ASSESSMENT OF 30 MCQS

FPSC NO : 124
MCQS ON CHRONIC DISEASE MANAGEMENT 2025
SUBMISSION DEADLINE: 1 April 2025, 12 NOON

INSTRUCTIONS
- **To submit answers to the following multiple choice questions, you are required to log on to the College Online Portal (https://lms.wizlearn.com/cfps/)**
- **Please contact sfp@cfps.org.sg if you have not received an email on the new LMS account.**
- **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.**
- **There will be NO further extension of the submission deadline**

1. A nationwide cohort study of patients with proteinuria without hypertension who were screened in 2003-2004 and 2005-2006 was published by Lee H, Park MS, Kang MK, et al in 2023. Which ONE group of the following in the study had the biggest hazard ratio (HR)?

A. Proteinuria-free patients
B. Proteinuria-resolved patients
C. Proteinuria-developed patients
D. Chronic proteinuria patients
E. None of the above

2. In the 2024 European Society of Cardiology (ESC) hypertension clinical practice guidelines, which of the following is the CORRECT definition of hypertension?

A. BP ≥140/95 mmHg
B. BP ≥140/90 mmHg
C. BP ≥130/85 mmHg
D. BP ≥130/80 mmHg
E. BP ≥120/70 mmHg

3. Which of the following organs can be damaged by prolonged elevated blood pressure?

A. Eye
B. Bone and joints
C. Skin
D. Hearing
E. Hair and nails

4. A 50-year-old man presents with a blood pressure of 140/90mmHg. In which of the following is lowering of his blood pressure indicated?

A. Heart failure
B. Moderate CKD
C. Severe CKD
D. Type 2 diabetes mellitus
E. All of the above

5. A 45-year-old woman is diagnosed with obstructive sleep apnoea. Which of the following clinical features is likely to be ABSENT?

A. Day-time sleepiness
B. Snoring when sleeping
C. Renal bruit
D. Atrial fibrillation
E. Obesity

6. Patients on insulin therapy should receive essential education on the following EXCEPT:

A. Insulin injection technique
B. For patients with Type 1 DM, they should be advised to stop basal insulin if there is poor oral intake
C. Recognition and self-management of hypoglycaemia
D. Sick day management
E. Safe driving advice

7. Which of the following is FALSE regarding patient education for insulin therapy?

A. It improves the patient's experience and adherence to insulin therapy
B. It requires time and preparation
C. Different topics and focus can be covered at different stages of insulin therapy
D. It can only be done by diabetes nurse educators
E. The medical team should periodically check on the patient's and caregiver's understanding and clarify their doubts

8. The following strategies can be used to help patients overcome the barriers and challenges faced in insulin therapy EXCEPT:

A. Threaten patient into adherence with insulin therapy
B. Engage the patient in shared decision-making, select an insulin regimen that they can adhere to
C. Provide close supervision and follow up when the patient is newly initiated on insulin therapy
D. Offer measures to reduce weight gain through lifestyle and dietary advice, concomitant use of insulin with metformin, SGLT-2 inhibitors, GLP-1RA
E. Set appropriate and achievable goals with the patient and caregiver

9. The glycaemic profiles of people living with diabetes is affected by the following EXCEPT:

A. Dietary intake
B. Hyperthyroidism
C. Calcium channel blockers
D. Shift work
E. Pregnancy

10. Which of the following is NOT an early warning symptom of hypoglycaemia?

A. Drowsiness
B. Anxiety
C. Tremors
D. Diaphoresis
E. Palpitations

11. Which of the following is NOT involved with weight regulation?

A. The lateral hypothalamic area
B. Nucleus of solitary tract of the hindbrain
C. Lateral geniculate nucleus
D. The paraventricular nucleus
E. The hypothalamic arcuate nucleus (ARC)

12. All of the following are potential factors leading to obesity EXCEPT:

A. Genetic
B. Microbial content of the skin
C. Lifestyle
D. Emotional (Psychological)
E. Certain medications

13. Which of the following statements regarding weight regulation is FALSE?

A. Weight regain after weight loss is physiological and not necessarily due to a failure of conscious efforts to lose weight
B. The reward system of weight regulation is non-homeostatic in nature
C. "Liking" and "wanting" of food are subconscious processes
D. In human studies, functional MRI (fMRI) studies have shown overactivation of reward-encoding brain regions and/or deficiency in cortical inhibitory networks in obese people
E. The homeostatic weight regulation circuitry centres around the corticolimbic structures of the brain

14. Which of the following statements regarding dietary approaches to obesity treatment is TRUE?

A. Dietary modifications are generally not sustainable, hence dietary approaches are not as important as pharmacological approaches
B. There is no Randomised Controlled Trial (RCT) level of evidence regarding decreasing sugar sweetened beverages
C. Dietary approaches can be broadly categorised into energy-focused, macronutrient-focused, reward-focused, and dietary timing-focused
D. Long-term diet trials have not shown clear superiority of one diet over another with respect to average weight loss
E. Carbohydrates has a greater satiating effect compared with proteins and fats, especially in obese individuals

15. Which of the following is an example of intermittent fasting?

A. Alternate-day Fasting
B. The "5:2 diet"
C. Time-restricted feeding
D. Religious fasting
E. All of the above

16. Mr Xavier, a 60-year-old accountant, was recently started on allopurinol 100 mg OM two months ago and increased to 200 mg three weeks ago in your clinic. He informed you that he was diagnosed with UTI and started on ciprofloxacin. Today, he returns to your clinic with maculopapular rashes on his trunk and abdomen. He has a low-grade fever 37.5°C. Which is the most appropriate next step?

