

1. Which one of the following statements is TRUE:
 - a) Vasculopathy in HIV-infected children is being increasingly recognised (frequency 1 - 2%).
 - b) Herpes and tuberculosis are the leading infective causes of vasculitides.
 - c) The pathophysiology of HIV vasculopathy includes direct vascular endothelial infection with HIV only.
 - d) Postmortem studies of HIV-infected children showed a 10% prevalence of large-vessel arteriopathy.
2. True (A) or false (B) – click on the correct answer:
 Authors describe decreased secretion of vascular endothelial cell growth factor-A (VEGF-A) by T lymphocytes in HIV-1-infected individuals.
3. Which one of the following statements is FALSE:
 - a) The incidence of cerebrovascular disease is described as 2.6% in children with HIV.
 - b) Medium- and large-vessel involvement can be found in unusual sites such as the descending aorta, subclavian vessels, and renal and internal carotid arteries.
 - c) There is a proven link between Takayasu's arteritis and tuberculosis in the pathogenesis of large-vessel vasculopathy.
 - d) Medical management, including HAART, in children has been used with good results.
4. True (A) or false (B) – click on the correct answer:
 Echocardiography and carotid artery Doppler are useful screening tools in HIV large-vessel vasculopathy.
5. True (A) or false (B) – click on the correct answer:
 Before the widespread use of highly active antiretroviral therapy (HAART), vascular disease in children was associated with severe immunosuppression. However, recently a few patients who were virally suppressed presented with vascular disease, and the immune-reconstitution inflammatory syndrome (IRIS) has been implicated in the pathogenesis.
6. Which one of the following statements is TRUE? Surfactant administration to preterm infants requiring NCPAP for RDS at an FiO_2 threshold of 0.45 is associated with the following outcomes when compared with use of higher thresholds:
 - a) Increased mechanical ventilation
 - b) Lower incidence of bronchopulmonary dysplasia
 - c) Increased air-leak syndromes
 - d) Higher incidence of PDA.
7. True (A) or false (B) – click on the correct answer:
 The use of NCPAP for RDS is associated with increased mortality.
8. With respect to preterm infants treated with NCPAP for RDS, which one of the following statements is TRUE?
 - a) Administration of surfactant when the a/APO₂ ratio is below 0.36 or an FiO_2 requirement is above 0.37 results in a decreased need for subsequent mechanical ventilation.
 - b) Administration of surfactant if the maximum FiO_2 requirement is below 0.3 is unlikely to be of significant benefit.
 - c) Most infants will require subsequent mechanical ventilation.
 - d) An abnormally low PaCO₂ suggests compromised alveolar ventilation.
9. When considering administering surfactant to preterm infants treated with NCPAP for RDS, which one of the following statements is TRUE?
 - a) There will only be clinical benefit if a dose of 200 mg/kg is administered.
 - b) Standard practice is to follow surfactant administration with at least 30 minutes of mechanical ventilation.
 - c) A reasonable oxygen saturation target is 88 - 94%.
 - d) There are no data on the use of bovine surfactant for this indication.
10. Which one of the following statements is FALSE?
 - a) The use of liquid paediatric antiretroviral formulations that require refrigeration is often not feasible in resource-limited rural areas.
 - b) In the absence of an appropriate paediatric formulation, the World Health Organization advocates that an adult antiretroviral formulation may be employed in an off-label manner.
 - c) The off-label use of adult formulations in children often requires manipulation that may affect the accuracy of the dose.
 - d) The method of dispersing the contents of a stavudine capsule in water is condoned by the manufacturers under special circumstances.
11. True (A) or false (B) – click on the correct answer:
 The accuracy of the 'opened capsule' method for stavudine dosing in young children has been found to be acceptable.
12. Which one of the following statements is TRUE of employing adult formulations in children:
 - a) Off-label use of adult formulations is recommended in paediatrics.
 - b) The accuracy of an off-label dosing method must be tested before it is used in children.
 - c) The bioavailability of capsule contents mixed into water is the same as that of an intact capsule.
 - d) The off-label use of an adult formulation is appropriate even in areas where a suitable paediatric formulation is readily available and feasible.
13. Which one of the following statements is TRUE regarding the 'opened capsule' dosing method:
 - a) The powder contents of capsules are reliably easy to disperse in water.
 - b) The 'opened capsule' dosing method has been shown to be accurate for all brands of stavudine capsules.
 - c) When the contents of a stavudine capsule are mixed into water, the visible sediment that collects at the bottom of the container is likely to contain active drug.
 - d) If the contents of a capsule do not disperse easily in water, the accuracy of the dose may be compromised.
14. True (A) or false (B) – click on the correct answer:
 When the contents of a stavudine capsule are mixed into water, it is essential for the sediment to be included in the aliquot given to the child.
15. True (A) or false (B) – click on the correct answer:
 The off-label 'opened capsule' administration method for stavudine dosing in children should only be used if generic capsules the contents of which disperse rapidly and easily in water can be supplied.
16. True (A) or false (B) – click on the correct answer:
 Urine abnormalities are not common in children starting school, so there is no need for urinalysis in this group.
17. Which one of the following statements is FALSE:
 - a) Urinary tract infection (UTI) is common in childhood.
 - b) The symptoms and signs of UTI are usually specific.
 - c) Older female children are more likely to have UTI than male children.
 - d) There are simple diagnostic tests available for UTI.
18. True (A) or false (B) – click on the correct answer:
 Long-term complications are not a problem in UTI.
19. Which one of the following is TRUE of abnormalities in urine:
 - a) They may be an early sign of urinary tract infections.
 - b) They always imply kidney disease.
 - c) Diseases of other organs/systems are not detected by urinalysis.
 - d) Proteinuria and/or haematuria have been shown to be significant predictors of end-stage renal disease.
20. Which one of the following statements is FALSE:
 - a) Routine medical examination including urinalysis should ideally occur at the first school entry.
 - b) Routine urinalysis should not be part of medical examination of pupils at the point of school entry.
 - c) Urinalysis using the simple dipstick is a valid screening tool.
 - d) Children with urine abnormalities require further follow-up to determine the cause.