iliac crest
  - B. The ratio of weight (in kg) and squared height (m) (g / h squared)
  - C. Report of the 2 circumference reflects the type of obesity
  - D. It is more common in populations with low socioeconomic level
  - E. Report of 3 circumferences reflects the type of obesity
  
3. The obesity paradox is defined as:
  - A. Represents a growing problem in the developed world
  - B. Is a major risk factor for atherosclerotic disease
  - C. A better short or long-term prognosis for overweight or obese patients
  - D. Is a minor risk factor for atherosclerotic disease
  - E. An unfavorable short or long-term prognosis for overweight or obese patients
  
4. The Framingham score is calculated:
  - A. Basis of equations that take into account gender, age, total cholesterol, HDL cholesterol, smoking status and systolic, assigning a number of points depending on the presence and magnitude of each factor.
  - B. are taken into account deaths from non-coronary atherosclerosis territories (AVC)
  - C. The mean ages adapted to the changing risk with age is steeper
  - D. Related to cardiovascular mortality and not total cardiovascular events
  - E. It is available in two versions, one for low-risk regions (Belgium, France, Greece, Italy, Luxembourg, Spain, Switzerland and Portugal) and another for those at high risk, where falling and our country, together with other countries European were not mentioned in the previous list.
  
5. Which of the following is the correct definition for abdominal circumference:
  - A. circumference measured at the umbilicus and halfway between costal margin and iliac crest
  - B. The ratio of weight (in kg) and squared height (m) (g / h squared)
  - C. Report of the 2 circumferences reflects the type of obesity
  - D. It is more common in populations with low socioeconomic level
  - E. Report of 3 circumferences reflects the type of obesity
  
6. Which of the following is the correct definition for hip circumference ratio in waist circumference (waist to hip ratio, WHR)
  - A. circumference measured at the umbilicus and halfway between costal margin and iliac crest
  - B. The ratio of weight (in kg) and squared height (m) (g / h squared)
  - C. Report of the 2 circumferences reflects the type of obesity
  - D. It is more common in populations with low socioeconomic level
  - E. Report of 3 circumferences reflects the type of obesity

7. Which of the following is the correct definition for hyperhomocysteinaemia:
- A. In vitro and in vivo studies that have shown to promote atherogenesis and thrombogenesis, representing a moderately independent favorable cardiovascular risk factor.
  - B. Relatively common in the population with genetic defects leading to procoagulant potential are known as thrombophilia.
  - C. Remains the main cause of genetic hyperhomocysteinaemia. The main changes are encountered in the population type MTHFR C677T gene mutation A1298C respectively.
  - D. hyperhomocysteinaemia cause is not known.
  - E. Remains the main cause of genetic hyperhomocysteinaemia. The main changes are encountered in the population of type C123 MTR gene mutations.
8. What are the cardiovascular risk factors listed below:
- A. Major
  - B. Minors
  - C. Classics
  - D. Modifiable
  - E. Unmodifiable
9. List the cardiovascular risk factors that are considered modifiable:
- A. Obesity
  - B. Age
  - C. High blood pressure
  - D. Sex
  - E. Smoking
10. Major risk factors were defined by WHO through:
- A. High prevalence in the population
  - B. Low prevalence in the population
  - C. Independent impact on the risk of coronary heart disease or stroke
  - D. Treatment or control lowers the risk
  - E. Treatment or control risk-accelerating
11. List cardiovascular risk factors that are considered unmodifiable:
- A. Obesity
  - B. Age
  - C. High blood pressure
  - D. Sex
  - E. Heredity
12. Obesity is a major cardiovascular risk factor with increasing prevalence in developed countries, mainly due to:
- A. Environmental and social factors
  - B. Peculiarities of diet
  - C. Sedentarism
  - D. Alcoholism
  - E. High blood pressure
13. What is the difference between Score Score and Framingham score?
- A. Related to cardiovascular mortality and not total cardiovascular events
  - B. Are taken into account deaths from non-coronary atherosclerosis territories (AVC)
  - C. The school is adjusted to average of ages, to which risks change with more abrupt age
  - D. There are separate scores for European countries with high risk, respective to low risk, or where exists complete data on mortality

E. Related to cardiovascular mortality and total cardiovascular events

14. Dyslipidemia:

- A. Represents among factors with great prevalence and susceptibility of being modified
- B. Includes a number of disorders of lipid metabolism potentially atherosclerotic phenomena induction and maintenance of:
- C. Related to cardiovascular mortality and total cardiovascular events
- D. A better short or long-term prognosis for overweight or obese patients
- E. It is one of the factors with low prevalence and susceptibility of being modified

15. What three components must be included in a comprehensive action for the prevention of cardiovascular risk factors from the World Health Organization (WHO):

