

MCC-004

Signature of the Candidate

Enrolment Number

Signature of the Invigilator

Exam Centre Code

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Exam Centre Superintendent

POST GRADUATE DIPLOMA IN CLINICAL CARDIOLOGY (PGDCC)

Term-End Examination

June, 2009

00843

MCC-004 : COMMON CARDIO-VASCULAR 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 60 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. Acute Rheumatic fever is a sequel of the following infection :
 - (1) Staph. Aureus
 - (2) Gr A. Beta haemolytic Streptococcus
 - (3) Streptococcus Viridans
 - (4) Pneumocci

2. In neonates Infective Endocarditis typically involves :
 - (1) Mitral Valve
 - (2) Aortic Valve
 - (3) Pulmonary Valve
 - (4) Tricuspid Valve

3. Osler's nodes and Splinter haemorrhages are seen in Infective Endocarditis in :
 - (1) 80 % Cases
 - (2) 20 - 40 % Cases
 - (3) 5 - 15 % Cases
 - (4) Less than 5 % Cases

4. Mycotic aneurysms due to infective Endocarditis occur most frequently in :
 - (1) Visceral arteries
 - (2) Arteries of lower limb
 - (3) Intracranial arteries
 - (4) Arteries of upper limb

5. The following situation reduces gradient across Mitral Valve in Mitral Stenosis is :
 - (1) Atrial fibrillation
 - (2) Sinus bradycardia
 - (3) Anaemia
 - (4) Fever

6. The Diastolic rumble of MS at apex is long in :
 - (1) Mild MS
 - (2) MS with MR
 - (3) Severe MS
 - (4) Atrial fibrillation

7. Mitral Balloon Valvuloplasty is *not* recommended in :
 - (1) Mildly restricted mobility of leaflets
 - (2) Scattered calcification confined to margins
 - (3) Thickening extending to entire leaflet
 - (4) Extensive calcification of leaflets

8. The Commonest rheumatic valve disease is :
 - (1) Mitral Stenosis
 - (2) Tricuspid Stenosis
 - (3) Aortic Stenosis
 - (4) Aortic Regurgitation

9. LV ejection fraction decreases after MV Surgery in case of chronic MR due to :
 - (1) Decreased preload
 - (2) Increased afterload
 - (3) Decreased contractility
 - (4) Increased contractility

10. Sudden worsening of symptoms in a stable patient of chronic MR is *not* due to :
- | | |
|---------------------|----------------------------|
| (1) Chordal rupture | (2) Infective endocarditis |
| (3) Onset of A 7 | (4) Sinus Tachycardia |
11. The following cardiac chamber is *not* enlarged in chronic MR not in failure :
- | | |
|-------------------|--------------------|
| (1) Left atrium | (2) Left ventricle |
| (3) Rt. ventricle | (4) L A appendage |
12. Severe Mitral regurgitation is diagnosed by echocardiography when :
- (1) Mitral regurgitation volume is $< 60 \text{ ml}$
 - (2) Effective regurgitant orifice is $\geq 0.40 \text{ cm}^2$
 - (3) No pulmonary vein systolic flow reversal
 - (4) Regurgitant fraction < 55 per cent
13. Surgery is *not* indicated in a patient of MR in :
- (1) Asymptomatic patient with normal LV function
 - (2) Symptomatic patient with normal LV function
 - (3) Asymptomatic patient with EF less than 60 %
 - (4) Asymptomatic patient with LVESD $> 45 \text{ mm}$
14. Acute mitral regurgitation is *not* seen with :
- | | |
|---------------------|----------------------------|
| (1) Chordal rupture | (2) Infective endocarditis |
| (3) Acute MI | (4) Chronic AR |
15. The Valve area of moderate Aortic Stenosis is :
- | | | | |
|----------------------|------------------------|------------------------|--------------------------|
| (1) 3 cm^2 | (2) 1.5 cm^2 | (3) $< 1 \text{ cm}^2$ | (4) $> 1.5 \text{ cm}^2$ |
|----------------------|------------------------|------------------------|--------------------------|
16. The typical carotid pulse in severe aortic stenosis is :
- | | |
|-----------------------|----------------------------------|
| (1) Pulsus bisferiens | (2) Slow rising low volume pulse |
| (3) Pulsus paradoxus | (4) Normal volume pulse |
17. Typical murmur of valvular aortic stenosis is :
- (1) Crescendo - decrescendo systolic murmur
 - (2) Long decrescendo murmur
 - (3) Continuous murmur in Rt. 2nd space
 - (4) Early diastolic murmur
18. The following ECG change is *not* seen in Aortic stenosis :
- | | |
|--------------------------|--------------------------|
| (1) LVH with ST-T change | (2) RVH with ST-T change |
| (3) LA enlargement | (4) 1° AV block |

