**Learning points**

- Testing for G6PD deficiency should be considered in children and adults (especially males of African, Mediterranean, or Asian descent) when a diagnosis of diabetes is made.
- In a G6PD-deficient diabetic patient, haemolysis may occur as a result of hypoglycaemia, blood glucose normalization, ketoacidosis, glibenclamide, and metformin.
- Methaemoglobinemia can be used to aid diagnosis of G6PD-deficiency.
- There may be an increased incidence of diabetes in G6PD deficient individuals.
- Rhabdomyolysis can occur especially in the presence of very high glucose and low phosphate levels and high plasma osmolality.
- Serum creatine kinase level can be used to detect rhabdomyolysis.