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MCC-004

POST GRADUATE DIPLOMA IN CLINICAL CARDIOLOGY (PGDCC)

00235

Term-End Examination

June, 2011

MCC-004 : COMMON CARDIOVASCULAR DISEASES - II

Time : 2 hours *Maximum Marks : 60*

Note :

(i) *There will be multiple choice type of questions in this examination which are to be answered in OMR Answer Sheets.*

(ii) *All questions are* ***compulsory.***

(iii) *Each question will have four options and only one of them is correct. Answers have to be marked in figures in the appropriate rectangular boxes corresponding to what is the correct answer and then blacken the circle for the same number in that column by using HB or lead pencil and not by ball pen in OMR Answer Sheets.*

(iv) *If any candidate marks more than one option it will be taken as the wrong answer and no marks will be awarded for this.*

(v) *Erase completely any error or unintended marks.*

(vi) *There will be 90 questions in this paper and each question carries equal marks.*

(vii) *There will be no negative marking for wrong answers.*

(viii) *No candidate shall leave the examination hall at least for one hour after the commencement of the examination.*

1. Group A streptococcal throat infection leads to Acute Rheumatic Fever in :
(1) 6 - 10% (2) 0.3 - 3% (3) 30 - 40% (4) > 90%

2. High ASO titre indicates :
(1) Recent Streptococcal (Gp.A) infection
(2) Acute Rheumatic fever
(3) Rheumatic heart disease
(4) Infective Endocarditis

3. Carey-combs murmur is a :
(1) Mid-diastolic murmur (2) Early diastolic murmur
(3) Pan-systolic murmur (4) Ejection systolic murmur

4. Vegetation in Infective Endocarditis consists of :
(1) fibrous tissue and new vessels
(2) fat ladden plaque with blood clot
(3) connective tissue (collagen tissue)
(4) mass of platelet, fibrin, inflammatory cell and microorganism

5. Common organism for I.E. in IV drug abusers :
(1) Streptococcus viridans (2) Salmonella typhi
(3) Candida (4) Staphylococcus aureus

6. Following prosthetic valve surgery, I.E. is :
(1) more with mechanical prosthesis
(2) more with bioprosthesis
(3) equal with mechanical and bioprosthesis
(4) not increased with bioprosthesis

7. Characteristics of Osler's mode :
(1) Painless nodules over extension surfaces
(2) Skin moves freely over Osler's node and non tender
(3) Pathognomonic of I.E.
(4) Small tender subcutenous nodules in pulp of the digits

8. Detection of vegetation in Native Valve Endocarditis is :
(1) equal sensitivity with TTE and TEE
(2) sensitivity is more with TEE
(3) sensitivity is more with TTE
(4) sensitivity is poor both with TTE and TEE

9. Commonest type of anaemia in I.E. is :
(1) Normochromic normocytic (2) Microcytic hypochromic
(3) Macrocytic (4) Normocytic hypochromic

10. Which is not correct in making decision for surgery in I.E. ?
(1) persistent fever (2) abscess formation
(3) prosthetic valve dehiscence (4) obstructive vegetation

11. Clinical splenomegaly present in I.E. in :
(1) 70% patient (2) 10% patient
(3) 30% patient (4) Every patient with I.E.

12. Which statement is most appropriate in terms of myocotic aneurysm ?
(1) it is the result of fungal I.E.
(2) frequent site is intracranial arteries
(3) embolization of arteries leads to myocotic aneurysm
(4) result from dilatation of weak arteries

13. Commonest valve involved in IV. drug abusers' I.E. is :
(1) Aortic valve (2) Tricuspid valve
(3) Mitral valve (4) Pulmonary valve

14. Chances of positive blood culture in I.E. patients without prior antibiotics :
(1) 95-100% (2) 70% (3) 50% (4) 25%

15. Conduction defect on ECG in a patient with I.E. – most likely cause is :
(1) CHF (2) Healing of vegetation and infected area
(3) abscess formation (4) constant bacteraemia

16. Chances of I.E. is highest in which of the following lesion :
(1) Prosthetic valve (2) VSD (3) TOF (4) ASD

17. Normal mitral valve orifice in an adult is :
(1) 4 cm^2 (2) 2 cm^2 (3) 6 cm^2 (4) 1.5 cm^2

18. Severity of mitral stenosis is assessed most appropriately by :
(1) Loudness of S_1 (2) Loudness of murmur
(3) Presence of diastolic thrill (4) Short A_2-OS interval

19. Common ECG findings in severe MS –
(1) Left atrial enlargement and Rt axis deviation
(2) Left atrial enlargement and Lt ventricular hypertrophy
(3) Left axis deviation and RVH
(4) Rt atrial enlargement and QRS axis > 130°

