# **ROYAL HOSPITAL FOR WOMEN**

Approved by Neonatal Clinical Committee

#### **CLINICAL POLICIES AND PROCEDURES**

## NEWBORN USE ONLY GIVEN ON DOCTORS ORDER ONLY

## **METHYLENE BLUE 1%**

## KEPT IN OPERATING THEATRE

**DESCRIPTION** It reduces methaemoglobin to haemoglobin in red blood cells.

**USE** Idiopathic or drug induced methaemoglobinemia.

**PHARMACOLOGY** Mainly excreted in urine, therefore expect blue colour of urine and faeces.

PRESENTATION 50mg/5ml

DOSE 1mg/kg/dose

ROUTE IV, oral

**RECONSTITUTION** Dilute the required dose (1mg/kg) with 3-5ml of 0.9% sodium chloride.

**ADMINISTRATION** IV administration over 15 minutes is preferable for rapid action. Doses can be repeated if necessary.

ADVERSE EFFECTS

- 1. G6PD DEFICIENCY Methylene blue may not be effective as these patients have diminished capacity to reduce methylene blue to leucomethylene blue. Large doses of methylene blue in this condition can itself lead to hemolytic anemia.
- 2. SEVERE RENAL FAILURE Long term administration may lead to marked anemia due to accelerated destruction of red blood cells.

#### SIDE EFFECT

- 1. Nausea, vomiting, abdominal and chest pain
- 2. Headache, dizziness, mental confusion, profuse sweating
- 3. Hypertension
- 3. Very high doses can lead to methaemoglobinemia and hemolysis

**IV INCOMPATIBILITY** No data available.

#### REFERENCE

1. MIMS Annual 1999, 2-226

2. Cloherty's Manual of Neonatal Care. 4th Ed p719