- A. Primary prevention
- B. Population Strategy
- C. Strategy for high risk populations
- D. Secondary prevention
- E. Strategy for low risk populations

16. Individuals with increased cardiovascular risk are those with:

- A. Multiple risk factors, giving a risk score  $\geq 5\%$
- B. Marked increased level of a single risk factor, such as BP  $\geq 180/110$  mmHg or persistent BP  $\geq 160/110$ mmHg, these values should be treated, regardless of the presence of other risk factors
- C. Total cholesterol  $\geq 8$  mmol / L (320mg/dL), LDL-cholesterol  $\geq 6$  mmol / L (240mg/dL)
- D. Diabetes (relative risk is 5 women and 3 men)
- E. Multiple risk factors, giving a risk score  $\geq 20\%$

17. List which are functions of the grid Score:

- A. Highlight the risk of fatal cardiovascular event within 10 years from the table without additional calculations
- B. Estimated relative risk by comparing a cell (grid square) with any other, in the same age group
- C. Assess the impact of improvements to risk factors (novel subject passes from one risk category to another by stopping to smoke, lowering total cholesterol etc.).
- D. Estimated absolute risk by comparing a cell (grid square) with any other, in the same age group
- E. Highlights the effect of the action of a risk factor over time (increasing risk with increased age, younger ages are generally at lower risk).

18. List haemostatic factors which are correlated with increased cardiovascular risks:

- A. Factor VII activated
- B. Plasminogen activator inhibitor-1
- C. Factor V activated
- D. Tissue plasminogen activator (tPA)
- E. von Willebrand factor (which is also a marker of endothelial dysfunction)

19. What are the measures of lifestyle change to reduce cardiovascular risks in patients with hypertension?

- A. High sodium diet, low weight, moderate consumption of ethyl alcohols
- B. Low sodium diet, low weight, moderate consumption of ethyl alcohols.
- C. Pharmacological measures should be added to obtain normal BP values
- D. Pharmacological measures to achieve normal BP values should not be added

E. An optimal control of BP values significantly decreases the risk of recurrence of a stroke, or cardiovascular death after a heart attack.

20. The mechanisms by which smoking increases cardiovascular risk are:

A. Increased total cholesterol and lower HDL cholesterol

B. Activation of platelets and leukocytes, increased circular fibrinogen

C. Endothelial dysfunction by promoting vulnerable plaques fissures, increased heart rate and blood pressure

D. Arterial vasoconstriction (including coronary spasm), effects of worsening myocardial ischemia due to carbon monoxide

E. Decrease circular fibrinogen

## **Invasive and non-invasive laboratory investigations**

1. c. s. Choose which of the markers listed below refers to the injury of myocytes:
  - A. C-reactive protein, tumor necrosis factor alpha, interleukins, Fas (APO1)
  - B. Norepinephrine, epinephrine, angiotensin II, renin, aldosterone, arginine vasopressin, endothelin
  - C. B- natriuretic peptide (BNP), NTpro-BNP, proadrenomedulina
  - D. Oxidized low-density lipoproteins, myeloperoxidases, malondialdehyde, urinary biopirines
  - E. Troponins I and T, creatine kinase MB, light chain myosin kinase, cardiac fatty acids associated with proteins
  
2. c.s. Choose which of the markers listed below refers to those of inflammation:
  - A. C-reactive protein, tumor necrosis factor alpha, interleukins, Fas (APO1)
  - B. Norepinephrine, epinephrine, angiotensin II, renin, aldosterone, arginine vasopressin, endothelin
  - C. B- natriuretic peptide (BNP), NTpro-BNP, proadrenomedulina
  - D. Oxidized low-density lipoproteins, myeloperoxidases, malondialdehyde, urinary biopirines
  - E. Troponins I and T, creatinekinase MB, light chain myosin kinase, cardiac fatty acids associated with proteins
  
3. c.s. Choose which of the markers listed below refers to those of oxidative stress:
  - A. C-reactive protein, tumor necrosis factor alpha, interleukins, Fas (APO1)
  - B. Norepinephrine, epinephrine, angiotensin II, renin, aldosterone, arginine vasopressin, endothelin
  - C. B- natriuretic peptide (BNP), NTpro-BNP, proadrenomedulina
  - D. Oxidized low-density lipoproteins, myeloperoxidases, malondialdehyde, urinary biopirines
  - E. Troponins I and T, creatinekinase MB, light chain myosin kinase, cardiac fatty acids associated with proteins
  
4. c.s. Choose which of the markers listed below refers to neurohormonal:
  - A. C-reactive protein, tumor necrosis factor alpha, interleukins, Fas (APO1)
  - B. Norepinephrine, epinephrine, angiotensin II, renin, aldosterone, arginine vasopressin, endothelin
  - C. B- natriuretic peptide (BNP), NTpro-BNP, proadrenomeduline
  - D. Oxidized low-density lipoproteins, myeloperoxidases, malondialdehyde, urinary biopirines
  - E. Troponins I and T, creatine kinase MB, light chain myosin kinase, cardiac fatty acids associated with proteins
  