20. MS in adult is considered severe if M.V. opening is :
(1) 1.5 – 2.0 cm^2 (2) 1.3 – 1.5 cm^2 (3) 1.1 – 1.3 cm^2 (4) 1 or < 1 cm^2

21. Diagnostic clinical feature of MS is :
(1) Loud S_1 (2) Mid-diastolic murmur
(3) Opening snap (4) Tricuspid Regurgitation

22. Best investigation for diagnosis of M.S. is :
(1) Cardiac catheterization (2) Echocardiography
(3) ECG (4) CT scan

23. Treatment of choice in MS with significantly fibrosed valve is :
(1) MVR (2) PTMC (3) CMV (4) Medical therapy

24. Commonest cause of MR in our country is :
(1) MVP (2) Collagen vascular disease
(3) RHD (4) Mitral annular calcification

25. In chronic MR, without LVF :
(1) LVEF is normal
(2) LVEF is more than normal
(3) LVEF is less than normal
(4) LVEF is less in mlid MR, but normal in severe MR

26. In severe MR – S_2 split is :
(1) wide (2) reverse (3) fixed (4) single

27. If Pansystolic murmur in MR radiates towards base it indicates :
(1) Predominant involvement of PML
(2) Predominant AML involvement
(3) dilatation of mitral annulus
(4) LV systolic dysfunction

28. The following echo findings are correct for severe MR except :
(1) Mitral regurgitation volume ≥ 30 CC
(2) Regurgitant fraction > 55%
(3) Pulmonary vein systolic flow reversal
(4) MR jet reaches posterior wall of LA

29. In relation to indications for surgery in severe MR findout, the wrong statement is :
(1) All symptomatic patient (class II and above)
(2) LVEF < 60%
(3) LV dimension end systolic > 45 mm
(4) Asymptomatic patient

30. Which is not the cause of Acute MR ?
(1) I.E.
(2) Inferior wall MI-papillary muscle rupture
(3) MVP due to chordal rupture
(4) Rheumatic heart disease

31. Aortic orifice size in an adult is :
(1) 4 - 5 cm^2 (2) 1 - 2 cm^2 (3) 3 - 4 cm^2 (4) 5 - 6 cm^2

32. Which is uncommon in severe AS ?
(1) Angina
(2) Syncope
(3) Atrial fibrillation
(4) Heart failure

33. Which is not found in relation to pulse in severe AS ?
(1) Pulsus bisferiens
(2) Pulsus parvus
(3) Pulsus tardus
(4) Low volume pulse

34. Doppler study in Aortic stenosis suggests severe AS if mean transvalvular pressure gradient is (with Normal CO)
(1) ≥ 30 mmHg
(2) ≥ 100 mmHg
(3) ≥ 120 mmHg
(4) ≥ 50 mmHg

35. Possibility of sudden cardiac death in asymptomatic severe AS is :
(1) 0.4% per annum
(2) 10% per annum
(3) 5% per annum
(4) 2% per annum

36. Aortic valve replacement is not indicated to all patients :
(1) With AS and severe LV systolic dysfunction
(2) Asymptomatic severe AS
(3) Symptomatic severe AS
(4) Symptomatic moderate AS

37. Following condition can lead to Acute Aortic Regurgitation except :
(1) Infective endocarditis (2) Aortic dissection
(3) Trauma (4) Supracrystal VSD with AR

38. Nocturnal angina is a classical feature of :
(1) Pulmonary hypertension (2) Mitral stenosis
(3) Severe AR (4) Severe AS

39. Systolic BP of lower limbs is :
(1) 10 - 20 mmHg higher than that of upper limbs
(2) 10 - 20 mmHg lower than that of upper limbs
(3) equal to that of upper limbs
(4) 30 - 60 mmHg higher than that of upper limbs

40. Find out the most appropriate answer of the statement – thrill is very rare in :
(1) A.S. (2) MS
(3) MR (4) AR

41. In severe AR, Aortic Valve Replacement is indicated in the following situation except :
(1) LVEF < 50% (2) LA dimension > 50 mm
(3) LVED dimension > 75 mm (4) LVES dimension > 55

42. Commonest cause of Tricuspid stenosis is :
(1) I.E. in IV drug abusers (2) RHD
(3) Congenital anomalies (4) Carcinoid disease

43. JVP in Tricuspid stenosis _____ with sinus rhythm :
(1) prominent 'a' wave and slow 'y' descent
(2) prominent 'x' and 'y' descents
(3) 'a' and 'v' waves are equal
(4) absent 'a' wave and prominent 'v' wave

44. Doppler velocity across T.V. is (normally) :
(1) < 1 m/sec and mean gradient is < 2 mmHg
(2) > 1.5 m/sec and mean gradient > 5 mmHg
(3) 1.5 - 1.7 m/sec and mean gradient > 7 mmHg
(4) 1.7 - 2 m/sec and mean gradient > 7.5 mmHg

45. Commonest cause of TR is :
(1) Rheumatic TR (RHD)
(2) I.V. drug abusers
(3) Pulmonary hypertension of any cause
(4) Carcinoid syndrome

46. Followings are clinical features of TR except :
(1) Prominent 'v' wave in JVP
(2) Pulsatile liver
(3) Pan systolic murmur
(4) Opening snap of T.V.

