



The physicochemical properties of different drugs result in very different behaviours, especially following cessation of intravenous infusion” Chambers (2018).

Abstract:

Intravenous infusions are required when a drug has a short half-life or a narrow therapeutic window. Pharmacokinetic models are employed to calculate the infusion rate for a particular target plasma concentration. While the one-compartment model is based on relatively simple mathematics, it is of little practical use. Multi-compartment models involve complex mathematics: a bolus-infusion regimen requires a variable-infusion rate. In clinical practice, this means incorporating the pharmacokinetic models into specially designed target-controlled infusion pumps. The physicochemical properties of different drugs result in very different behaviours, especially following cessation of intravenous infusion.

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Review of intravenous drug infusion technologies

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Reference:

Chambers, D.J. (2018) Principles of intravenous drug infusion. Anaesthesia and Intensive Care Medicine. December 15th. .

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