5. c.s. Choose which of the markers listed below refers to the stress of myocytes :
  - A. C-reactive protein, tumor necrosis factor alpha, interleukins, Fas (APO1)
  - B. Norepinephrine, epinephrine, angiotensin II, renin, aldosterone, arginine vasopressin, endothelin
  - C. B- natriuretic peptide (BNP), NTpro-BNP, proadrenomedulina
  - D. Oxidized low-density lipoproteins, myeloperoxidases, malondialdehyde, urinary biopirines
  - E. Troponins I and T, creatinekinase MB, light chain myosin kinase, cardiac fatty acids associated with proteins

6. c.s. Choose which of the markers listed below refers to the myocyte stress:

- A. C-reactive protein, tumor necrosis factor alpha, interleukins, Fas (APO1)
- B. Norepinephrine, epinephrine, angiotensin II, renin, aldosterone, arginine vasopressin, endothelin
- C. B- natriuretic peptide (BNP), NTpro-BNP, proadrenomedulina
- D. Oxidized low-density lipoproteins, myeloperoxidases, malondialdehyde, urinary biopirines
- E. Troponins I and T, creatinekinase MB, light chain myosin kinase, cardiac fatty acids associated with proteins

7. c.s. Continuous ECG monitoring is:

- A. recommended for patients with sporadic symptoms or very short, able to activate the device so as to store in its memory ECG immediately preceding symptomatic episode
- B. particularly useful in symptomatic patients with syncope, which could not turn in time with the recording device type or in patients with intermittent symptoms occurring daily or almost daily
- C. The most used method for the diagnosis and / or risk stratification of patients with stable angina, unstable angina which was stabilized therapeutically, patients after myocardial infarction or patients with myocardial revascularization
- D. provides information about pulmonary circulation and thoracic aorta, as well as about possible associated lung damages
- E. The most used method for the diagnosis and / or risk stratification of patients with stable angina, unstable angina which was stabilized therapeutically, patients after myocardial infarction or patients with myocardial revascularization

8. c.s. Intermittent ECG monitoring is:

- A. recommended for patients with sporadic symptoms or very short, able to activate the device so as to store in its memory ECG immediately preceding symptomatic episode
- B. particularly useful in symptomatic patients with syncope, which could not turn in time with the recording device type or in patients with intermittent symptoms occurring daily or almost daily
- C. The most used method for the diagnosis and / or risk stratification of patients with stable angina, unstable angina which was stabilized therapeutically, patients after myocardial infarction or patients with myocardial revascularization
- D. provides information about pulmonary circulation and thoracic aorta, as well as about possible associated lung damages
- E. The most used method for the diagnosis and / or risk stratification of patients with stable angina, unstable angina which was stabilized therapeutically, patients after myocardial infarction or patients with myocardial revascularization

9. c.s. Resting potential value of cardiomyocytes is:

- A) -70mV
- B) +40mV
- C) -90mV
- D) 0mV
- E) +10 mV

10. c.s. To perform standard ECG is used:

- A.10 derivation
- B 12 derivations
- C.6 deivations
- D.8 derivations
- E.2 derivations

11. c.s. The enlargement of the right atrium on radiography determines:

- a) Opacity of retrosternal space
- b) Bulging lower arch as more than 5.5 cm to the right of the midline.
- c) Previous projection of thoracic vertebral bodies
- d) Opacity of subdiaphragmatic space
- e) Right ventricular hypertrophy

12. c.s. Which statement is FALSE regarding pulsed Doppler:

- a) Measures blood velocity in the direction of the ultrasound beam
- b) Has a low amplitude measurable velocity
- c) Measures blood velocity only in the interest zone
- d) Destinated for flows with low velocity
- e) Has a spatial resolution

13.c.s. The main advantages of radionuclide ventriculography before the radiological ventriculography with contrast are the following, except:

- a) The test provide detailed information on the anatomy of the cardiac chambers and maximum information on the structure and valvulares function
- b) The ability to study both ventricles simultaneously
- c) Ability to perform repeated measurements (before and after exercise)
- d) The method provides optimum contrast between target ventricular volumes and background
- e) Noninvasively nuclear procedures

14. c.s. Stopping the ECG exercise test is done in all cases, except:

- a) decrease in systolic blood pressure over 10 mm Hg from baseline
- b) Hiccup
- c) Angina moderate / severe
- d) Dizziness, ataxia or presyncope
- e) Cyanosis or pallor

15. c.s. What is the distance for effectuating the radiography in posterior-anterior incidence?

