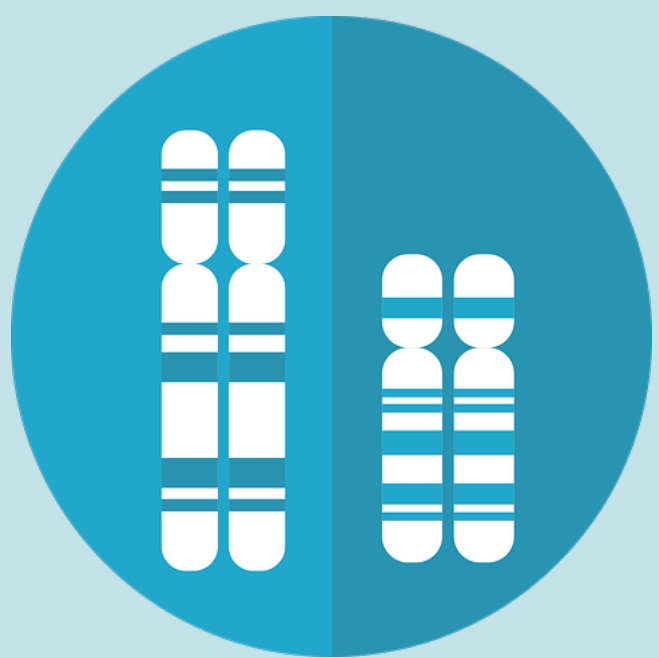




INTRODUCTION

Commonest enzyme deficiency globally.

Protects red cells against oxidative damage.

Haemolysis can develop in response to oxidative stress¹

- Oxidative medicines
- Fava beans
- Infection

Anaesthetic and regional anaesthetic drugs rarely included in the literature.

AIM To provide clarity over analgesia and anaesthesia in this population, with a suggested framework for monitoring these patients should exposure occur.



METHODS

Multidisciplinary group from obstetric anaesthesia and haematology.

Comprehensive literature review by Medicines Information team (BNF, G6PD-D website, Drugdex website, Electronic medicines compendium for product characteristics.)

Review of existing evidence.

British Society of Haematology guidance².

KEY RECOMMENDATIONS

1. Patients with a personal or family history of G6PD-D or severe neonatal jaundice should be referred to their local obstetric team for consideration of antenatal testing

2. Individual patient plans should be made based on results and history

3. Inform patients with G6PD-D of signs and symptoms of haemolysis

4. Monitor patients who have had potential precipitant drugs for at least 72 hours after administration

5. Inform neonatal team of mothers with G6PD-D so neonatal testing can be arranged if appropriate

References

1. Luzzatto L, Nannelli C, Notaro R. Glucose-6-Phosphate Dehydrogenase Deficiency. Hematol Oncol Clin N Am 2016; 30: 373-393
2. Roper D, Layton M, Rees D, et al. Laboratory diagnosis of G6PD deficiency. A British Society of Haematology Guideline. British Journal of Haematology 2020; 189: 24-38



RESULTS

Avoid drugs with high risk of haemolysis in mothers with G6PD-D: NSAIDs* and methylene blue.

Use with caution and monitor mother with local anaesthetic, paracetamol and oxidative antibiotic use.

General anaesthetic drugs (hypnotics, muscle relaxants, opioids, volatile anaesthetic agents) are overall deemed safe to use.

Uterotonics are safe to use.

*Aspirin can be used in discussion with haematology



DISCUSSION

This guideline offers an approach to identifying pregnant people with G6PD-D.

Includes a suggested evidence based list of 'safe', 'unsafe' and 'use with caution' medications.

Suggested guidance for how to provide anaesthesia and ongoing management of these patients.