47. Find out the wrong statement :
(1) Normal amount of pericardial fluid 15 - 35 ml
(2) Intrapericardial pressure vary from −5 to +5 mmHg
(3) Normal parietal pericardium thickness is 5 - 10 mm.
(4) Pericardial pressure varies during respiration.

48. Which one of this is pathognomonic of pericarditis ?
(1) Chest pain - retrosternal
(2) ↑ ST in ECG
(3) Pulsus paradox
(4) Pericardial rub

49. Ewart's sign is formal in :
(1) Large pericardial effusion
(2) Acute anterior wall MI
(3) Complete A.V. block
(4) Constrictive pericarditis

50. Cardiac temponade is the result of :
(1) massive pericardial effusion
(2) tubercular pericardial effusion
(3) depends on rate of accumulation of effusion
(4) develops with I.V. fluid in pericardial effusion

51. Which one of the following echo finding is not a feature of cardiac temponade :
(1) RV early diastolic collapse (2) RA diastolic collapse
(3) IVC plethora (4) A >> E in M.V. flow pattern on doppler

52. Pericardial knock is a :
(1) diastolic sound heard after S_3
(2) high pitch sound heard earlier to S_3
(3) low pitch soft sound heard earlier to S_3
(4) systolic event.

53. In constrictive pericarditis - JVP shows :
(1) Prominent 'x' and 'y' descent
(2) Large 'a' wave with raised JVP
(3) Prominent 'a' and 'v' waves with normal pressure
(4) Inspiratory decrease in JVP

54. In relation to ECG findings in Acute pericarditis, find out the wrong statement :
(1) Wide spread $\hat{}$ ST with concavity upwards
(2) There can be PR segment depression
(3) No reciprocal $\check{}$ ST occurs
(4) Occasionally Q wave develops

55. In Peripartum cardiomyopathy find the wrong statement :
(1) CCF occurs between last trimester and 6 months after delivery
(2) 50% may recover completely
(3) Subsequent pregnancy is not contraindicated with recovery
(4) Treatment is same to that of dilated CMP

56. Arrhythmogenic RV dysplasia commonly leads to :
(1) congestive cardiac failure (2) PSVT
(3) Recurrent VT (4) Severe pulmonary hypertension

57. Chest x-ray findings in Restrictive Cardiomyopathy :
(1) No significant cardiomegaly and pulmonary venous congestion.
(2) Gross cardiomegaly with pulmonary venous congestion.
(3) Ventricles are predominantly dilated.
(4) Pulmonary artery hypertension.

58. Clinical hall mark of Hypertrophic Cardiomyopathy is :
(1) Systolic murmur (2) Cardiomegaly
(3) S_3 (4) S_4

59. Find out the correct statement :
(1) In valsalva murmur increases in HOCM and decreases in AS.
(2) In standing murmur decreases in HOCM.
(3) Supine with leg elevated, murmur in HOCM increases.
(4) With amyl nitrate, no change of murmur in HOCM.

60. Find out the wrong statement in relation to hypertrophic cardiomyopathy :
(1) Some patients may remain asymptomatic.
(2) May present with anginal chest pain.
(3) Sudden cardiac death occurs with HOCM only.
(4) History of SCD in family may be present.

61. Subaortic gradient on HOCM is abolished by all except :
(1) Beta blockers (2) Squatting
(3) Valsalva manovera (4) Isomeric hand grip

62. ECG findings on myocarditis are all except :
(1) Sinus tachycardia (2) ST-T changes
(3) Prolonged QTc interval (4) Persistent CHB

63. Most common cause of sudden cardiac death in young people is :
(1) Coronary Artery disease (2) Aortic stenosis
(3) HOCM (4) Dilated cardiomyopathy

64. Factors associated with adverse prognosis in dilated cardiomyopathy is :
(1) NYHA class II (2) LVS3
(3) Ventricular ectopics (4) Young age