- A.1.5 - 2 m
- B.30-50 cm
- C.1 m
- D.20-25 cm
- E.2-3 m

16. c.s. The resting electrocardiogram is:

- A. The most used method for the diagnosis and / or risk stratification of patients with stable angina, unstable angina which was stabilized therapeutically, patients after myocardial infarction or patients with myocardial revascularization
- B. paraclinical investigation most commonly used in cardiology exam
- C. to assess the heart and its cavities
- D. provides information about pulmonary circulation and thoracic aorta, as well as about possible associated lung damages
- E. allows monitoring and treatment of heart disease

17. c.s. Which of the clinical application is not characteristic for PET (positron emission tomography)?

- a) Is effectuating on patients who have hypoperfused and dysfunctional myocardial segments.
- b) Metabolic imaging

- c) It is used to detect dysfunction in the microcirculation
- d) Determination of coronary calcium score
- e) None

18. c.s. The accuracy of general diagnostic of PET's (positron emission tomography) research is about:

- a) 90 %
- b) 60%
- c) 100%
- d) 75%
- e) 40%

19. c.s. The most used score to determine coronary calcium score is:

- a) Agatston
- b) Hounsfield
- c) Mobitz
- d) Sokolow
- e) Hoffman

20. c.s. What is not characteristic for balanced radionuclide ventriculography:

- a) Assume the purchase of 16-24 frames in RR interval
- b) Records a short sequence of cardiac cycles
- c) In balanced radionuclide ventriculography are used the labeled  $^{99m}\text{Tc}$  red blood cells
- d) The balanced radionuclide ventriculography synchronized requires the presence of sinus rhythm
- e) Data are acquired sequentially in a memory of properly frame

21. c.s. Exercise testing is done by monitoring the patient's ECG:

- a) The administration of dipyridamole
- b) With tilted table
- c) During cycling or treadmill
- d) The administration of ergometrine
- e) During respiratory arrest

22. c.s. Intracardiac electrophysiological study represents:

- a) Noninvasive diagnostic method, intracardiac rhythm disorders and management of cardiac arrhythmias
- b) Invasive diagnostic method, intracardiac rhythm disorders and management of cardiac arrhythmias
- c) Study of cardiac activity using 3D Eco
- d) The exclusively diagnostics of atrial fibrillation and ventricular
- e) Method of testing only elderly patients

23. c.s. What is the way of percutaneous approach of introducing catheters into SEF (electrophysiological study) most often used?

- a) Vena saphena magna
- b) Femoral vein
- c) Abdominal aorta
- d) Inferior vena cava
- e) Femoral artery

24. c.s. Indicate radiological signs of increasing of ascending aorta:

- a) A prominent aortic button



- b) Difficult to assess
- c) Curved upper right arc
- d) Curved arc left upper
- e) Is not shown on the radiography

25. c.s. Characterized to the pulmonary venous hypertensions:

- a) Radiographic - vessels in the upper lung fields are equal to or greater than the basal
- b) Radiographic - vessels in the upper lung fields are equal to or less than the basal
- c) Radiographic - vessels in the upper lung fields become equal to the basal
- d) Dilatation of the pulmonary artery trunk
- e) Pulmonary hilum is large due to much dilated central vessels compared with peripheral

26. c.s. This of radiographic aspects not characterized the interstitial edema:

- a) The opaque pleural axillary or basal tape
- b) Changes in heart consideration
- c) The inelar opacity
- d) Increase left atrium
- e) Alveolar transudation as nodular opacities, localized mainly to bases

27. c.s. The notion of markers sensitivity is understood:

- a) The power to identify real negative cases
- b) The ability to detect true positive cases
- c) Ability to identify a single disease
- d) Presence of instable marker in the body
- e) The vulnerability of the marker to the action of environmental factors

28. c.s. The notion of specificity of a marker is understood:

- a) The ability to detect true positive cases
- b) The vulnerability of the marker to the action of environmental factors
- c) Ability to identify a single disease
- d) The power to identify real cases negative
- e) Presence of the instable marker in the body

29. c.s. Radiologic the left middle arch is formed by:

- a) Ascending aorta
- b) Pulmonary trunk
- c) Descending aorta
- d) Left atrium
- e) Left ventricle

30. c.s. For execution of ventriculography is necessary to be introduced intracavitary a:

- a) Foley Catheter
- b) Catheter "Pigtail"
- c) Sleep probe
- d) Probe Swan-Ganz
- e) Judkins catheter

31. c.s. Note the frequent complications of cardiac catheterization and angiography:

- a) Hematoma at puncture site
- b) Vasovagal reactions
- c) Allergic reactions to contrast agents and drugs
- d) Inflammation or exudate at puncture site
- e) All options listed

32. c.m. Choose from those listed that relate to markers of myocytes injury:

