

## CPD questionnaire • July/August

### Heart failure: understanding the condition and navigating its management

1. Which of the following is a hallmark symptom of heart failure with reduced ejection fraction (HFrEF)?

- a Bradycardia
- b Peripheral oedema
- c Hyperglycaemia
- d Hypotension

2. What is the primary role of beta-blockers in the management of heart failure?

- a Increase cardiac output
- b Reduce fluid overload
- c Lower myocardial oxygen demand and prevent arrhythmias
- d Enhance renal function

3. Which of the following medications has been shown to reduce mortality in patients with HFrEF?

- a Digoxin
- b Furosemide
- c Sacubitril/valsartan
- d Atorvastatin

### The role of pharmacists in optimising patient outcomes to reduce the burden of tonsillitis

4. Which of the following statements about the aetiology of tonsillitis is correct?

- a Bacterial tonsillitis is more commonly caused by *Haemophilus influenzae* than *Streptococcus pyogenes*
- b *Streptococcus pyogenes* infections are always preventable with antibiotics
- c Viral infections account for the majority of tonsillitis cases
- d *Mycobacterium tuberculosis* is a typical acute cause of tonsillitis in children
- e *Corynebacterium diphtheriae* is a frequent pathogen in vaccinated populations

5. Which of the following treatment strategies is most appropriate for a patient with confirmed streptococcal tonsillitis and a Type 1 penicillin allergy?

- a Phenoxyethylpenicillin for 10 days
- b Cephalexin for 5–7 days
- c Azithromycin for 3–5 days
- d Amoxicillin for 7 days
- e Benzathine penicillin G IM single dose

6. Which of the following statements regarding antimicrobial resistance (AMR) in tonsillitis is TRUE?

- a Resistance in *S. pyogenes* is primarily due to beta-lactamase production.
- b Topical antibiotics like neomycin are always safe to use for sore throat.
- c Macrolide resistance is decreasing globally due to shorter treatment durations.
- d Co-pathogens like *S. aureus* can contribute to treatment failure by inactivating penicillin.
- e Penicillin resistance in *S. pyogenes* is due to its ability to mutate penicillin-binding proteins.

### Advances in hypothyroidism management: rethinking therapy beyond levothyroxine

7. Which of the following is a common symptom of hypothyroidism in adults?

- a Rapid heart rate
- b Heat intolerance
- c Weight gain and fatigue
- d Increased appetite

8. Which of the following is the most common cause of hypothyroidism in iodine-sufficient areas?

- a Central hypothyroidism
- b Graves' disease
- c Hashimoto's thyroiditis
- d Pituitary adenoma

9. What is the main reason that combination LT4+LT3 therapy is underutilised despite evidence of benefit in some patients?

- a It is associated with a higher risk of cancer
- b It lacks fixed-dose formulations that mimic natural hormone ratios
- c It is significantly more expensive than LT4 monotherapy
- d It is not approved in any country

### Depression unveiled: a comprehensive review of pathophysiology and treatment advances

10. Which of the following best describes the monoamine hypothesis of depression?

- a Depression is caused by excessive production of cortisol and other glucocorticoids.
- b Depression results from deficits in serotonin, norepinephrine, and dopamine in key brain regions.
- c Depression is due to overactivation of the glutamate and GABA systems.
- d Depression is caused solely by genetic mutations in serotonin receptors.

11. Which neurotransmitter imbalance has been associated with elevated levels in the blood, brain, and cerebrospinal fluid of patients with depression?

- a Dopamine
- b Glutamate
- c GABA
- d Acetylcholine

12. Which of the following antidepressant classes is considered first-line therapy due to its proven efficacy and safety profile?

- a Monoamine oxidase inhibitors (MAOIs)
- b Tricyclic antidepressants (TCAs)
- c Selective serotonin reuptake inhibitors (SSRIs)
- d Benzodiazepines

**SGLT2 inhibitors in type 2 diabetes mellitus: a pharmacist's guide to optimised care**

13. Which of the following best explains the glucose-lowering action of SGLT2 inhibitors in type 2 diabetes mellitus (T2DM)?

- a Increasing insulin secretion by pancreatic beta cells
- b Inhibiting hepatic glucose production
- c Delaying intestinal carbohydrate absorption
- d Enhancing urinary glucose excretion via inhibition of glucose reabsorption in the proximal tubule
- e Blocking glucagon receptors

14. Which clinical trial demonstrated a 38% reduction in cardiovascular mortality in high-risk T2DM patients treated with empagliflozin?

- a DECLARE-TIMI 58
- b DAPA-CKD
- c EMPA-REG OUTCOME
- d CREDENCE
- e CANVAS

15. Which of the following medications is a UGT enzyme inducer that may reduce the plasma concentration and efficacy of SGLT2 inhibitors like dapagliflozin and canagliflozin?

- a Paracetamol
- b Probenecid
- c Simvastatin
- d Valsartan
- e Rifampicin

**Human papillomavirus (HPV) as the main cause of cervical and other related cancers: a review**

16. Which two HPV types are most strongly associated with the development of cervical cancer?

- a HPV-6 and HPV-11
- b HPV-16 and HPV-18
- c HPV-31 and HPV-45
- d HPV-52 and HPV-58

17. What is one of the key roles of pharmacists in managing HPV-related diseases, as discussed in the article?

- a Performing surgical treatment for cervical cancer
- b Prescribing chemotherapy directly
- c Educating the public and managing vaccine supply
- d Diagnosing cancers through biopsy

18. What is a primary reason why HPV vaccination coverage remains low in some countries?

- a Lack of effectiveness of the vaccine
- b Overabundance of screening programmes
- c High mutation rate of HPV strains
- d Barriers such as cost, infrastructure, and awareness

**Interprofessional impressions amongst 4<sup>th</sup>-year medical and pharmacy students at Sefako Makgatho Health Sciences University**

19. What was the primary aim of the Interprofessional Education and Collaborative Practice (IPECP) initiative described in the article?

- a To evaluate clinical outcomes in private healthcare settings
- b To implement a standardised curriculum across all health professions
- c To provide health professions students with structured interprofessional collaborative practice exposure
- d To train pharmacists to work independently of other healthcare professionals

20. Which of the following BEST describes a key benefit of interprofessional collaborative practice highlighted in the article?

- a Reduction in the duration of undergraduate education
- b Improved patient outcomes through coordinated care
- c Increased administrative efficiency for healthcare institutions
- d Elimination of the need for continuing professional development

21. What setting was used for the practice-based IPECP initiative?

- a Hospital emergency department
- b Rural health clinic
- c Community-based service-learning site
- d University

The answers for these CPD questions will be in the upcoming issue of the SAPJ.  
This activity can contribute towards your CPD compliance.

## CPD answers • May/June 2025

1. c   2. b   3. b   4. c   5. c   6. c   7. b   8. c   9. d   10. a   11. d   12. c  
13. a   14. d   15. b   16. c   17. b   18. c