65. Prognostic factor on Arrhythmogenic RV cardiomyopathy is :
(1) Chest pain (2) Dyspnea
(3) Edema (4) Syncope

66. In Infective endocarditis patients, Fever is noted in :
(1) 42 - 75% (2) 25 - 55% (3) 80 - 85% (4) 7 - 10%

67. Sensitivity of TEE for detecting vegetation in prosthetic valve endocarditis is :
(1) 80 - 96% (2) 50 - 70% (3) 36 - 50% (4) 16 - 36%

68. Janeway lesions in Infective endocarditis seen in :

(1) 70 - 80% (2) 40 - 50% (3) 10 - 30% (4) 6 - 10%

69. Most common micro organism in prosthetic valve endocarditis in age > 12 yrs of age is :

(1) Enterococcus (2) Streptococci

(3) Staph. aureus (4) HACEK gp.

70. Risk of Embolism during Infective Endocarditis increases with all except :

(1) La-Vegetation > 10 mn (2) Increasing vegetation size during therapy

(3) Staph. aureus endocarditis (4) Vegetations on aortic valve

71. Mortality in Infective endocarditis is highest with :

(1) Viridans streptococci (2) Staph. aureus

(3) Enterococcus (4) Fungal

72. Acute heart failure on Native valve IE occurs more frequently in :

(1) Mitral valve (2) Aortic valve

(3) Tricuspid valve (4) Pulmonary valve

73. LV apical impulse in HOCM is :

(1) Not palpable (2) Hyperkinetic

(3) Shifted down and out (4) Double apical impulse

74. All are acute manifestations of Rheumatic Fever except :

(1) carditis (2) arthritis

(3) chorea (4) erythema margination

75. Most frequent manifestation of Rheumatic fever is :

(1) Polyarthritis (2) Carditis

(3) Chorea (4) Subcutaneous nodules

76. In Rheumatic carditis following features are common except :

(1) mitral regurgitation (2) heart failure

(3) aortic regurgitation (4) tamponade

77. Risk of prosthetic valve endocarditis is highest in :

(1) Initial one month (2) Initial six month

(3) Initial nine month (4) Initial one year

78. Infective endocarditis in neonates is primarily caused by :

(1) Streptococci (2) Staph. aureus

(3) Polymicrobial (4) Coagulase negative staphylococci

79. Aortic Regurgitation on Echo is severe when :

(1) Regurgitant jet width/LVOT diameter > 30 - 60%

(2) PHT $\geq$ 400 mec

(3) Regurgitant fraction $\geq$ 50%

(4) Effective regurgitant orifice $\leq$ 0.1 cm^2

80. Preferred treatment for symptomatic severe MS is :

(1) Open mitral valvotomy (2) Closed mitral valvotomy

(3) MVR (4) Balloon mitral valvotomy

81. Readily palpable tapping S_1 in MS suggests :

(1) anterior mitral leaflet calcified (2) AML-pliable

(3) AML-fixed (4) Both AML and PML fixed

82. Classical finding of MS on Echo is :

(1) Septal bounce (2) M V calcification

(3) LV enlargement (4) Doming of MV during diastole

83. Aortic stenosis is considered severe when AVA is :

(1) < 1 cm^2 (2) 1 - 1.5 cm^2

(3) 2 - 2.5 cm (4) > 2.5 cm^2

84. Early clinical finding of Severe Aortic Stenosis is :

(1) Atrial fibrillation (2) angina

(3) heart failure (4) GI bleed

85. Aortic valve is affected on patients with mitral stenosis in approximately :

(1) One third of patients (2) One half of patients

(3) In three fourth patients (4) No involvement of aortic valve

86. Mitral valve scoring for prognostication in BMV includes all parameters except :

(1) leaflet thickness (2) mobility

(3) calcification (4) isolated papillary Muscle Involvement

87. Normal Mitral Valve Area is :

(1) 1.5 - 2.5 cm^2 (2) 2.5 - 4 cm^2

(3) 4 - 6 cm^2 (4) 2 - 3 cm^2

88. Which of the following is not a feature of restrictive cardiomyopathy ?

(1) Presentation with right sided failure

(2) Echo evidence of Near normal LV and dilated atria

(3) Low voltage ECG

(4) Dilated LV with decreased LVEF in Echo

89. Which of the following drugs does not have mortality benefit in DCMP ?

(1) Frusemide (2) ACE Inhibitors

(3) Carvedilol (4) Spironolactone

90. Find the wrong statement in relation to Hypertrophic Cardiomyopathy :

(1) Inappropriate myocardial hypertrophy in absence of hypertension on aortic stenosis

(2) Myocardial disarray and interstitial fibrosis

(3) Asymmetric Septal Hypertrophy is always present.

(4) It is a genetic disorder due to mutation of genes.