Addendum

Identification and Management of Neonatal Hypoglycaemia in the Full Term Infant - A Framework for Practice (April 2017)

Appendix 3, page 25.

Dose. If a weight per weight preparation of 40% dextrose gel is used, practitioners should be aware of the weight of 1ml of the preparation and calculate the ml/kg volume required to deliver 200mg/kg of dextrose. Advice from local pharmacist is recommended. Practitioners may decide that variations in dextrose content per 1ml dextrose gel are unlikely to be clinically significant.

Reference to (Glucogel®) has been removed from Appendix 3.

Context

In 2016 NHS Improvement and British Association of Perinatal Medicine (BAPM) convened an expert working group to develop a Framework for Practice (FfP) to: address variation in practices in the identification, management and admission thresholds of babies admitted to neonatal units for hypoglycaemia; and to promote safer practices that avoid unnecessary separation of mother and baby. A draft FfP was produced and sent to consultation, which ended 25th January 2017; for details of process refer to http://www.bapm.org/publications/. The final document was ratified by the BAPM executive, and was published on line April 2017.

One of the recommendations was to consider using dextrose gel alongside a feeding plan for infants with blood glucose 1.0-1.9mmol/l without clinical signs of hypoglycaemia.

Post Implementation

On 24th July, Mr Nigel Davies, executive manager at BAPM was contacted by Ms Lou Pitman, Lead Pharmacist for Family Services, Salisbury District Hospital.
Ms Pitman pointed out that dose per unit volume of dextrose gel depends on preparation and composition of the gel.

If 40% dextrose gel is *weight per volume* (40g in 100ml) then 200mg/kg equates to 0.5ml/kg.

If 40% dextrose gel is *weight per weight* (40g in 100g) then 200mg/kg does not necessarily equate to 0.5ml/kg. It does so only if gel composition is such that 1ml of gel weighs 1g. For example if 1ml of gel weighs 1.25g, then 200mg/kg equates to 0.4ml/kg.

The working group is grateful to Ms Pitman, and for expert advice from Ms Jenny Carson, Lead Pharmacist for Women’s Services, NHS Lothian.