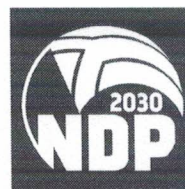




health

Department: Health
REPUBLIC OF SOUTH AFRICA



Reference: AMD/21Dec23

Enquiries:

Stock queries:

Ms Babalwa Melitafa

E-mail: Babalwa.Melitafa@health.gov.za

Clinical queries:

Essential Drugs Programme

E-mail: SAEDP@health.gov.za

ALERT: SAFE USE OF LIDOCAINE INJECTION FOR LOCAL ANAESTHESIA

The Primary Healthcare (PHC), Adult and Paediatric Hospital Level Standard Treatment Guidelines (STGs) and Essential Medicines List (EML) recommend the use of lidocaine for local anaesthesia. There have been a few reports with fatal outcomes, of inadvertent administration of higher than recommended doses of lidocaine 2% injection when used as a local anaesthetic for soft tissue injuries. This communication serves as an alert to take special note of the dosing recommendations, especially weight-based dosing guidance for children. It is also important to note that lidocaine is available as a 20ml vial which might exacerbate the possibility of administering a high dose therefore, strict adherence to the dosing and administration recommendations for all indications included in the STGs and EML is advised to avoid systemic local anaesthetic toxicity. Refer to the Primary Healthcare STGs and EML (2020 edition), Adult Hospital Level STGS and EML (2019 edition) and the Paediatric Hospital Level STGs and EML (2023 edition) for the complete treatment guidance for all indications included for lidocaine injection.

Please see the dosing table indicated below for the safe administration of lidocaine Injection:

Indication: Primary Healthcare Level STGs and EML, 2020 edition	Current recommendation in STGs and EML																																																						
<p>CHAPTER 21: EMERGENCIES AND INJURIES</p> <p>21.3.7 SOFT TISSUE INJURIES-MANAGEMENT OF WOUNDS AND LACERATIONS</p>	<p>If sutures needed:</p> <ul style="list-style-type: none"> • Lidocaine without adrenaline (epinephrine), injection. <ul style="list-style-type: none"> ○ Infiltrate around the wound as local anaesthetic. ○ Maximum dose: 3 mg/kg. <table border="1"> <thead> <tr> <th>Weight kg</th> <th>Maximum dose, mg</th> <th>Vial 1%, 10 mg/mL</th> <th>Vial 2%, 20 mg/mL</th> <th>Age months/years</th> </tr> </thead> <tbody> <tr> <td>>2.5–3.5 kg</td> <td>7 mg</td> <td>0.7 mL</td> <td>0.35 mL</td> <td>Birth–1 month</td> </tr> <tr> <td>>3.5–5 kg</td> <td>10 mg</td> <td>1 mL</td> <td>0.5 mL</td> <td>>1–3 months</td> </tr> <tr> <td>>5–7 kg</td> <td>15 mg</td> <td>1.5 mL</td> <td>0.75 mL</td> <td>>3–6 months</td> </tr> <tr> <td>>7–9 kg</td> <td>20 mg</td> <td>2 mL</td> <td>1 mL</td> <td>>6–12 months</td> </tr> <tr> <td>>9–11 kg</td> <td>25 mg</td> <td>2.5 mL</td> <td>1.25 mL</td> <td>>12–18 months</td> </tr> <tr> <td>>11–14 kg</td> <td>30 mg</td> <td>3 mL</td> <td>1.5 mL</td> <td>>18 months–3 years</td> </tr> <tr> <td>>14–17.5 kg</td> <td>40 mg</td> <td>4 mL</td> <td>2 mL</td> <td>>3–5 years</td> </tr> <tr> <td>>17.5–35 kg</td> <td>50 mg</td> <td>5 mL</td> <td>2.5 mL</td> <td>>5–11 years</td> </tr> <tr> <td>>35–55 kg</td> <td>100 mg</td> <td>10 mL</td> <td>5 mL</td> <td>>11–15 years</td> </tr> </tbody> </table> <p>For children > 55 kg and adults:</p> <p>Lidocaine without adrenaline (epinephrine), injection.</p> <ul style="list-style-type: none"> ○ Infiltrate around the wound as local anaesthetic. ○ Maximum dose: 3 mg/kg. 					Weight kg	Maximum dose, mg	Vial 1%, 10 mg/mL	Vial 2%, 20 mg/mL	Age months/years	>2.5–3.5 kg	7 mg	0.7 mL	0.35 mL	Birth–1 month	>3.5–5 kg	10 mg	1 mL	0.5 mL	>1–3 months	>5–7 kg	15 mg	1.5 mL	0.75 mL	>3–6 months	>7–9 kg	20 mg	2 mL	1 mL	>6–12 months	>9–11 kg	25 mg	2.5 mL	1.25 mL	>12–18 months	>11–14 kg	30 mg	3 mL	1.5 mL	>18 months–3 years	>14–17.5 kg	40 mg	4 mL	2 mL	>3–5 years	>17.5–35 kg	50 mg	5 mL	2.5 mL	>5–11 years	>35–55 kg	100 mg	10 mL	5 mL	>11–15 years
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It is important to remember that although administration is local, systemic effects occur, hence the importance of adhering to dosing recommendations.

Circular dissemination

Provinces and Healthcare facilities are requested to distribute and communicate this information in consultation with the Pharmaceutical and Therapeutics Committees and all other relevant stakeholders.

Kind regards



MS N MPANZA

ACTING CHIEF DIRECTOR: SECTOR-WIDE PROCUREMENT

DATE:

22/12/2023