

## Appendix 5: Anaesthetic Dosing

### Starting and Maximum Doses of 1.0% Lignocaine with and without Bupivacaine, By Volume

If bupivacaine to be used with lignocaine 1.0%, use concentration of 0.25% with 1:1 combination

Safe local anaesthetic dosing—starting\* and *maximum*\*\* volumes

# 1% Lidocaine

| Weight in KG    | Starting volume | <i>Maximum safe volume</i>               |
|-----------------|-----------------|--|
| 20–29 kg***     | 4 ml            | Additional 2 ml to <b>TOTAL of 6 ml</b>  |
| 30–39 kg        | 6 ml            | Additional 3 ml to <b>TOTAL of 9 ml</b>  |
| 40–50 kg        | 8 ml            | Additional 4 ml to <b>TOTAL of 12 ml</b> |
| More than 50 kg | 10 ml           | Additional 5 ml to <b>TOTAL of 15 ml</b> |

\*Starting dose lidocaine (lignocaine) 2 mg/kg

\*\**Maximum safe dose lidocaine 3 mg/kg*

\*\*\*For those weighing less than 30 kg, use 5 ml syringe so that volumes can be measured accurately

Starting volume usually adequate; increase up to *maximum* volume (dose) only if required for pain control up to the *maximum*.

Safe local anaesthetic dosing—starting\* and *maximum*\*\* volumes

# Mixture of 1% Lidocaine and 0.25% Bupivacaine

1:1 Mixture (equal volumes of each)

| Weight in KG    | Starting volume<br>(1:1 mixture) | <i>Maximum safe volume<br/>(1:1 mixture)</i>  |
|-----------------|----------------------------------|---|
| 20–29 kg        | 3 ml of each<br>(6 ml total)     | Additional 1 ml of each drug to<br><b><i>TOTAL of 8 ml (maximum 4 ml of each)</i></b>   |
| 30–39 kg        | 4 ml of each<br>(8 ml total)     | Additional 2 ml of each drug to<br><b><i>TOTAL of 12 ml (maximum 6 ml of each)</i></b>  |
| 40–50 kg        | 5 ml of each<br>(10 ml total)    | Additional 3 ml of each drug to<br><b><i>TOTAL of 16 ml (maximum 8 ml of each)</i></b>  |
| More than 50 kg | 5 ml of each<br>(10 ml total)    | Additional 5 ml of each drug to<br><b><i>TOTAL of 20 ml (maximum 10 ml of each)</i></b> |

\*Starting dose lidocaine (lignocaine) 1.5 mg/kg/bupivacaine 0.3 mg/kg

\*\**Maximum safe dose lidocaine 2.0 mg/kg/bupivacaine 0.5 mg/kg*

Starting volume usually adequate; increase up to *maximum* volume (dose) only if required for pain control up to the *maximum*.

To improve provider efficiency through minimizing numbers of syringes needed, starting doses have been kept at or below 10 ml and maximum doses at or below 20 ml

## Starting and Maximum Doses of 2.0% Lignocaine with and without Bupivacaine, by Volume

If bupivacaine to be used with lignocaine 2.0%, use concentration of 0.5% with 1:1 combination

Safe local anaesthetic dosing—starting\* and *maximum*\*\* volumes

# 2% Lidocaine

| Weight in KG    | Starting volume | <i>Maximum safe volume</i>              |
|-----------------|-----------------|---|
| 20–29 kg***     | 2 ml            | Additional 1 ml to <b>TOTAL of 3 ml</b> |
| 30–39 kg***     | 3 ml            | Additional 1 ml to <b>TOTAL of 4 ml</b> |
| 40–50 kg        | 4 ml            | Additional 2 ml to <b>TOTAL of 6 ml</b> |
| More than 50 kg | 5 ml            | Additional 2 ml to <b>TOTAL of 7 ml</b> |

\*Starting dose lidocaine (lignocaine) 2 mg/kg

\*\**Maximum safe dose lidocaine 3 mg/kg*

\*\*\*Use 5ml syringe so that volumes can be measured accurately

Starting volume usually adequate; increase up to *maximum* volume (dose) only if required for pain control up to the *maximum*.

Safe local anaesthetic dosing—starting\* and *maximum*\*\* volumes

# Mixture of 2% Lidocaine and 0.5% Bupivacaine

1:1 Mixture (equal volumes of each)

| Weight in KG    | Starting volume<br>(1:1 mixture) | <i>Maximum safe volume<br/>(1:1 mixture)</i>   |
|-----------------|----------------------------------|--|
| 20–29 kg***     | 1 ml of each<br>(2 ml total)     | Additional 1 ml of each drug to<br><b><i>TOTAL of 4 ml (maximum 2 ml of each)</i></b>  |
| 30–39 kg***     | 2 ml of each<br>(4 ml total)     | Additional 1 ml of each drug to<br><b><i>TOTAL of 6 ml (maximum 3 ml of each)</i></b>  |
| 40–50 kg        | 3 ml of each<br>(6 ml total)     | Additional 1 ml of each drug to<br><b><i>TOTAL of 8 ml (maximum 4 ml of each)</i></b>  |
| More than 50 kg | 4 ml of each<br>(8 ml total)     | Additional 1 ml of each drug to<br><b><i>TOTAL of 10 ml (maximum 5 ml of each)</i></b> |

\*Starting dose lidocaine 1 (lignocaine) .5 mg/kg/bupivacaine 0.3 mg/kg

\*\**Maximum safe dose lidocaine 2.0 mg/kg/bupivacaine 0.5 mg/kg*

\*\*\*Use 5ml or smaller syringe so that volumes can be measured accurately

Starting volume usually adequate; increase up to *maximum* volume (dose) only if required for pain control up to the *maximum*.