19. The following condition *does not* cause Aortic regurgitation :
- | | |
|-----------------------|---------------------------------|
| (1) Marfan's syndrome | (2) Aortic dissection |
| (3) High VSD | (4) Aneurysm of Abdominal Aorta |
20. Examination of peripheral pulse in chronic Severe AR reveals :
- | | |
|---------------------------|------------------------------------|
| (1) Narrow pulse pressure | (2) Rapid upstroke of radial pulse |
| (3) Low volume pulse | (4) Slow rising upstroke |
21. Severe AR presents the following feature in echo cardiography :
- | |
|------------------------------------------------------------|
| (1) Flow reversal in descending aorta |
| (2) Regurgitant jet width / LVOT diameter $\leq 30\%$ |
| (3) Aortic regurgitant pressure half time ≥ 400 m sec |
| (4) LVEDD ≤ 60 mm |
22. Severe primary tricuspid regurgitation will *not* have symptom of :
- | | |
|------------------------|------------------------|
| (1) Fatigue | (2) Effort intolerance |
| (3) Abdominal fullness | (4) PND |
23. ECG changes in Acute Pericarditis are :
- | | |
|---------------------------|--------------------------|
| (1) ST- segment elevation | (2) PR segment elevation |
| (3) Reciprocal changes | (4) Bradycardia |
24. The cause of electrical alternans in large pericardial effusion is :
- | |
|---------------------------------------------------------|
| (1) Decreased movement of parietal pericardium |
| (2) Large echofree space around cardiac shadow |
| (3) Swinging movement of heart within pericardial fluid |
| (4) Tachycardia |
25. Which of the following are Cardiovascular diseases (CVD's) ?
- | | |
|-----------------------------|-----------------------------|
| (1) Coronary Heart disease | (2) Cerebrovascular disease |
| (3) Rheumatic Heart disease | (4) All of the above |
26. ECG feature of Cardiac Tamponade is :
- | | |
|-----------------------|--------------------------------|
| (1) Sinus bradycardia | (2) Total electrical alternans |
| (3) Frequent VPCs | (4) Tall T wave |
27. Jugular venous pulse in constrictive pericarditis *does not* show the following feature :
- | | |
|-------------------------|-------------------------|
| (1) Prominent Y-descent | (2) Prominent X-descent |
| (3) Kussmaul's sign | (4) Elevated JVP |

28. Typical character of Apical impulse in Hypertrophic cardiomyopathy is :
- (1) Heaving (2) Tapping
(3) Double apical impulse (4) Diffuse pulsation
29. Systolic murmur increases with Valsalva manoever in :
- (1) Valvar AS (2) Mitral regurgitation
(3) MVP (4) HOCM
30. Infective endocarditis of Rt. sided valves occurs in :
- (1) Prosthetic valves (2) Rheumatic ms
(3) IV drug abusers (4) MVP
31. Maximum incidence of Gr. A beta haemolytic Streptococcal pharyngitis is in the age group :
- (1) 5-15 yrs. (2) 10-20 yrs.
(3) 20-40 yrs. (4) 0-5 yrs.
32. The following is a minor manifestation of Acute Rheumatic fever :
- (1) Carditis (2) Erythema marginatum
(3) Subcutaneous module (4) Prolonged P-R interval
33. Prosthetic valve endocarditis is called early when symptoms begin within :
- (1) 60 days (2) 80 days
(3) 100 days (4) 120 days
34. Systemic embolisation in Infective endocarditis occurs in :
- (1) 10-15 % cases (2) 20-50 % cases
(3) 50-70 % cases (4) 80-100 % cases
35. The commonest symptom of Mitral stenosis is :
- (1) Chest pain (2) Palpitation
(3) Dyspnoea (4) Syncope
36. The first heart sound is soft in Mitral stenosis in :
- (1) Mild MS (2) Severe MS
(3) Calcific MV (4) Sinus tachycardia
37. The most informative investigation in MS is :
- (1) Chest X-ray (2) Blood tests
(3) Echo-cardiography (4) ECG

