Critical Care Guidelines FOR USE IN CRITICAL CARE ONLY



SODIUM BICARBONATE INTRAVENOUS INFUSION

| PRESENTATION: | 500ml intravenous infusions of either sodium bicarbonate 1.26% or 200ml intravenous infusions of sodium bicarbonate 8.4% |
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| INDICATION: | Metabolic acidosis or to induce forced alkaline diuresis. |
| DOSE AND ADMINISTRATION: | Sodium bicarbonate 1.26% may be administered peripherally or centrally. |
| | In severe acidosis or volume restriction sodium bicarbonate 8.4% may be used and is given centrally. If central access is not available consult with senior medical staff before giving peripherally as 8.4% solution is a hypertonic solution. |
| | In an emergency situation (e.g. cardiac arrest) a small volume i.e. 50ml of sodium bicarbonate 8.4% solution may be give peripherally into a large vein and flushed with 0.9% sodium chloride after administration. |
| | Sodium bicarbonate should be infused or injected through a dedicated lumen. |
| | Volume appropriate to correct the acidosis, usually starting at 50mls/hour of the 1.26% solution. |
| CONCENTRATION: | 1.26% is equivalent to 150mmol each of Na ⁺ and HCO ₃ ⁻ /litre. 8.4% is equivalent to 1000mmol each of Na ⁺ and HCO ₃ ⁻ /litre. |
| STABILITY: | Physically and chemically stable for 24 hours at room temperature. |

References

- 1. British National Formulary. 71st ed. London: British Medical Association and the Royal Pharmaceutical Society of Great Britain.
- 2. Clinical Pharmacy .. Eds Wright J, Gray AH, Goodey V. Pharmaceutical Press. 2006.
- 3. Trissel's Drugs and Solutions Data. www.micromedexsolutions.com. Accessed 24.8.16

 4. Shulman R, Drayan S, Harries M et al., eds. UCL Injectable Drug Administration Guide. London: Blackwell Science, 2010.

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