

## ASSESSMENT OF 30 MCQs

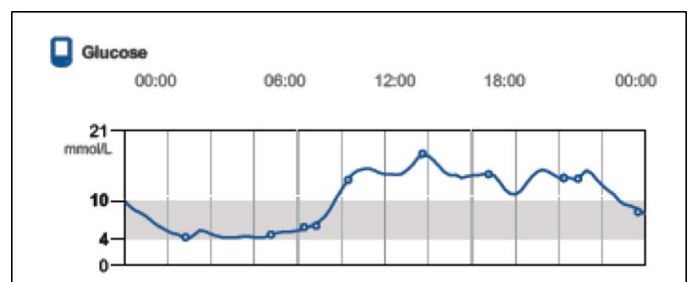
**FPSC No : 78**  
**MCQS ON CHRONIC DISEASE MANAGEMENT (RERUN)**  
**Submission DEADLINE: 28 APRIL 2020, 12 NOON**

**INSTRUCTIONS**

- To submit answers to the following multiple choice questions, you are required to log on to the College Online Portal ([www.cfps2online.org](http://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.
- There will be NO further extension of the submission deadline

- Based on recent evidence suggesting benefits of lower BP targets (Whelton et al, 2017), the definition of hypertension for diagnosis is x mmHg. What is x?
  - 160/100
  - 140/90
  - 135/85
  - 130/80
  - Age plus 100
- Which of the following about home BP measurement is normal?
  - Daytime <140/90 mmHg and night-time 120/70 mmHg
  - Daytime <135/85 mmHg and night-time 120/70 mmHg
  - Daytime <150/85 mmHg and night-time 120/80 mmHg
  - Daytime <150/90 mmHg and night-time 120/70 mmHg
  - Daytime <160/90 mmHg and night-time 120/80 mmHg
- In a patient given dual RAAS blocking therapy, which of the following may be the outcome?
  - Reduced risk for acute kidney injury.
  - Increased risk for hypokalaemia.
  - Increased risk for all-cause mortality.
  - Increased risk for hypernatremia.
  - None of the above.
- A study by Epstein & Sowers in 1992 found hypertension was x times as prevalent in patients with diabetes compared to the general population. What is x?
  - 2
  - 2.5
  - 3
  - 3.25
  - 3.5
- Mr Tan, aged 85, stays in a nursing home because there is no one at home to look after him. He needs maximum assistance in basic activities in daily living. He has hypertension, hyperlipidemia, and diabetes mellitus. What is the target BP for him?
  - <130/80 mm Hg
  - <135/85 mm Hg
  - <140/85 mm Hg
  - <140/90 mm Hg
  - <150/90 mm Hg
- Insulin therapy is often challenging for the following reason EXCEPT:
  - Cost
  - Convenience
  - Complicated
  - Pain
  - Personal health beliefs
- Successful prescription of insulin therapy may be achieved with the following strategy:
  - Providing support for administration of insulin injection
  - Offering regimen with least disruption to lifestyle
  - Staged approach to initiation beginning with glucose awareness
  - Wait until oral agents are maximised before introducing insulin therapy
  - Introduce use of gadgets that will minimise pain
- Some of the common myths about insulin therapy include the following except:
  - "Once started, must continue for life"
  - Can cause lower limb edema
  - Should only be offered as the last resort
  - Can worsen neuropathy and retinopathy
  - "Insulin injections will hurt my baby"

Refer to diagram for Question 9 & 10:



**9. The following best describes the glycemic profile:**

- A. All day hyperglycemia
- B. Daytime hyperglycemia
- C. Overnight hyperglycemia
- D. Postprandial hyperglycemia
- E. Premeal hyperglycemia

**10. The following insulin therapy may be initiated for such glycemic profile except:**

- A. Basal insulin given the morning
- B. Premixed insulin given at breakfast
- C. Prandial insulin given at biggest meal
- D. Basal insulin given at bedtime
- E. Self-mixed insulin given at breakfast

**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 and 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 categorized 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 X, 40-year-old, smoker with hypertension sees you for routine review. He reports two gout flares in the past two months. His current labs are creatinine 106, eGFR 65ml/min, uric acid 400, HbA1c 5.4%, random hypo-count 7.5 mmol/L. He is currently on Amlodipine 5mg OM. He does not drink alcohol except one glass of wine once or twice a year on special occasions. His BMI is 25kg/m2.**

