AMINOPHYLLINE Supporting information

This guideline has been prepared with reference to the following:

Joint Formulary Committee. British National Formulary "Aminophylline". 2024. London. BNF

https://bnf.nice.org.uk/drugs/aminophylline/

Hameln Pharma Ltd. Aminophylline Injection BP. 2022. Electronic Medicines Compendium (EMC)

https://www.medicines.org.uk/emc/product/6299/smpc

The Injectable Medicines Guide Multidisciplinary Advisory Group. Medusa. 2022. NHS Wales Informatics Service

Toxbase. Aminophylline. 2022.

Hodgson G, Specialist Pharmacy Service. What are the clinically significant drug interactions with tobacco smoking? 2020

https://www.sps.nhs.uk/articles/what-are-the-clinically-significant-drug-interactions-with-tobacco-smoking

Ismail A, Specialist Pharmacy Service. How is an intravenous aminophylline dose converted to an oral aminophylline or theophylline dose? 2019

Sanger J & Martinelli F. Dosing and administration instructions for intravenous aminophylline in adults and children over 12 years. 2018. Brighton and Sussex University Hospital

https://www.bsuh.nhs.uk/library/wp-content/uploads/sites/8/2018/12/AMINOPHYLLINE-GUIDELINE.docx

Sinden E & Crowther S. Intravenous Aminophylline (Adults). 2013. Royal Bournemouth & Christchurch Hospitals NHS/Poole Hospital NHS

http://www.dorsetformulary.nhs.uk/docs/bnf03/RBCH_PHT%20Aminophylline%20Loading%20Dose%20Guidelines.pdf

Is there any evidence or guidance comparing the dose of aminophylline given intravenously in smokers, ex-smokers and never smokers?

The Injectable Drugs Guide (2013) recommend a maintenance dose of: 500 micrograms/kg IBW/hour for otherwise healthy non-smoking adults; 300 micrograms/kg IBW/hour for elderly persons, in corpulmonale, heart failure, or liver disease and 700–800 micrograms/kg IBW/hour for children 10–16 years of age and young adult smokers.

Gray, A., Wright, J., Goodey, V. et al. Injectable Drugs Guide. Aminophylline. 2013. Pharmaceutical Press

Last amended January 2025 Last reviewed March 2025