

DRUG CALCULATIONS

NB: Most calculations were rounded up.

2% Lidocaine

- Dose: 2 mg/Kg
- Concentration: 20 mg/mL
- Weight of Kid: 9 Kg

$$\text{Volume} = \frac{\text{Weight} \times \text{Dose}}{\text{Concentration}}$$

$$\text{Volume} = \frac{9 \text{ Kg} \times 2 \text{ mg/Kg}}{20 \text{ mg/mL}}$$

$$\text{Volume} = 0.9 \text{ mL}$$

NB: For simplicity, **1 mL** of Lidocaine will be used. This will be divide into 4 giving *0.25 mLs of Lidocaine per site*

Combikel

- Dose: 10,000 IU/Kg
- Concentration: 200,000 IU/mL
- Weight of Kid: 9 Kg

$$\text{Volume} = \frac{\text{Weight} \times \text{Dose}}{\text{Concentration}}$$

$$\text{Volume} = \frac{9 \text{ Kg} \times 10,000 \text{ IU/Kg}}{200,000 \text{ IU/mL}}$$

$$\text{Volume} = 0.5 \text{ mL}$$

Toxic Dose of 2% Lidocaine

- Dose: 10 mg/Kg
- Concentration: 20 mg/mL
- Weight of Kid: 9 Kg

NB: $\frac{1}{2}$ Toxic Dose was used

$$\text{Volume} = \frac{\text{Weight} \times \text{Dose}}{\text{Concentration}}$$

$$\text{Volume} = \frac{9 \text{ Kg} \times 5 \text{ mg/Kg}}{20 \text{ mg/mL}}$$

$$\text{Volume} = 2.3 \text{ mL}$$

\therefore Do **NOT** exceed 2.3 mLs of Lidocaine

5% Flunixin

- Dose: 1.1 mg/Kg
- Concentration: 50 mg/mL
- Weight of Kid: 9 Kg

$$\text{Volume} = \frac{\text{Weight} \times \text{Dose}}{\text{Concentration}}$$

$$\text{Volume} = \frac{9 \text{ Kg} \times 1.1 \text{ mg/Kg}}{50 \text{ mg/mL}}$$

$$\text{Volume} = 0.2 \text{ mL}$$

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EMERGENCY DRUGS

Atropine

- Dose: 0.04 mg/Kg
- Concentration: 0.54 mg/mL
- Weight of Kid: 9 Kg

$$\text{Volume} = \frac{\text{Weight} \times \text{Dose}}{\text{Concentration}}$$

$$\text{Volume} = \frac{9 \text{ Kg} \times 0.04 \text{ mg/Kg}}{0.54 \text{ mg/mL}}$$

$$\text{Volume} = 0.7 \text{ mL}$$

Epinephrine

- Dose: 0.02 mg/Kg
- Concentration: 1 mg/mL
- Weight of Kid: 9 Kg

$$\text{Volume} = \frac{\text{Weight} \times \text{Dose}}{\text{Concentration}}$$

$$\text{Volume} = \frac{9 \text{ Kg} \times 0.02 \text{ mg/Kg}}{1 \text{ mg/mL}}$$

$$\text{Volume} = 0.2 \text{ mL}$$

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