- A. Troponin heart I and T, myosin - light chain kinase
- B. cardiac fatty acids bound to protein
- C. creatinekinase, creatinekinase MB
- D. The modified albumin by ischemia
- E. interleukins 1.6 and 1.8

33. c.m. Choose from those listed which refers to markers of interstitial remodeling matrix:

- A. myosin - light chain kinase
- B. C-reactive protein
- C. Matrix metalloproteinases
- D. Tissue inhibitors of metalloproteinases
- E. Peptide procollagen I

34. c.m. Choose from those listed that relate to markers of inflammation:

- A. albumin modified by ischemia
- B. C-reactive protein
- C. Tumour necrosis factor alpha
- D. Fas (APO-1)
- E. Interleukins 1.6 and 1.8

35. c.m. Choose from those listed that relate to markers of oxidative stress:

- A. Oxidized low density lipoprotein
- B. Mielloproteases
- C. Melondialdehida
- D. C-reactive protein
- E. Tumour necrosis factor alpha

36. c.m. Choose from those listed that relate to neuromoral markers:

- A. Peptide heart natriuretics
- B. The renin - angiotensin-aldosterone
- C. Adrenergic nervous system
- D. Arginine vasopressin, Peptides derived from the endothelium
- E. Mielloproteases

37. c.m. ECG Interpretation provides information with diagnostical implications, therapeutics and essential prognostic especially in the management of patients with:

- A. Acute Coronary Syndromes
- B. Arrhythmias or management
- C. Diselectrolitemiis
- D. Electrical anomalies with genetical substrate
- E. Pneumonia

38. c.m. What are the indications carrying the standard 12 lead electrocardiogram in cardiology practice:

- A. Patient's treatment can cause side effects that can be detected by ECG
- B. Patients with pacemaker implantation, patients with stable chronic heart disease regularly evaluate
- C. Evaluation of patients with increased risk of cardiovascular disease, assess response to cardio treatment
- D. Changes in the clinical or biological condition indicate cardiac dysfunction, patients > 40 years undergoing routine examinations,
- E. Evaluation of the patient to X-ray light

39. c.m. Which of the statements listed are correct for left ventricular hypertrophy:

- A. ST segment elevation
- B. Left ventricular hypertrophy is an independent prognostic parameter value
- C. European Society of Cardiology recommends ECG as mandatory exploration in the initial evaluation of all newly diagnosed hypertensive patients in risk stratification for adverse cardiovascular events
- D. A large variability and a significantly lower sensitivity in the ECG compared to echocardiography in diagnosing SS especially when using voltage criteria
- E. left bundle branch block

40. c.m. ECG recording quality can be influenced by:

- a) Chronic lung disease
- b) Incorrect placement of the electrodes
- c) Obesity
- d) Renal
- e) Respiratory movements

41. c.m. The indications of performance of standard 12-lead electrocardiogram are patients with:

- a) Pacemaker implant
- b) Increased risk of heart disease
- c) Stable chronic heart disease
- d) > 40 years undergoing routine examination
- e) Severe Acute Respiratory

42. c.m. The main criteria of ECG diagnostic of left ventricular hypertrophy used in clinical practice are included in the index:

- a) Sokolow-Lyon
- b) Cornell
- c) Romhilt-Estes
- d) Perugia
- e) Mobitz

43. cm Absolute contraindications to ECG stress test are:

- a) Acute aortic dissection
- b) Headache
- c) Physical or mental disorders that prevent effort
- d) Myocardial infarction (within 2 days after onset)
- e) Acute pulmonary embolism or pulmonary infarction

44. cm For imaging perfusion is used:

- a) Technetium 99
- b) Vasovist
- c) Thallium 201
- d) TESLASCAN
- e) BaSO<sub>4</sub>

45. Radionuclide imaging in cardiology includes the possibility of performing:

- a) Myocardial perfusion scintigram
- b) Radionuclidic ventriculography
- c) ECG Holter
- d) Positron emission tomography
- e) Ergometry

46. cm main clinical applications of transesophageal echocardiography:

- a) Infectious endocarditis (diagnosis, complications)
- b) Detecting sources of embolism
- c) Evaluation of congenital heart disease
- d) Evaluation of aortic prostheses
- e) Endocarditis

47. cm in CT examination the contrast agents which are using are the following:

- a) Ultravist
- b) OMNIPAQUE
- c) Visipaque
- d) Technetium
- e) Silicon

48. cm List the physiological limitations of CT investigation:

- a) The presence of arrhythmias
- b) Sinus tachycardia
- c) Presence of calcifications
- d) The cost of the contrast
- e) Irradiance level

49. cm Magnetic resonance imaging allows evaluation:

- a) The location and extension of myocardial necrosis
- b) Myocarditis
- c) Cardiomyopathy
- d) Valvulopathy
- e) Anatomy of mediastinal veins

50. cm The main indications of ambulatory ECG monitoring:

