

Recreational, inhalational misuse of hyoscine butylbromide (Buscopan®) tablets as reported to the UK National Poisons Information Service

Moyns E,¹ Jagpal PS,¹ Ferner RE,¹ Sandilands EA,² Gray LA,³ Thanacoody RHK,⁴ Bradberry SM.¹

¹NPIS (Birmingham Unit), City Hospital, Birmingham, UK. Email contact: e.moyns@nhs.net; ²NPIS (Edinburgh Unit), Royal Infirmary, Edinburgh, UK; ³NPIS (Cardiff Unit), University Hospital Llandough, Cardiff, UK; ⁴NPIS (Newcastle Unit), Regional Drug and Therapeutics Centre, Newcastle, UK.

Introduction

Hyoscine butylbromide is an antispasmodic drug. When heated, it liberates hyoscine (scopolamine), whose psychotropic effects include delirium and hallucinations. This has led to recreational misuse, particularly in prison.[1] Public Health England and NHS England (PHE/NHS E) issued advice against prescribing hyoscine butylbromide in prisons in 2015.[2]

Objective

To establish the incidence of exposures relating to the inhalation of hyoscine butylbromide for recreational misuse in the UK as reported to the UK National Poisons Information Service (NPIS) between 1 January 2010 and 31 August 2020.

Results

Eight cases were identified, two of which occurred before dissemination of the 2015 PHE/NHS E advice. The median age was 31.5 years (range 24–40 years). All exposures were due to recreational misuse. Further details about all patients is shown in Table 1. The Maximum Poisoning Severity Score (MAXPSS)[3] at the time of the enquiry was moderate in 6 cases and severe in two. Both patients whose MAXPSS was severe had suffered transient loss of consciousness after exposure. No long-term follow up of these enquiries was undertaken.

Conclusions

Despite advice against prescribing hyoscine in prisons, exposures continue to occur. Clinicians and Specialists in Poisons Information need to be aware of the hazards of hyoscine butylbromide misuse.

References:

1. Jalali F, Afshari R, Babaei A. Smoking crushed hyoscine/scopolamine tablets as drug abuse. Substance Use & Misuse. 2014; 49: 793-797.
2. Farmer D, Ryan G. Misuse of hyoscine butylbromide (Buscopan). 2015 [cited 1 Oct 2020]. Available from <https://medicines.nhs.uk/wp-content/uploads/2015/07/MisuseXofHyoscineXbutylbromideXletterXV5XFinal.pdf>
3. Persson HE, Sjöberg GK, Haines JA, De Garbino JP. Poisoning severity score. Grading of acute poisoning. J Toxicol Clin Toxicol. 1998; 36: 205-213.

Patient age	Gender	Method of exposure	Location	Features	MAXPSS
25	Female	Vaped in an e-cigarette	HM Prison	Tetany, confusion, somnolence, abnormal eye movements	Severe
35	Male	Tablet heated on foil and liberated fumes inhaled	Home	Ataxia, slurred speech, stupor	Severe
40	Male	Smoked crushed tablet in cigarette form	HM Prison	Agitation, hypoxia, hallucinations, confusion	Moderate
30	Male	Tablet heated on foil and liberated fumes inhaled	HM Prison	Agitation, mydriasis	Moderate
39	Female	Smoked crushed tablet in cigarette form	HM Prison	Agitation, lactic acidosis	Moderate
29	Female	Smoked crushed tablet in cigarette form	Home	Agitation, mydriasis	Moderate
33	Female	Smoked crushed tablet in cigarette form	HM Prison	Somnolence, hypotension	Moderate
24	Female	Smoked crushed tablet in cigarette form	Home	Agitation, confusion, stupor, tachycardia	Moderate

Table 1. Case details for all patients