ASSESSMENT OF 30 MCQs

FPSC NO : 36
MCQs on Cardiovascular, Risk Factors, and Consequences
Submission DEADLINE : 13 September 2010

INSTRUCTIONS

- **With effect from 1st April 2008, the College Assessment of 30 MCQs has gone paperless.**
- **To submit answers to the following multiple choice questions, you are required to log on to the College Online Portal (www.cfps2online.org)**
- **Attempt ALL the following multiple choice questions.**
- **There is only ONE correct answer for each question.**
- **The answers should be submitted to the College of Family Physicians Singapore via the College Online Portal before the submission deadline stated above.**

1. In the INTERHEART Study by Yusuf et al published in 2004, a study of 52 low- and meddle-income countries, the five established risk factors - tobacco use, lipids, hypertension, diabetes, and obesity - predict approximately X% of the population attributable risk of acute myocardial infarction. What is X?

(A) 20%.
(B) 40%.
(C) 60%.
(D) 80%.
(E) 100%.

2. An adult male who is a current smoker wishes to know what is reduction of coronary artery disease risk which may occur if he were to stop smoking. He has not had an acute myocardial infarct. Which one of the following effect sizes of reduction of risk can be expected?

(A) 35%.
(B) 40%.
(C) 45%.
(D) 50%.
(E) 55%.

3. Coronary artery disease in Singapore is the third major cause of hospitalization in the last three years. Over this period, what is the trend of hospitalization for this condition?

(A) Rising.
(B) Falling.
(C) Static.
(D) No clear trend.
(E) None of the above.

4. From the National Health Surveillance Survey 2007 in Singapore, what is the trend of physical inactivity in the population with regards to the age-standardized prevalence of 2001 and 2007?

(A) Drop by 6.4%.
(B) Increase by 0.4%.
(C) Increase by 0.7%.
(D) Drop by 7.3%.
(E) None of the above.

5. In a study by Chan et al on myocardial infarction patients admitted to a local tertiary hospital, it was noted that 83% of patients younger than 45 years and 72% of patients 45 years and older with X were left untreated. What is X?

(A) Diabetes mellitus.
(B) Hyper-uricaemia.
(C) Hypertension.
(D) Hyper-triglyeridemia.
(E) Hyperlipidemia.

6. Which one of the following statements regarding recent studies in hypertension is TRUE?

(A) As we age, it is normal and acceptable to have a higher blood pressure.
(B) Cardiovascular risks begins to increase from blood pressures of 130/90 mmHg.
(C) For every 2 mmHg reduction in systolic blood pressure, cardiovascular mortality is increased by 7-10%.
(D) For each 20 mmHg increase in systolic pressure, mortality from ischaemic heart disease or stroke is doubled.
(E) None of the above.

7. Which of the following statements regarding the HYVET study is TRUE?

(A) It was undertaken in elderly subjects above 65 years with hypertension.
(B) The active treatment group was given the diuretic Indapamide only.
(C) The control group received Perindopril.
(D) There was a 10% reduction in the primary end point of fatal or nonfatal strokes.
(E) It demonstrated that antihypertensive treatment with indapamide, with or without perindopril, in persons 80 years of age or older is beneficial.

8. Which of the following statements regarding the ACCOMPLISH trial is TRUE?

(A) It compared treatment with either benazepril plus amlodipine or benazepril plus hydrochlorothiazide.
(B) It was a randomised, double-blind trial involving 1,500 hypertensive patients.
(C) This trial was terminated early at mean follow-up of 24 months.
(D) The benazepril–hydrochlorothiazide group had 2.2% fewer events than the benazepril–amlodipine group.
(E) The benazepril–hydrochlorothiazide combination was shown to be superior to the benazepril–amlodipine combination.

9. Which of the following statements regarding the ARBITER6-HALTS trial is TRUE?

(A) The primary end point was major adverse cardiovascular events.
(B) The secondary end point was change in carotid artery intima-media thickness.
(C) Extended-release niacin was compared with ezetimibe when combined with statin therapy.
(D) Ezetemibe therapy led to regression of carotid intima–media thickness and fewer clinical cardiovascular events.
(E) Niacin failed to reduce or halt progression of carotid intima-media thickness.

10. Which of the following regarding use of Telmisartan for hypertension treatment in patients who have vascular disease or diabetes with end-organ damage is TRUE?

(A) Ramipril better tolerated than telmisartan.
(B) Telmisartan is less effective than Ramipril in reducing cardiovascular events.
(C) Combination therapy of Telminsartan and Rampiril does not increase hypotension or renal dysfunction.
(D) Telmisaartan compared to placebo had no significant effect on the reduction of hospitalisations for heart failure.
(E) None of the above.