- a) Patients with unexplained palpitations
- b) Evaluation of antiarrhythmic therapy
- c) Cardiac tamponade
- d) Pericardial effusion with a quantity of 2000 ml of liquid
- e) Patients with unexplained syncope choices

51. cm What is the characteristics of arterial pulmonary hypertension:

- a) Radiographic - vessels in the upper lung fields are equal to or greater than the basal
- b) Radiographic - vessels in the upper lung fields are equal to or less than the basal
- c) Radiographic - vessels in the upper lung fields become equal to the basal
- d) Dilatation of the pulmonary artery trunk
- e) Pulmonary hilum is large due to very dilated central vessels compared with peripheral

52. c.m. Echocardiography advantages are:

- a) Provide accurate information about structure and function of the heart
- b) It is widely available
- c) It is easily repeatable if necessary
- d) Is operator dependent
- e) It is cost-effective

53. cm main methods used for routine echocardiographic are:

- a) Echocardiography in M
- b) Transoesophageal echocardiography
- c) 2D echocardiography (two-dimensional)

- d) Doppler echocardiography
- e) 3D echocardiography

54. cm To assess pulmonary circulation should be evaluated:

- a) Right pulmonary diameter
- b) The distribution of pulmonary circulation
- c) The spirometry results
- d) It is not appreciate
- e) The heart's bows

55. cm Select type of potential serological biomarkers present in cardiovascular disease:

- a) Myocytes injury markers
- b) Markers of inflammation
- c) Oxidative stress markers
- d) Intracellular remodeling markers
- e) Psychological stress markers

56. c m Select myocytes injury markers:

- a) C-reactive protein
- b) Troponin I and T
- c) Myosin light chain kinase
- d) Malondialdehyde
- e) B natriuretic peptide

57. c m Select myocytes stress markers:

- a) B natriuretic peptide
- b) Malondialdehyde
- c) Proadrenomedullin
- d) Troponin I and T
- e) Interleukins

## Pericarditis

1. c.s In acute pericarditis the pain is characterized by :

- A) Prickly character
- B) Atypical chest pain
- C) Scizual path pain „ in the scarf ”
- D) Deaf character, of push
- E) Sdr. Tietze

2. c.s. Characteristic accuse in acute pericarditis following except:

- A) Pericardial friction
- B) Syncope
- C) Radiation of pain to the neck, trapezius muscle, left arm
- D) Cough, deeply breathe
- E) Chest pain: deaf character by pressing

3. c.s. In what forms of infarction it often encountered pericarditis?

- a) Prior forms
- b) Posterior forms
- c) Lower forms
- d) Lateral forms
- e) Prevailing forms of VD

4. c.s. Pericardium receives arterial blood from:

- a) Subclavian artery branches
- b) Left pulmonary artery branches
- c) Branches of the aorta and internal mammary artery
- d) Left intercostal artery branches
- e) Coronary vessels

5. c.s. Which of the following syndromes are characteristic on pericardial diseases?

- a) Constrictive pericarditis
- b) Acute Pericarditis
- c) Chronic pericarditis
- d) Pericardial effusion and cardiac tamponade
- e) Spontaneous pericarditis

6. c.s. What is the main characteristic of neoplastic pericarditis on ECG?

- a) Ventricular fibrillation
- b) Tachycardia
- c) Changes in the Q wave
- d) Bradycardia
- e) Flutter

7. c.s. When usually occurs rheumatic pericarditis?

- a) At the beginning of the first episode of rheumatic fever
- b) At the end of the first episode of rheumatic fever
- c) During the crisis of rheumatism
- d) During the second episode of rheumatic
- e) Occurs regardless of the number rheumatic episodes throughout their

8. c.s. The treatment in constrictive pericarditis is:

- A) Complete resection of the pericardium.

- B) B-blocker
- C) Blockers of Ca channels
- D) TB
- E) Antidiarrhoeals

9. c.s. Patients with constrictive pericarditis in contrast to, those who have cardiac tamponade have everything, excepting:

- A) Heart paradoxically marked
- B) A decrease of pressure in AD in breath
- C) Intrapericardiac pressure drop
- D) A right atrial pressure curve wave dominant negative x and negative y wave attenuated or absent
- E) Lack of obvious aspect diplateau" type" of pressure curves VD and VS.

10. c.s. Pathogen called tuberculous pericarditis:

- a) Koch bacillus
- b) Staphylococcus aureus
- c) Streptococcus pyogenes
- d) Escherichia coli
- e) Idiopathic

11. c.s. What is characteristic for tuberculous pericarditis?

- a) The formation of tophi
- b) Calculi formation
- c) The formation of granuloma
- d) Goma Lueta
- e) Hydatid cyst

12. c.s. What causes pericardial effusion pressure?