38. The acute life threatening complication in MS is :
- | | |
|-------------------------|---------------|
| (1) Atrial fibrillation | (2) Severe PH |
| (3) Pulmonary oedema | (4) CC 7 |
39. The Commonest valvular abnormality seen in clinical practice is :
- | | |
|--------------------------|------------------------------|
| (1) Mitral Stenosis | (2) Mitral regurgitation |
| (3) Aortic regurgitation | (4) Pulmonary valve stenosis |
40. The following is *not* a cause of Mitral regurgitation :
- | | |
|-----------------------------------|---------------------------------|
| (1) Infective Endocarditis | (2) Bicuspid aortic valve |
| (3) Cleft anterior Mitral leaflet | (4) Hypertrophic Cardiomyopathy |
41. LV ejection fraction is maintained in Mitral regurgitation by :
- | | |
|-------------------------|-----------------------|
| (1) Increased Afterload | (2) Increased preload |
| (3) Dilated left atrium | (4) Small size of LV |
42. First heart sound (S1) is *not* soft in MR due to :
- | | |
|----------------------------------|---------------------------|
| (1) Rheumatic MR | (2) Mitral valve prolapse |
| (3) Papillary muscle dysfunction | (4) Marfan's Syndrome |
43. The following drug is beneficial in a patient of MR in Sinus Rhythm :
- | | |
|------------------|--------------|
| (1) Beta blocker | (2) Digoxin |
| (3) Vasodilator | (4) Diuretic |
44. The following patients of MR do better after MV surgery :
- | | |
|--------------------------------|---------------------|
| (1) With preserved LV function | (2) High NYHA Class |
| (3) Large LVEDV | (4) With poor EF % |
45. Causes of Aortic Stenosis in young adult is most likely to be :
- (1) Rheumatic
 - (2) Congenital Tricuspid aortic valve
 - (3) Fibrocalcific changes in aortic valve
 - (4) Carcinoid tumor
46. In the natural history of Aortic Stenosis :
- (1) Systolic function is maintained till late
 - (2) Diastolic function is maintained till late
 - (3) LV dilatation occurs early
 - (4) Patients have decreased LVEDP

47. Acute Aortic regurgitation occurs in :
- | | |
|--------------------------------|--------------------------------------|
| (1) Aortic Dissection | (2) Congenital Bicuspid Aortic valve |
| (3) Fibrocalcific degeneration | (4) Rheumatic heart disease |
48. Patients with chronic severe AR may be :
- (1) Symptomatic very early
 - (2) Asymptomatic for many years
 - (3) Present with LV dysfunction very early
 - (4) Present with sudden death
49. Characteristic murmur of moderately severe chronic AR :
- (1) Middiastolic rumbling murmur
 - (2) Rough crescendo-decrescendo syst. murmur
 - (3) Blowing early diastolic murmur
 - (4) Continuous murmur at LSB
50. The following statement is *true* for Aortic regurgitation :
- (1) Vasodilators lower stroke volume and degree of regurgitation
 - (2) Vasodilators improve stroke volume by lowering systemic resistance
 - (3) Vasodilators are indicated in mild AR with normal LV size
 - (4) ACE inhibitors are better choice following AVR
51. In Tricuspid Stenosis following is *not* seen clinically :
- (1) Prominent 'a' wave
 - (2) Slow y descent
 - (3) Diastolic murmur with crescendo-decrescendo shape
 - (4) Severe pulmonary hypertension
52. Acute Pericarditis clinically presents with :
- | | |
|-----------------|-----------------|
| (1) Chest pain | (2) Bradycardia |
| (3) Hypotension | (4) PND |
53. The following is *not* a symptom of periodical effusion :
- | | |
|----------------------|---------------|
| (1) Dyspnoea | (2) Dysphagia |
| (3) Irritating Cough | (4) Headache |
54. Following are the clinical signs of Cardiac Tamponade except :
- | | |
|----------------------|-----------------------|
| (1) Elevated JVP | (2) Tachypnoea |
| (3) Pulsus paradoxus | (4) Pulsus bisferiens |

55. The following is *not* the presenting feature of Hypertrophic Cardiomyopathy :
- (1) Chest pain
 - (2) Syncope
 - (3) Palpitation
 - (4) Headache
56. The most important investigation for diagnosis of Hypertrophic Cardiomyopathy is :
- (1) ECG
 - (2) Chest X-ray
 - (3) Echo-cardiography
 - (4) EMG
57. Ejection click is commonly heard in :
- (1) Rheumatic AS
 - (2) HOCM
 - (3) Cong. Valvar AS
 - (4) Cong. Subvalvar AS
58. Medical Therapy for HOCM *does not* include the following drug :
- (1) Verapamil
 - (2) Digoxin
 - (3) Beta blocker
 - (4) Amiodarone
59. ECG of Arrhythmogenic RV Cardiomyopathy shows following features except :
- (1) Inverted T in Rt. precordial lead
 - (2) Tall T in V₅, V₆
 - (3) VT of RV origin
 - (4) VT with LBBB pattern
60. Adverse outcome in dilated cardiomyopathy is related with :
- (1) Marked LV dilatation
 - (2) Low LV mass
 - (3) Good LV systolic function
 - (4) ≤ moderate MR

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