A. Stop ciprofloxacin and continue the chronic medications
B. Prescribe paracetamol for pain relief and switch to moxifloxacin 500 mg bd instead
C. Continue medications and check for dengue serology
D. Stop Allopurinol
E. Stop all medications and refer for possible drug allergy/Stevens Johnson Syndrome

17. Mr Tan, a 50-year-old with hypertension, sees you for routine review. He reports three gout flares in the past two months relieved with three days of arcoxia 120 mg OM for each episode. You perform some blood tests, which results return as below:

Creatinine 95 umol/L, eGFR >90 mL/min
Uric acid 460 mmol/L
HbA1c 5.4%
Random hypocount 7.5 mmol/L

He is currently on amlodipine 10 mg OM. He does not drink alcohol except one glass of wine once or twice a year on special occasions. His BMI is 20.5 kg/m².

Which is the most appropriate next step?

A. Prescribe NSAIDs standby for gout flare
B. Offer dietary advice and advise regular exercise only
C. Prescribe prednisolone standby for gout flare
D. Offer exercise and dietary advice
E. Discuss urate lowering therapy as he has had >2 gout flares in the past year, ideally with colchicine prophylaxis

18. Mr Yee, a 45-year-old, reports three recent gout attacks in the ankle or knee. You notice a small tophus over the left elbow.

He says that two years ago he had taken allopurinol 100 mg for one month then 200 mg OM for one month but stopped as it "did not help his gout and there was no improvement". When you probe, he states that he was not very adherent to allopurinol either then; as it was some years ago, he says he took it perhaps "once or twice a week". He states he did not experience any rashes or other side effects to it then.

He did not go back to see his previous GP as he has moved house and your clinic is nearer to his home.

He does not drink alcohol except one glass of wine once or twice a year on special occasions. He has past history of renal stones and also underlying ischaemic cardiomyopathy for which he is still being followed up by a cardiologist.

Two weeks ago, he was admitted to the hospital for a gout flare. He had a blood test done, which includes results as below; he is asking you to give him arcoxia 120 mg OM standby as it usually works for his gout flare.

Uric acid 620 mmol/L
Creatinine 120 umol/L, eGFR 55 mL/min
BP 144/94 mmHg, he has Hypertension on hydrochlorothiazide long-term.

Which is correct advice?

A. Discuss HLA B5801 testing particularly as febuxostat is being prescribed for him
B. Advise that he will need stepwise up-titration of allopurinol to reach uric acid target. Regular blood tests will allow this to be done safely
C. Advice that colchicine prophylaxis is helpful to prevent gout attacks and increased hydrochlorothiazide to optimise his BP control
D. Offer to initiate probenecid immediately as allopurinol is ineffective
E. Start him on allopurinol 300 mg once per day and inform that he should watch for signs of allergy such as rashes, red eyes, or mouth ulcers. If this happens, he should stop allopurinol immediately and see a doctor

19. You are seeing Mr Yee two months later. At your last visit he did not want colchicine prophylaxis as he did not want to take "too many tablets". He has started and is adherent to his urate-lowering agent. Last month his uric acid had decreased to 390 mmol/L.

He had a gout flare last week, hence he came to your clinic today to ask about colchicine prophylaxis.

Which is correct advice regarding colchicine prophylaxis?

A. Offer to start colchicine at 500 mcg once daily or alternate days as gout prophylaxis as his renal function is abnormal
B. Colchicine cannot help to reduce the frequency of flares especially during the first six months of Urate-lowering therapy
C. Tell him that if he is started on clarithromycin, he does not need to inform his doctor or pharmacist that he is on colchicine regularly as colchicine can have drug interactions. There is no impact of clarithromycin on colchicine prophylaxis, thus he can continue colchicine until it is completed
D. Regular colchicine prophylaxis in someone with normal renal function and regular monitoring can lead to renal failure
E. If he is having vomiting or diarrhoea, he should continue with colchicine prophylaxis and only stop when he is well

20. Mr Soh, a 40-year-old accountant on allopurinol 100 mg OM for the past eight months, reports two recent gout attacks in the last year. He has no other known past medical history. When you probe, he is adherent to allopurinol except for missing it perhaps once or twice a month.

His BMI 25 kg/m², BP 144/94 mm Hg. His last uric acid was one month ago which was 405 mmol/L.

