Hard to swallow (answers on page 34)

Part one

Anita, a woman of Indian origin living in West Africa, was admitted as an emergency to our local hospital with a history of a 'flu-like illness (cough, headache, fever and joint pains) that had started two days earlier. What brought her into intensive care was blistering of the mucous membranes of the lips, mouth, eyes, urethra and vagina, and a general skin rash in which patches looked like a 'target' with purple areas of skin surrounded by lighter areas. In some areas the skin had sloughed off leaving raw painful sores. There was no itch. Her main complaints were that the act of swallowing, even of water, was 'very painful', and that she had a severe headache. An immediate diagnosis of Stevens Johnson syndrome was made, and she was admitted for intravenous rehydration and respiratory support.

- Q1 Which of the following have been commonly associated with initiating Stevens Johnson syndrome in adults like Anita?
 - (a) Analgesics
 - (b) Antibiotics
 - (c) Virus infections
 - (d) Bacterial infections
 - (e) Use of skin lightening agents

Part two

- Q2 And in children?
 - (a) Herpes virus
 - (b) Influenza
 - (c) Mumps
 - (d) Epstein Barr virus

Anita's husband Dinesh (they were married for less than a year) had to answer questions for her, as her blistered mouth and throat prevented her from speaking. He was able to tell the admitting doctor that she had not been prescribed any medicines in her relatively short stay in the country. He could only offer that she had 'been to a clinic for a skin bleaching treatment a week before falling ill'. She had been worried that her skin had darkened considerably in the year in which she had come to Africa from India. He was not sure what the treatment had been, but he thought it had involved an injection.

Part three

- Q3 Skin bleaching has been common among in communities across the tropics. Which of the following substances have been recorded as being used as topical skin bleaching agents (with very little evidence that they work safely)?
 - (a) Mercurials
 - (b) Topical steroids
 - (c) Kojic acid
 - (d) Cement
 - (e) Glutathione

Part four

- Q4 There has been a huge rise in the practice of intravenous glutathione for skin bleaching. What are the proposed mechanisms of its action, if any?
 - (a) It switches eumelanin to pheomelanin production
 - (b) It inhibits the action of tyrosinase (a key in melanogenesis)
 - (c) It interferes with the transfer of tyrosinase to premelanosomes
 - (d) None of these have been proven
 - (e) All of them are thought to be the case.

Part five

- Q5 And what are the reported adverse effects of intravenous glutathione so far? It hasn't been in use for long!
 - (a) Neurotoxicity
 - (b) Hepatotoxicity
 - (c) Renal failure
 - (d) Toxic epidermolysis (including Stevens Johnson syndrome)
 - (e) Transmission of infectious agents.