



CHRONOLAB DIAGNOSTIC GROUP

CLINICAL CHEMISTRY / QUÍMICA CLÍNICA

RHEUMATOLOGY DIAGNOSTIC / DIAGNÓSTICO DE REUMATOLOGÍA

SERODIAGNOSTIC / SERODIAGNÓSTICO

TURBIDIMETRY / TURBIDIMETRÍA



CPD Challenge

Questions

Were you paying attention? Test your retentive capacities on issues raised in this edition of *Africa Health*. You can quietly test yourself, or – and we're particularly keen on this – you could make it a part of the foundation of a Journal Club in your department or health institution. Life-long learning is a collaborative exercise and the whole health team can be positively stimulated by being involved in such discussion.

Q1. Anatomy of the Heart

- i. Why is cardiac pain referred to the neck, chest and arm?
- ii. Name the four key branches of the artery system.

Q2. Laboratory Diagnosis of STIs

- i. Why are nucleic acid amplification tests (NAATs) becoming the test method of choice?
- ii. With HIV, samples found reactive on a screening test should be submitted for confirmatory tests, preferably retesting from the original clot. How should you then go on to confirm the result?

Q3. Management of STIs in non-genitorurinary specialist settings

Should you refer cases of primary acute genital herpes?

Q4. Clinical Review

- i. Name the four leading causes of blindness in Africa.
- ii. Male circumcision (MC) can reduce the risk of acquiring what sexually transmitted infections?
- iii. The World Health Organization (WHO) and UNAIDS set an ambitious goal for increasing male circumcision coverage in Africa. What is the goal and it is it going to be achieved?
- iv. Give four reasons why scale-up and adoption of voluntary male medical circumcision (VMMC) are lagging in sub-Saharan Africa.

Answers

Q1. satisfactorily in primary care without referral.

Q4. i. Cataract, glaucoma, corneal scar, and diabetic retinopathy.

ii. Male circumcision can reduce male acquisition of HIV, herpes simplex virus type 2 (HSV-2), human papillomavirus (HPV), genital ulcers and syphilis. MC may also reduce the risk of men acquiring Trichomonas vaginalis, Chlamydia trachomatis, and Mycoplasma genitalium infection. MC reduces female partners' acquisition of Trichomonas vaginalis, bacterial vaginosis, HPV, genital ulcer disease, and syphilis.

iii. WHO and UNAIDS established a goal of 80% MC coverage among men aged 15-49 in 13 eastern and southern African countries by 2016. This goal will not be met as most countries, with the exception of Kenya, are lagging far behind the rate of MC needed to meet this goal.

iv. Some of the reasons for slow scale-up of VMMC are inadequate human resources, limited access to services, reliance on conventional surgical methods, cost and lack of demand. Demand is limited by men's fear of pain, concerns about sexual potency and dysfunction, time lost from work, cultural beliefs and perceived low risk for HIV.

Q1. i. The visceral layer and the heart itself are supplied by sympathetic nerves from the cardiac plexuses; these in turn carry general visceral afferent fibres to the vertebral levels from which the sympathetic supply arises, which are the three cervical sympathetic ganglia and the T1-5 ganglia.

ii. Right Coronary artery; Left Coronary artery; Circumflex artery; Anterior interventricular artery.

Q2. i. NAATs are tolerant of variable storage conditions; tolerant of delays in reaching the laboratory; and their high sensitivity allows use with samples taken non-invasively, such as urine samples and self-taken vaginal swabs. Specificity is also good.

ii. i) a test to discriminate HIV-1 or HIV-2; ii) test a second blood sample taken at a different time. Expect some discordant results in the early infection period; iii) Retest two weeks later to monitor the evolving pattern of reactivity.

Q3. No, treat it in the primary setting. It is a painful and distressing condition that needs immediate treatment with antivirals without waiting for swab results. It frequently affects young women and can be managed