Critical Care Guidelines
FOR CRITICAL CARE USE ONLY

KETAMINE

For resistant status epilepticus only. For acute pain see "guideline for ketamine subcutaneous infusion for acute pain"

<table>
<tr><td>PRESENTATION:</td><td>Vial containing 500mg in 10ml, 50mg/ml of ketamine.</td></tr>
<tr><td>INDICATION:</td><td>Resistant status epilepticus (unlicensed use).</td></tr>
<tr><td>DOSE AND ADMINISTRATION:</td><td>The evidence on the use of ketamine is mostly based on isolated case reports. From the information available:

Intravenous loading dose of 3mg/kg. Use ideal body weight in obese patients.

Maintenance intravenous infusion of 1-5mg/kg/hr. Use ideal body weight in obese patients.

ICU STANDARD INFUSION

Loading dose:
3mg/kg intravenously, over at least one minute,
then,
Continuous infusion:
2500mg in 50ml undiluted.

<table>
<tr><td rowspan="2">IBW</td><td colspan="5">Infusion rate (ml/hr)</td></tr>
<tr><td>1mg/kg/hr</td><td>2mg/kg/hr</td><td>3mg/kg/hr</td><td>4mg/kg/hr</td><td>5mg/kg/hr</td></tr>
<tr><td>40kg</td><td>0.8ml/hr</td><td>1.6ml/hr</td><td>2.4ml/hr</td><td>3.2ml/hr</td><td>4.0ml/hr</td></tr>
<tr><td>50kg</td><td>1.0ml/hr</td><td>2.0ml/hr</td><td>3.0ml/hr</td><td>4.0ml/hr</td><td>5.0ml/hr</td></tr>
<tr><td>60kg</td><td>1.2ml/hr</td><td>2.4ml/hr</td><td>3.6ml/hr</td><td>4.8ml/hr</td><td>6.0ml/hr</td></tr>
<tr><td>70kg</td><td>1.4ml/hr</td><td>2.8ml/hr</td><td>4.2ml/hr</td><td>5.6ml/hr</td><td>7.0ml/hr</td></tr>
<tr><td>80kg</td><td>1.6ml/hr</td><td>3.2ml/hr</td><td>4.8ml/hr</td><td>6.4ml/hr</td><td>8.0ml/hr</td></tr>
<tr><td>90kg</td><td>1.8ml/hr</td><td>3.6ml/hr</td><td>5.4ml/hr</td><td>7.2ml/hr</td><td>9.0ml/hr</td></tr>
<tr><td>100kg</td><td>2.0ml/hr</td><td>4.0ml/hr</td><td>6.0ml/hr</td><td>8.0ml/hr</td><td>10.0ml/hr</td></tr>
</table>

Administer intravenously via a central access device. Commence intravenous infusion at 1mg/kg/hr and titrate according to response (i.e achievement of burst suppression on the EEG).

Ketamine has a low pH and may cause venous irritation and tissue damage in cases of extravasation.

Ketamine does not need to be administered in a locked syringe in intensive care.</td></tr>
<tr><td>CONCENTRATION:</td><td>50mg/ml</td></tr>
<tr><td>STABILITY:</td><td>Physically and chemically stable for 24 hours at room temperature. Protect from light.</td></tr>
</table>

References:

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