He is having a gout attack now. He tells you that his gout attacks are usually aborted with colchicine TDS for two days. Whilst on colchicine, he does not experience diarrhoea except perhaps one episode of loose stools after which he stops colchicine.

Which is the most appropriate next step?

A. Start hydrochlorothiazide for hypertension
B. Start losartan for hypertension
C. Stop allopurinol during this acute gout attack and start colchicine. Consider checking a baseline creatinine if not recently available
D. Continue allopurinol at 100 mg OM despite the attack and start colchicine. Consider checking an updated uric acid level and creatinine two weeks after the attack resolves. If Uric acid is >360, explain that allopurinol 100 mg OM is insufficient and needs to be up titrated
E. Increase the allopurinol to 200 mg OM today and start colchicine. Consider checking a baseline creatinine if not recently done

21. Which of the following laboratory abnormalities is NOT associated with fatty liver?

A. Elevated uric acid
B. Elevated LDL-cholesterol
C. Elevated fasting glucose
D. Elevated creatinine kinase
E. Elevated triglycerides

22. Which of the followings has been showed to be useful in managing fatty liver?

A. Insulin injection
B. Metformin
C. Vitamin E
D. Exercises
E. Dieting

23. Which of the following is NOT part of the histology of non-alcoholic steatohepatitis?

A. Fatty infiltration in liver
B. Fibrosis of liver
C. Inflammatory infiltrates in lobules
D. Cirrhosis
E. Mallory bodies

24. Which of the followings should NOT be routinely performed for patients with suspected non-alcoholic fatty liver disease?

A. Liver biopsy
B. Imaging studies like US scan
C. Fasting lipids
D. Fasting glucose
E. Liver function test

25. Which of the following statement on NAFLD is false?

A. Weight loss is the prime way of management
B. Long-term management is needed
C. Patients should be referred to specialists for further evaluation
D. Statins can be used in patients with NAFLD and dyslipidaemia
E. Metformin should be used as first-line treatment in patients with NAFLD and diabetes mellitus

26. Which of the following test(s) is/are routinely used in the assessment of heart failure?

A. Holter monitoring
B. ECG and echocardiography
C. Ambulatory blood pressure monitoring
D. Echocardiography
E. Trans-oesophageal echocardiography

27. In the clinical assessment of heart failure, which of the following is FALSE?

A. Jugular venous distention, an S1 heart sound, and non-displaced apical impulse significantly increase the likelihood of the diagnosis
B. Hypertension, CAD, and valvular disease are the most common causes
C. Fatigue, weakness, dyspnoea, orthopnoea, paroxysmal nocturnal dyspnoea, and oedema are common symptoms
D. Cardiomegaly on CXR is helpful in supporting the diagnosis
E. An ECG is necessary in patients with suspected heart failure to assess for evidence of CAD, left ventricular hypertrophy, and dysrhythmia

28. In preserved ejection heart failure (HFpEF), which of the following is NOT a key clinician recommendation?

A. Request a brain natriuretic peptide or N-terminal pro-brain natriuretic peptide level for patients with possible heart failure if the diagnosis is uncertain

B. Those patients with coronary artery disease who have indications should be offered revascularisation

C. Patients should be referred for endurance and resistance training

D. Those patients with suspected heart failure should be referred for transthoracic echocardiography to confirm the diagnosis and identify preserved or reduced ejection fraction

E. The use of nitrates, spironolactone, and angiotensin receptor blockers should be considered early in patients with HFpEF

29. Which of the following is FALSE about reduced ejection fraction heart failure (HErEF)?

A. The goals of therapy) are to reduce morbidity (i.e., reducing symptoms, improving health-related quality of life and functional status, decreasing the rate of hospitalisation) and to reduce mortality

B. Beta blockers, angiotensin converting enzyme (ACE) inhibitor, angiotensin II receptor blocker (ARB), or angiotensin receptor-neprilysin inhibitor (ARNI) and mineralocorticoid receptor antagonist (MRA) are the preferred antihypertensive agents because these agents improve survival

C. Recommended lifestyle modifications include smoking cessation, restriction of alcohol consumption, salt restriction, weight reduction in obese patients, as well as daily weight monitoring to detect fluid accumulation before it becomes symptomatic

D. Patients at high risk for re-hospitalisation should be referred to a long-term care facility

E. Treatment should address contributing factors such as hypertension, myocardial ischemia or infarction, diabetes mellitus, thyroid dysfunction, and infection

30. Which of the following is FALSE about brain natriuretic peptide (BNP):

A. Plasma levels of BNP often correspond to the severity of underlying cardiac dysfunction and can provide relatively reliable prognostic information

B. It is secreted in response by the atria and ventricles in response to stretching for increased wall tension

C. Obesity, diuretics, ACE inhibitors, beta blockers, angiotensin receptor antagonists, and aldosterone antagonists can lead to falsely high levels of BNP

D. Common conditions that may falsely elevate plasma BNP levels include age and significant renal dysfunction

E. Patients with BNP levels higher than 1,000 pg/mL often have an especially poor prognosis