

What happens when doctors stop prescribing temazepam? Use of alternative therapies

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SUMMARY

We investigated the withdrawal of temazepam in a single general practice using two alternative prescribing policies: an alternative benzodiazepine; or an alternative group of drugs recommended for short-term management of insomnia, including sedative antihistamines and chloral hydrate. The study showed that temazepam prescribing in general practice can be reduced or stopped by using a simple intervention. An alternative benzodiazepine is useful in helping patients to stop their use of hypnotic agents. The use of antihistamines as substitute hypnotics is not advocated on the basis of our findings.

Keywords: prescribing; sleep disorders; benzodiazepines; hypnotic agents; intervention.

Introduction

CONCERN about misuse of temazepam,¹ combined with evidence that National Health Service (NHS) prescriptions were the main source of supply,² led us to investigate the withdrawal of temazepam in a single general practice. We decided to replace temazepam with two groups of hypnotics with lower abuse potential: an alternative benzodiazepine or an alternative group of drugs recommended for short-term management of insomnia, including sedative antihistamines (some of which are widely available as over-the-counter hypnotics) and chloral hydrate. The aim of the study was to investigate whether temazepam prescribing could be stopped using alternative drugs as substitutes, and to discover if there were any differences in outcome between the two substitution policies.

Method

From 1 February 1995, all patients requesting a prescription for temazepam (excluding one patient who was considered too unwell) were given a study number: odd numbered patients were allocated to receive an antihistamine replacement or chloral hydrate (antihistamine/chloral group), and even numbered patients received a benzodiazepine replacement (benzodiazepine group) (Appendix 1). All patients were also given information on reducing their dose of temazepam and advice on healthy sleeping. The option of remaining on temazepam was not offered.

Nineteen months after temazepam withdrawal, each patient

was followed up by the research nurse (MW) and invited to take part in a home interview.

Results

Ninety-one patients were recruited: 46 were allocated to the antihistamine/chloral group, 45 to the benzodiazepine group. The characteristics of the study groups were similar at the time of recruitment (Table 1). A similar number of patients in each group were interviewed: 36 (78%) of the antihistamine/chloral group, 38 (84%) of the benzodiazepine group.

Of the antihistamine/chloral group, 32 (70%) were initially changed to one of the recommended antihistamines; 28 (62%) of the benzodiazepine group were prescribed one of the recommended benzodiazepines. Only eight out of 36 (22%) of the antihistamine/chloral group interviewed were satisfied with the initial change, compared with 21 out of 38 (55%) of the benzodiazepine group ($\chi^2 = 8.47$; $df = 1$; $P = 0.004$). The antihistamine/chloral group had significantly more changes of hypnotic treatment: a median of two changes versus one change in the benzodiazepine group (Table 1). Only one patient in the antihistamine group had received a single prescription for chloral hydrate.

At the time of the interview, the majority of patients were reported as being prescribed benzodiazepines as hypnotics (27/36, 75% in the antihistamine/chloral group; 28/38, 74% in the benzodiazepine group). Only one patient had reverted to temazepam (Table 1). Of the antihistamine/chloral group, seven patients of the 36 (19%) were still taking antihistamines. Of those interviewed, one of the 36 (3%) in the antihistamine/chloral group, and nine out of 38 (24%) in the benzodiazepine group, had stopped hypnotic treatment altogether (Fisher's exact $P = 0.014$).

Discussion

This study demonstrated that general practitioners (GPs) can stop prescribing temazepam with the help of a simple intervention consisting of a brief description of a detoxification routine along with substitute hypnotic therapy. The results indicate that a policy of prescribing an alternative benzodiazepine is preferable to substitution by antihistamine or chloral hydrate, because significantly more patients reported being satisfied with the change in treatment and more stopped taking hypnotics altogether.

Although potentially flawed, the method of treatment allocation was selected for practical reasons; when compared, the two groups proved to be well balanced (Table 1). Despite being selected from an area of high multiple deprivation, the practice population of temazepam users was similar to benzodiazepine users reported in other studies, predominantly consisting of elderly women with considerable co-morbidity and who had been prescribed temazepam for some time.^{3,4} It is likely that this population will be intrinsically difficult to treat, and so the success in reducing temazepam prescribing is particularly welcome.