**Which is the most appropriate next step?**

- A. Offer dietary advice
- B. Offer dietary advice and advise regular exercise
- C. Offer to initiate urate lowering therapy, ideally with colchicine prophylaxis
- D. Prescribe NSAIDs standby for gout flare
- E. Prescribe prednisolone standby for gout flare

**17. Mr Y, 45-year old reports three recent gout attacks in the ankle or knee. BP 144/94 mmHg. You notice a small tophus over the left elbow. He said that two years ago he had taken allopurinol 100mg for a month then 200mg OM for three months but stopped as it "did not help his gout and there was no improvement"; and therefore, did not go back to see his previous GP.**

**Two weeks ago, he was admitted to the hospital for a gout flare, his uric acid was 620 mmol/L and creatinine was 95, eGFR 65mL/min.**

**Which of the following is incorrect advice?**

- A. Offer to restart allopurinol.
- B. Advise that he will need stepwise up titration of a urate lowering agent to reach uric acid target of ideally < 300 mmol/L. Regular blood tests will allow this to be done safely.
- C. Advise that colchicine prophylaxis is helpful and can be started to prevent gout attacks while titrating urate lowering agent to reach uric acid target.
- D. Advise him that allopurinol is ineffective and should not be started. Offer to initiate febuxostat or probenecid.
- E. Inform him that if he is increasing allopurinol to a dose higher than previously taken, 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.

**18. You are seeing Mr Y two months later. At your last visit he did not want colchicine prophylaxis as he did not want to take too many medications. 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; thus, he came to your clinic today to ask about colchicine prophylaxis.**

**Which of the following is incorrect advice regarding colchicine prophylaxis?**

- A. Offer to start colchicine at 500mcg once daily as prophylaxis.
- B. Colchicine can help to reduce the frequency of flares especially during the first six months of Urate lowering therapy.
- C. Tell him if he has started on new medications, he should inform his doctor or pharmacist that he is on colchicine regularly so they can make the necessary adjustments.
- D. If he is having vomiting or diarrhoea, he should omit colchicine prophylaxis; only restart when he is well.
- E. Regular colchicine prophylaxis in someone with normal renal function can lead to renal failure.

**19. Mr Y, a 60-year-old mechanic was recently started on allopurinol 100mg two months ago and increased to 200mg three weeks ago in your clinic. He came down with flu four days ago and developed rashes after being given Klacid, fluimucil and loratadine by another GP. Today, he returns to your clinic.**

**Which is the most appropriate next step?**

- A. Stop Klacid and continue the chronic medications
- B. Prescribe paracetamol for pain relief and switch to Levofloxacin 500mg bd instead
- C. Continue medications and check for Dengue serology
- D. Stop Klacid, fluimucil and loratadine
- E. Stop all medications and refer for possible SJS

**20. A 40-year old accountant on allopurinol 100mg OM for the past one year reports two recent gout attacks in the last year. He has no other known past medical history. His BMI is 25 kg/m<sup>2</sup>, BP 144/94mm Hg. He is having a gout attack now. He tells you that his gout attacks are usually aborted with colchicine TDS for two days. 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. Stop Allopurinol during this acute gout attack and start colchicine. Consider checking a baseline creatinine if not recently done.
- B. Continue allopurinol at 100mg OM despite the attack and start colchicine. Consider checking a baseline creatinine if not recently done.
- C. Increase the allopurinol to 200mg OM today and start colchicine. Consider checking a baseline creatinine if not recently done.
- D. Start hydrochlorothiazide for hypertension.
- E. Start Losartan for hypertension.

**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 following has NOT been proven 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 following should be 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 dyslipidemia
- 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, dyspnea, orthopnea, paroxysmal nocturnal dyspnea, and edema 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 revascularization.
- 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 (HFrEF):**

- 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 hospitalization) 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-hospitalization 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 1000 pg/mL often have an especially poor prognosis.

### OSTEOPOROSIS

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

### GERIATRIC CARE (RE-RUN)

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