DRUG: HYDROCORTISONE

PRESENTATION:
Vial: 100mg
Oral Solution: 1mg/mL, 10mg/mL (Prepared in Pharmacy).

ACTION & INDICATION:
Corticosteroid used in:
(i) Replacement therapy in adrenal insufficiency
(ii) Relative adrenal insufficiency (RAI) in sick neonate where hypotension is refractive to inotropic agents and random cortisol <414nmol/L
(iii) Intractable hypoglycaemia

DOSE:
Physiological replacement:
Oral: 8 to 18 mg/m² per day divided into 3 doses
IV: 8 to 18 mg/m² per day divided into 4 hourly doses
Relative Adrenal Insufficiency:
Term neonate >35/40 gestation 1mg/kg/dose 6-8 hourly
Preterm neonate <35/40 gestation 1mg/kg/dose 12 hourly
Stop if random cortisol >414nmol/L. Use for least possible duration, until stable off inotropes. Usually 2-5 days.
Intractable hypoglycaemia:
IV / Oral: 1-2mg/kg/dose 6 hourly

PREPARATION:
Diluent: Water for Injections or sodium chloride 0.9%
Add 1.5mL of diluent to each vial, then withdraw and dilute to 2mL = 100mg/2mL
May be further diluted if required, that is, take 2mL of the above solution and dilute it to 10mL = 10 mg/mL

ADMINISTRATION:
IV: Over 3-5 minutes
Oral: Given with or immediately after feeds.

ADVERSE EFFECTS:
Hypokalaemia, abdominal distension, oesophagitis, impaired wound healing, petechiae, convulsions, growth suppression, hypertension, hyperglycaemia. Gastric perforation when given in combination with NSAIDs.
Contraindication - Systemic fungal infection.

COMMENTS:
Discard reconstituted parenteral solution immediately after use.

Body Surface Area:

<table>
<thead>
<tr>
<th>Weight(Kg)</th>
<th>Surface Area (sq.metres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.6</td>
<td>0.08</td>
</tr>
<tr>
<td>1</td>
<td>0.1</td>
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<tr>
<td>1.4</td>
<td>0.12</td>
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<tr>
<td>2</td>
<td>0.15</td>
</tr>
<tr>
<td>3</td>
<td>0.2</td>
</tr>
<tr>
<td>4</td>
<td>0.25</td>
</tr>
</tbody>
</table>

*BSA (m²) = (0.05 x kg)+0.05

REFERENCES:
1. Pediatric Dosage Handbook 17th Ed Lexicomp
2. Paediatric Pharmacopoeia 13th Ed Royal Children’s Hospital Melbourne
3. Neofax 2012
4. Neonatal Pharmacopoeia 2nd Ed Royal Women’s Hospital Melbourne
5. Sperling Pediatric Endocrinology 2006
   Lifshitz Pediatric Endocrinology 2007
   Brook Clinical Paediatric Endocrinology 2007

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