11. The goal of diabetic therapy in patients with diabetes mellitus is a glycated haemoglobin of LESS THAN:

(A) 5.5%.
(B) 6.0%.
(C) 6.5%.
(D) 7.0%.
(E) 7.5%.

12. The lipid abnormalities commonly associated with diabetes mellitus are:

(A) Decreased Apo-b liprotein.
(B) Increased HDL.
(C) Decreased VLDL.
(D) Increased LDL.
(E) Increased serum triglycerides.

13. Which of the following statements is TRUE?

(A) Diabetics with raised serum cholesterol are at marginally increased risk from cardiovascular events.
(B) Studies show that total serum cholesterol mirrors risk from coronary artery mortality.
(C) The DECODE study found that when pre-diabetics progresses to frank diabetes, cardiovascular mortality remains the same.
(D) The MRFIT study found that there was linear relationship between coronary heart disease and serum cholesterol down to 70mg/dl.
(E) Stroke accounts for 40% of all diabetic mortality.

14. Metabolic syndrome consists of :

(A) Hyperlipidaemia.
(B) Increased waist circumference.
(C) Insulin resistance.
(D) Hypertension.
(E) All of the above.

15. Which of the following regarding diabetic treatment is TRUE?

(A) Intensive glucose lowering leads to decreased mortality.
(B) Lifestyle changes are very successful for reducing HBA1C.
(C) Sulphonylureas remain first line in the management of diabetes.
(D) Macrovascular complications are the major cause of diabetic mortality.
(E) Microvascular complications are the major cause of diabetic mortality.

16. Chronic Kidney Disease (CKD) in Diabetics can arise from multiple causes, which of the following is TRUE?

(A) Diabetic nephropathy is the only main cause of CKD.

(B) Diabetics with frequent urine infections and chronic pylenephritis usually do not cause CKD.
(C) Neurogenic bladders and painless obstructive uropathy may also occur for long time and does not progress to CKD.
(D) Ischaemic nephropathy is a condition when there is CKD due to heart attacks.
(E) Diabetic and Ischaemic nephropathy accounts for the majority of CKD in the diabetic population.

17. Which of the following statement on diabetic nephropathy is CORRECT?
(A) Late histological changes include mesangial expansion and glomerular basement membrane thickening.
(B) Microalbuminuria not only predicts risk for overt diabetic nephropathy but is also associated with risk for cardiovascular diseases.
(C) Microalbuminuria is a late manifestation of Diabetic nephropathy.
(D) Screening for microalbuminuria is NOT the best means of detecting possible early diabetic nephropathy.
(E) Microalbuminuria can only be done by 24 hour urine.

18. About microalbuminuria in diabetic nephropathy, which one of the following is CORRECT?
(A) Early treatment can normalize it to normoalbuminuria.
(B) The normal rate of Albumin excretion in the urine is less than 10 mg/day.
(C) Microalbuminuria is defined as 20-300 mg/day of albuminuria
(D) Screening for microalbuminuria is done with a spot urine sample collected in the morning.
(E) Progression of microalbuminuria to macroalbuminuria is estimated to be in the range of 1.5-2% /year.

19. With regards to glycaemic control, which is TRUE?
(A) Good glycemic control prevents onset and delay progression of diabetic related renal complications.
(B) The choice of therapy to achieve normoglycaemia is less important than the ability to achieve target glycaemic control.
(C) The aim of treatment is to achieve HbA1c of 6.5% or lower.
(D) The elderly and those with advanced renal disease are exempted from very strict control as they run the risk of hypoglycaemia.
(E) All of the above are true.

20. About the aims of treatment and prevention of end stage kidney disease, which of the following statements is TRUE?
(A) ACE inhibitors or Angiotensin receptor blockers in hypertensive diabetic patients are of marginal effectiveness compared with beta-blockers.
(B) Weight reduction and lowering LDL cholesterol is of marginal use in DM patients with dyslipidaemia.
(C) Strict blood pressure control is important in diabetic nephropathy.
(D) Aldosterone antagonist and Aliskiren (direct renin inhibitor) are not effective to reduce albuminuria when used alone.
(E) Anaemia and calcium metabolism have only marginal impact on cardiovascular disease in diabetic patients.

21. The goal of antihypertensive therapy in patients with uncomplicated combined systolic and diastolic hypertension is a blood pressure of LESS THAN:
(A) 120/80 mmHg.
(B) 130/80 mmHg.
(C) 130/90 mmHg.
(D) 140/90 mmHg.
(E) 140/100 mmHg.

22. The goal of antihypertensive therapy in patients with diabetes mellitus, proteinuric chronic kidney disease, and known atherosclerotic cardiovascular disease is:
(A) 120/80 mmHg.
(B) 130/80 mmHg.
(C) 130/90 mmHg.
(D) 140/90 mmHg.
(E) 140/100 mmHg.

