

AMINOPHYLLINE

Supporting information

This guideline has been prepared with reference to the following:

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.

Joint Formulary Committee. British National Formulary "Aminophylline". 2021. London. BNF

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

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>

British Thoracic Society/SIGN. Asthma Guideline. 2019. London and Edinburgh: BTS/SIGN

<https://www.brit-thoracic.org.uk/quality-improvement/guidelines/asthma/>

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?

British Thoracic society/SIGN (2016) do not make distinctions between dosage for smokers or non-smokers. In the extreme cases where IV aminophylline is suggested, they recommend a loading dose of 5mg over 20 mins and 0.5-0.7 infusion mg/kg/hr.

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 cor pulmonale, 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 August 2022
Last reviewed October 2023

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