

GALENIC PREPARATION OF 40% DEXTROSE GEL: NEW APPROACH TO MANAGEMENT OF NEONATAL HYPOGLYCAEMIA

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Background

Neonatal hypoglycaemia is a condition in which the amount of blood glucose is lower than <45 mg/dl. There are several treatment options available for the management of neonatal hypoglycemia: breast-milk, infant formula, intravenous (IV) or oral dextrose therapy. Neonatal care unit asked pharmacy collaboration for the galenic preparation of 40% dextrose gel for the treatment of neonatal hypoglycaemia



Purpose

The objective of this work is the preparation of a galenic formulation in order to develop a safe and effective treatment for management of hypoglycaemia in newborns.

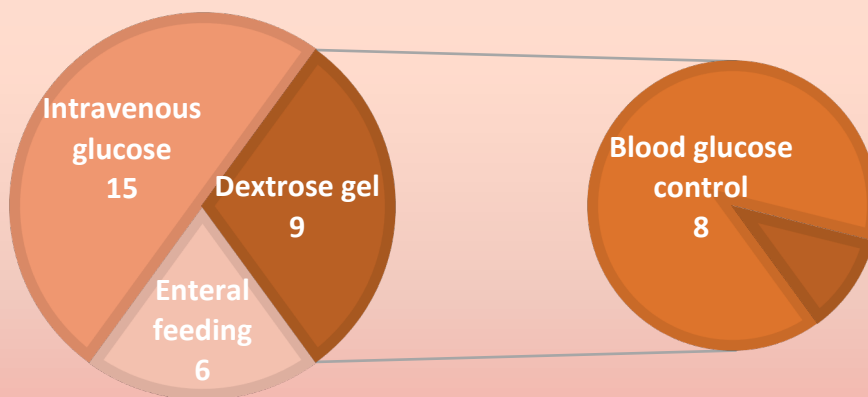
Material and methods

A systematic literature review concerning dextrose gel preparation was conducted and the pharmacy service developed a procedure for the galenic formulation. The preparation consist in a glucose gel solution and carboxymethylcellulose. The obtained gel was divided in sterile enteral feeding syringes with female connector



Results

Neonatal hypoglycaemia N = 30



Conclusion

Dextrose gel formulation prepared by the pharmacy service responded to the need of the neonatal care unit. This preparation has been recommended for the management of neonatal hypoglycaemia and reduced the admission to the newborn intensive-care unit for intravenous glucose.