23. When starting a patient on antihypertensive medication, which of the following is TRUE?
(A) The amount of blood pressure reduction is the major determinant of reduction in cardiovascular risk.
(B) Studies show that the different classes of antihypertensive drugs have different outcomes in cardiovascular protection.
(C) The STOP-Hypertension-2 trial recommended use of newer classes of antihypertensive drugs.
(D) The CAMELOT trial found that amlodipine was superior to enalapril.
(E) Single drug therapy is unlikely to attain blood pressure goal in most patients with mild hypertension.

24. Beta blockers are no longer used for initial monotherapy because:
(A) There is an increased risk of cardiovascular events in older patients.
(B) They are associated with a higher rate of stroke amongst smokers.
(C) They are associated with impaired glucose tolerance and an increased risk of new onset diabetes.
(D) Better antihypertensive drugs are available.
(E) All of the above.

25. Which of the following regarding hypertensive treatment is TRUE?

(A) For patients with cardiovascular disease without heart failure, the blood pressure needs to be aggressively controlled to as low as possible.
(B) For patients with heart failure due to systolic dysfunction, ACE inhibitors and ARBs are recommended but not beta blockers.
(C) For patients with a prior stroke, use of diuretics and the combination of diuretics and an ACE inhibitor is recommended.
(D) For severe hypertensive patients with ECG evidence of left ventricular hypertrophy, ACE inhibitors have superior benefit to ARBs.
(E) ACE inhibitors cannot slow the progression of kidney disease among patients with proteinuric chronic kidney disease.

26. Which of the following statements is TRUE about Atrial Fibrillation (AF)?

(A) AF is not expected to increase with increasing age.
(B) AF is not associated with hypertension, diabetes, obesity & chronic renal disease.
(C) The lifetime risk of AF in adults is less than 20% in the Framingham Heart Study.
(D) AF is the most common form of arrhythmia in clinical practice and accounts for one third of all hospital admissions for arrhythmia-related diagnoses.
(E) All of the above.

27. Which one of the following statements about atrial fibrillation management is CORRECT?

(A) Rate control is the most important objective in atrial fibrillation management.
(B) Maintenance of sinus rhythm should be attempted in each patient with atrial fibrillation.
(C) Angiotensin receptor blockers are now accepted as the drug of choice in atrial fibrillation management.
(D) Rate control in atrial fibrillation is usually achieved by beta blockers, calcium channel blockers, and agents with effects on the atrioventricular node.
(E) Strict rate control is need for most patients.

28. Which of the following statements is TRUE about Thromboembolism and Atrial Fibrillation (AF)?

(A) The prevalence of stroke and AF is not age dependent.
(B) The risk of thromboembolism in non-valvular AF is different depending on whether it is paroxysmal, persistent or permanent.
(C) Thromboembolic phenomenon in AF does not pose significant morbidity and mortality.
(D) Strokes in AF are usually more serious than strokes from other causes.
(E) The presence of symptoms is not a consideration in the treatment of AF.

29. Risk stratification for thromboembolism is important in the treatment of Atrial Fibrillation (AF). Which statement of the following statement is CORRECT in this context?

(A) The commonest accepted strategy to prevent thromboembolism is the use of the CHADS score.
(B) CHADS is acronym for C (Congestive Cardiac Failure), H (Hyperlipidaemia), A (age more than 60 years old), D (Diabetes Mellitus) and S (History of stroke or TIA).
(C) A score of 0-2 usually means anti-platelet therapy is recommended, 3-4 means either anti-platelet or anti-coagulation, although anti-coagulation is preferred if history of stroke or TIA present.
(D) A score of 5-6 usually means anti-coagulation is recommended.
(E) The risk of stroke decreases with the CHAD score.

30. Which of the following descriptions of atrial fibrillation is CORRECT?

(A) Atrial fibrillation is classified into 4 categories.
(B) Paroxysmal atrial fibrillation refers to episodes that terminate spontaneously and usually last ltess than 14 days.
(C) Persistent atrial fibrillation refers to episodes that last more than 14 days.
(D) Permanent atrial fibrillation implies failure of cardioversion or cardioversion not attempted.
(E) Lone atrial fibrillation applies to atrial fibrillation in the older age group with no evidence of any cardiopulmonary or systematic disease.

FPSC No: 35
"Vaccinations 2010 - What's Old, What's New"
Answers to 30 MCQ Assessment

1.	B	11.	E	21.	B
2.	E	12.	D	22.	E
3.	E	13.	A	23.	A
4.	A	14.	E	24.	E
5.	E	15.	C	25.	A
6.	B	16.	C	26.	A
7.	A	17.	B	27.	E
8.	A	18.	D	28.	D
9.	E	19.	D	29.	E
10.	A	20.	A	30.	E