- a) Myocardial infarction
- b) Cardiac tamponade
- c) Cardiomyopathy
- d) Endocarditis
- e) Hypertension

13. c.s. Which of the symptoms are characteristic of pericardial effusion without cardiac compression?

- a) Cough with reduced sputum
- b) Hypertension
- c) Chest pain
- d) Constant pain
- e) Agitation

14. A serious complication of chronic renal failure is:

- a) Neoplastic pericarditis
- b) Uremic pericarditis
- c) Hepatomegaly
- d) Tuberculous pericarditis
- e) Elevation

15. c.s. The treatment in neoplastic pericarditis includes:

- a) Antibiotics
- b) NSAIDs

- c) chemotherapy
- d) antiviral
- e) antifungal

16. c.s. The most important feature of constrictive pericarditis is:

- a) Noise of droplet falling
- b) Diastolic clacment
- c) Gallop rhythm
- d) Systolic blast
- e) Noise II in place of aortic valve auscultation

17. c.s. Indicate causes of cardiac tamponade:

- a) Bazal pneumonia
- b) Mitral Insufficiency
- c) Uremia
- d) Hypertension
- e) Ventricular paroxysmal tachycardia

18. c.s. Appointed group of specific drugs in treatment of purulent pericarditis:

- a) Antibiotics
- b) Diuretics
- c) Analgesics
- d) Antihypertensive
- e) Diuretics

19. c.s. Specific forms of pericarditis are the following except:

- a) Post myocardial infarction
- b) Uremic
- c) Pre myocardial infarction
- d) Postirradiation
- e) TB

20. c.s. Viral diseases that cause infectious pericarditis are following except:

- a) Indemic mumps
- b) Varicella
- c) AIDS
- d) Viral Meningitis
- e) infectious mononucleosis

21. c.s. Stage III of evolution of acute pericarditis, ECG is characterized by:

- a) I, II, aVL with negative T waves
- b) aVR, V1, V2 are negative T waves
- c) aVR, V1, V2 ST segm depression
- d) aVF, V3-V6 ST segm elevation
- e) aVR, V1, V2 segm PR depression

22. c.m. Name the methods of diagnosing in acute pericarditis:

- a) EcoCG
- b) Chest radiography
- c) Radionuclide exploration
- d) Test exercise
- e) Ventriculography



23. c.m. What is specific for the first stage of acute pericarditis on EKG:

- a) aVR, V1-V2 is inverted T wave
- b) I, II, aVL T wave is positive
- c) aVF, V3-V6 ST segment elevation
- d) I, II, III, aVL where T is negative
- e) aVR, V1-V2 where T is positive

24. c.m. Call thebiological explorations for diagnosis of acute pericarditis:

- a) HIV serological
- b) Pancreatic enzymes
- c) Thyroid balance
- d) Diagnosis of autoimmune diseases
- e) Tuberculin testing, viral markers.

25. c.m. Pericardial effusion depends of following factors?

- a) The age of the patient
- b) The absolute volume of effusion
- c) Physiologic characteristics of the pericardium
- d) the rate of fluid accumulation
- e) the frequency of cardiac contractions

26. c.m. Write cardiac tamponade features:

- a) Increased pressure in the pericardium
- b) Progressive limitation of ventricular diastolic filling
- c) Reduction of stroke volume and cardiac output
- d) Increased systolic volume
- e) increase in stroke volume and cardiac output

27. cm Clinical heart tamponade include:

- a) Extreme cold, wet
- b) Chest pain
- c) Bradycardia
- d) Tachycardia
- e) Vomiting

28. c m Clinical investigation praticed in suspection of cardiac tamponade are following:

- a) Chest radiography
- b) ECOCG
- c) Excretory urography
- d) Ophthalmoscopy
- e) Pericardiocentesis

29. c.m. Possible mechanisms of uremic pericarditis are:

- a) Hyperfunction of parathyroid gland
- b) Hypercortisolism
- c) Hypoglycemia
- d) Metabolites of nitric catabolism
- e) Metabolites of protein anabolism

30. c.m. Neoplastic diseases leading to pericardial affecting includes:

- a) Lung cancer
- b) Leukemia
- c) Ovarian cyst

- d) Intestinal polyposis
- e) Leiomyosarcoma

31. c.m. Modes of involvement of the heart in cases of neoplastic metastasis:

- a) Extension and attaching to pericardium a mediastinal malignant mass.
- b) Diffuse pericardial thickening and infiltration of tumor
- c) Inhomogeneous lipid streaks
- d) Local depigmentation
- e) Local infiltration of the pericardium

32. c.m Name the complications of pericarditis are?

- a) Myocardial infarction
- b) Recurrent episodes of pericardial inflammation
- c) Fibrosis and calcified pericardium at
- d) Cardiac tamponade
- e) Constrictive pericarditis

33. c.m. What laboratory investigations should be performed in cases of acute pericarditis?

