

OCTOBER 2010 – DIABETES

CPD questionnaires must be completed online via www.cpdjournals.org.za. After submission you can check the answers and print your certificate. Questions may be answered up to 6 months after publication of each issue.

ROUTINE MONITORING OF DIABETES MELLITUS IN ADULTS AT PRIMARY HEALTH CARE LEVEL, AND SMBG

- 1. According to SEMDSA guidelines, glycaemic targets for control in type 2 diabetes include (choose one):**
 - A. Fasting plasma glucose <8 mmol/l
 - B. Post-prandial plasma glucose <10 mmol/l
 - C. HbA_{1c} <6.5%
 - D. HbA_{1c} <7.0%
 - E. Fasting plasma glucose is the primary target for glycaemic control.
- 2. According to SEMDSA guidelines, a lipid profile for type 2 diabetes (choose one):**
 - A. Should be performed every second year
 - B. Targets should include a LDL-cholesterol <2.5 mmol/l
 - C. Targets should include total cholesterol <5.0 mmol/l
 - D. Should only be done initially if there are additional cardiovascular risk factors, or a history of ischaemic heart disease
 - E. Achieving the recommended total cholesterol is the primary goal of therapy.

HOW TO START AND OPTIMISE INSULIN THERAPY

- 3. True (A) or false (B):**

The two defects in type 2 diabetes are deteriorating beta cell function with insulin resistance.
- 4. The ADA recommends the target HbA_{1c} for glycaemic control (choose one):**
 - A. <6%
 - B. <7%
 - C. <6.5%
 - D. <7.5%
 - E. Between 6% and 7%.
- 5. Which one of these is not an indication for insulin therapy?**
 - A. Gestational diabetes mellitus
 - B. When A_{1c} ≥7% and lifestyle intervention and metformin fail
 - C. Uncontrolled diabetes mellitus with catabolism defined as A_{1c} >10%
 - D. Random glucose levels consistently >16.7 mmol/l
 - E. Patient with A_{1c} of 8% on lifestyle intervention only.

RENOPROTECTION IN DIABETES MELLITUS

- 6. Which one of the following plays no direct role in the pathogenesis of diabetic nephropathy?**
 - A. Protein kinase C (PKC) activation
 - B. Glucose transporter-1 (GLUT-1)
 - C. Insulin-like growth factor (IGF)
 - D. Generation of advanced glycation end-products (AGEs)
 - E. Sympathetic nervous system (SNS) activation.
- 7. In the protection of the kidney, one of the following has shown success in numerous studies:**
 - A. Inhibitors of plasminogen activator inhibitor (PAI-1)
 - B. Inhibitors of advanced glycation end-product (AGE)
 - C. Inhibitors of angiotensin-converting enzyme (ACE)
 - D. Inhibitors of protein kinase C (PKC)
 - E. Restoration of the glycosaminoglycan contents of the basement membranes.

DIAGNOSIS OF DIABETES IN 2010

- 8. True (A) or false (B):**

Diabetes may be diagnosed if the fasting plasma glucose is ≥7.0 mmol/l.
- 9. True (A) or false (B):**

Current universal guidelines are that an HbA_{1c} of ≥6.5% may be used to diagnose diabetes.

- 10. True (A) or false (B):**

Pre-diabetes may be diagnosed if a 2-hour plasma glucose after a 75 g oral glucose tolerance test is ≥7.1 mmol/l.

WHAT TYPE OF DIABETES DOES MY PATIENT HAVE AND IS IT RELEVANT?

- 11. True (A) or false (B):**

Most patients with type 1 diabetes have the immune-mediated form of type 1 diabetes mellitus with islet cell antibodies and often have other autoimmune disorders such as Hashimoto's thyroiditis, Addison's disease, vitiligo or pernicious anaemia.
- 12. True (A) or false (B):**

Diabetic ketoacidosis (DKA) can occur in the presence of partial or temporary insulin deficiency, and therefore cannot be relied on as an absolute indicator that the patient has type 1 diabetes or that long-term insulin therapy will be required.
- 13. True (A) or false (B):**

In most patients, classification can be made reliably on the basis of clinical presentation and course, and therapeutic trials can safely be undertaken without a specific aetiological diagnosis.

MANAGEMENT OF DIABETES IN THE ELDERLY

- 14. True (A) or false (B):**

Routine screening for diabetes in elderly patients has a high detection rate.
- 15. True (A) or false (B):**

Glibenclamide should not be prescribed for newly diagnosed patients with type 2 diabetes (>70 years) because of the marked risk of hypoglycaemia.
- 16. True (A) or false (B):**

Participation in self-selected exercise activities is independently associated with delaying the onset and progression of frailty in elderly subjects.

DIABETES EDUCATION IN PRIMARY CARE: A PRACTICAL APPROACH USING THE ADDIE MODEL

- 17. The ADDIE model for educational programmes stands for all of the following, except (choose one):**
 - A. Analyse
 - B. Design
 - C. Describe
 - D. Implement
 - E. Evaluate.
- 18. All of the following are recommended in the content of diabetic education, except (choose one):**
 - A. Engaging with local beliefs
 - B. Side-effects of medication
 - C. Portion size at meal times
 - D. Caring for one's feet
 - E. A goal of 60 minutes physical activity a week.

CARDIOVASCULAR PROTECTION IN TYPE 2 DIABETES MELLITUS

- 19. True (A) or false (B):**

Most patients with type 2 diabetes mellitus should receive fibrates because hypertriglyceridaemia is common in diabetes.
- 20. Choose the incorrect statement:**
 - A. Cardiovascular disease is a major complication of type 2 diabetes mellitus
 - B. Most diabetic patients require multiple antihypertensive agents for adequate blood pressure control
 - C. Treating all risk factors aggressively in patients with diabetes almost eliminates cardiovascular events
 - D. Good glycaemic control reduces microvascular complications
 - E. The benefits of aspirin outweigh its risk in patients who have had a myocardial infarction.