Sedative antihistamines (diphenhydramine, promethazine) are freely available for sale to the public 'for occasional insomnia in adults'⁵ and are widely advertised as such. Our study demonstrated that the antihistamine/chloral group were less satisfied with their original treatment and had more changes of medication, implying a cost to GPs. Seven patients remained on long-

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Table 1. Basic characteristics of the study groups and hypnotic treatment at time of follow-up.

	Antihistamine/chloral group (n = 46)	Benzodiazepine group (n = 45)	Statistical test
Baseline characteristics			
Age (years)	Median = 59 Range = 32–89	Median = 56 Range = 26–85	M-W Z = -0.36 P = 0.72
Sex	Male = 15 (33%) Female = 31 (67%)	Male = 17 (38%) Female = 28 (62%)	$\chi^2 = 0.14$; df = 1 P = 0.71
Duration of temazepam treatment (years)	Median = 6 Range = 1–11 (missing 5)	Median = 5 Range = 1–11 (missing 9)	M-W Z = -1.00 P = 0.31
Dose of temazepam on 1 January 1995	10 mg 10 (24%) 20 mg 32 (76%) (missing 4)	10 mg 16 (40%) 20 mg 24 (60%) (missing 5)	$\chi^2 = 2.26$; df = 1 P = 0.13
Previous psychiatric history	Yes 12 (29%) No 30 (71%) (missing 4)	Yes 14 (33%) No 30 (67%) (missing 4)	$\chi^2 = 0.16$; df = 1 P = 0.69
Changes in hypnotic			
Number of changes of hypnotic over 19-month study period	1 9 (26%) 2 23 (57%) 3 or more 7 (17%) (missing 7)	1 30 (73%) 2 10 (24%) 3 or more 1 (2%) (missing 1)	test for trend $\chi^2 = 19.42$ df = 1 P < 0.001
Treatment reported at time of interview			
Protocol benzodiazepine	22 (61%)	26 (68%)	
Protocol antihistamine	7 (19%)	0	
Temazepam	1 (3%)	0	
Other benzodiazepine	4 (11%)	2 (5%)	
Non-prescribed hypnotic	1 (3%) ^a	1 (3%) ^b	
No hypnotic	1 (3%) (missing 10) ^c	9 (24%) (missing 7) ^d	

M-W = Mann-Whitney. ^aPatient reported using half a tablet of daughter's nitrazepam occasionally. ^bPatient reported using husband's nitrazepam approximately once a week. ^cPatients not interviewed: 2 had died, 7 had left the practice or were untraceable, 1 refused to be interviewed. ^dPatients not interviewed: 2 had died, 4 had left the practice or were untraceable, 1 refused to be interviewed.

term use of antihistamine, only three of whom reported being satisfied with their treatment. Our study does not support the use of antihistamines as a substitute for benzodiazepines and would question their use as a short-term hypnotic.

Benzodiazepine substitution was the preferred option, resulting in 24% of interviewees taking no hypnotic therapy 19 months after temazepam prescribing stopped — a similar outcome to other studies of minimal interventions used to reduce benzodiazepine use.^{6,7} A more intensive intervention involving individually agreed programmes of dosage reduction led to 37.5% of patients stopping their benzodiazepine.³

In conclusion, this study shows that temazepam prescribing in general practice can be reduced. An alternative benzodiazepine is useful in helping some patients stop their hypnotic use, but further work is needed to identify the characteristics of patients who would best respond to this form of treatment, or if the findings can be extrapolated to other benzodiazepine users. The use of

antihistamines as substitute hypnotics is not advocated on the basis of our findings.

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Appendix 1. The two alternative drug policies.

Antihistamine/chloral group	Benzodiazepine group
Hydroxyzine HCl	Diazepam (if not on it already)
Promethazine HCl	Nitrazepam (if under 60 years of age)
Trimipreazine tartrate	Oxazepam
Chlorpheniramine maleate	Lormetazepam
Diphenhydramine HCl	Loprazolam
Chloral hydrate	Chlordiazepoxide

Within each alternative policy, patients were prescribed the first suitable drug found acceptable from the list of six drugs.