- a) Ultrasound
- b) CT
- c) Chest radiography
- d) EcoCG
- e) ECG

34. c.m. Name pericardial syndromes:

- a) Congenital defects of the pericardium
- b) Recurrent Pericarditis
- c) chronic pericarditis
- d) constrictive pericarditis
- e) subacute pericarditis

35. c.m. Fungal infections that cause infectious pericarditis:

- a) Histoplasma
- b) Hold
- c) Blastomycosis
- d) Candida
- e) Pityriasis versicolor

36. c m. specific forms of pericarditis are:

- a) Uremic
- b) Fungal
- c) viral
- d) noninfectious
- e) tuberculosis

37. cm Protozoa causing infectious pericarditis:

- a) Toxoplasmosis
- b) Epidinium
- c) raw Trypanosoma
- d) Ophroscolex
- e) Paramecium

38. cm Name medication in the treatment of tuberculous pericarditis:

- a) Isoniazid
- b) Streptomycin
- c) Ethambutol
- d) Tetracycline
- e) Penicillin

37. c.m. Treatment of bacterial pericarditis, purulent:

- a) Corticosteroids
- b) Adrenomimetic
- c) Percutaneous pericardiocentesis
- d) Antistaphylococic
- e) Aminoglycosides

38. cm Name the clinical manifestations in tuberculous pericarditis:

- a) Fever
- b) Sinus tachycardia
- c) Dyspnoea due to a quantity of pleural fluid
- d) Pericardiac quiver
- e) Hypertension

39. cm Differences between constrictive pericarditis and restrictive cardiomyopathy are:

- A) S3 gallop— absent in CP and present in RC
- B) pericardial clacment -present in CP and absent in RC
- C) pericardial calcification —present in 50% cases of CP and absent in RC
- D) apexian shock palpable in systole only in CP
- E) pulse absent in both forms od pericarditis.

40. cm ECG in constrictive pericarditis show:

- A) decrease in QRS voltage
- B) T-wave inversion
- C) flattening of the T wave
- D) mitral P wave l
- E) Lack of P-wave

41. cm In constrictive pericarditis laboratory results revealed:

- A) Decreasing of the serum albumin
- B) Increasing of the serum albumin
- C) Increasing of the serum globulins
- D) Increased of the conjugated and unconjugated bilirubin
- E) decreasing of conjugated bilirubin and unconjugated

42.c.m What means Dressler syndrome :

- a) acute illness manifested by fever, pleurisy and pericarditis
- b)of autoimmune etiology
- c) can occur in a few weeks or months after an acute myocardial infarction
- d) acute disease manifested by chest pain, purulent secretions, pleurisy
- e) may occur immediately as a result of acute myocardial infarction

43. cm Other forms of pericardial involvement are the following, except:

- a) toxic pericarditis
- b) pericardial cysts
- c) chilopericarditis
- d) infectious pericarditis
- e) mixedematous pericarditis

44. c m What includes treatment of pericarditis:

- a) NSAIDs
- b) antibiotics whith large specter of action

- c) corticosteroids
- d) hospitalization and supervision
- e) pericardium surgery

45. cm pericardium is a powerful sac of ellipsoidal shape, which includes:

- a) aortic origin and its junction with aortic arch
- b) vena cava
- c) pulmonary artery — instead of branching
- d) proximal pulmonary veins
- e) distal pulmonary veins

46. c m Pericardium is innervated by:

- a) vagus nerve
- b) left recurrent laryngeal nerve
- c) esophageal plexus
- d) brachial plexus
- e) accessory nerve

47. MC. Pericardium functions are:

- a. secretory function
- B. Limitation of acute dilatation of the heart
- C. decreasing of hydrostatic pressure inside of heart cavities
- D. barrier function against infections
- E. Fixing heart

48. c m What are the causes of pericarditis?

- A) Tuberculosis
- B) Pheochromocytoma
- C) amebiasis
- D) Infectious Mononucleosis
- E) with gram-negative septicemia

49. c m Acute pericarditis is characterized by:

- A) left ventricular hypertrophy.
- B) local or generalized narrowing of retinal arteries
- C) Changes in ECG
- D) Chest pain
- E) pericardial friction

50. cm in bacterial pericarditis in EKG occur the following changes:

- a) ST segment
- b) R wave
- c) T wave
- d) P wave
- e) QRS complex

51. c m The treatment in fungal pericarditis includes:

- a) Antiarrhythmics
- b) Antihypertensive
- c) NSAIDs
- d) Anti-inflammatory steroids
- e) Antibiotics

52 c.m Treatment of myocardial post-infarction pericarditis is:

- a) opioid analgesics
- b) NSAIDs
- c) Analgesics neopioids
- d) Hypertension
- e) Anti-inflammatory steroids

