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.

You may also be interested in...

- Review of intravenous drug infusion technologies
- Caution when using pumps for intravenous fluid infusion on a tucked limb
- Optimal infusion rate for a range of IV antibiotic therapy
Reference:

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