Burning Issues Case Report

Substitution of alcohol with carisoprodol: A case for concern

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ABSTRACT

Carisoprodol, a centrally acting skeletal muscle relaxant, is not a controlled substance. Despite some evidence for its abuse, certain aspects, e.g. nature of effects, existence of withdrawals, remain unclear till date. We discuss the case of a middle-aged male who presented with carisoprodol use for 10 years. He reported remarkable similarity of its psychoactive effects with alcohol leading to carisoprodol as primary drug of preference. Some withdrawals were also reported which need to be studied further. Awareness for its abuse/dependence potential and ensuring proper regulatory mechanisms is the need of the hour along with stimulation of research to resolve the unclear aspects.

Key words: Carisoprodol, substance-related disorders

INTRODUCTION

Carisoprodol is a centrally acting skeletal muscle relaxant, with mebrobamate as its active metabolite. Even though its metabolite is a schedule IV controlled substance, carisoprodol (soma®, carisoma, somaflam; 350 mg tablets) remains uncontrolled despite a preliminary evidence of its abuse potential. The fact that it can be procured easily coupled with unawareness of its misuse among physicians shows an alarming situation.

We discuss a case where carisoprodol was substituted for alcohol as the primary drug of abuse and highlight some of the relevant issues for concern.

CASE REPORT

Mr. P, 52 years, unskilled worker, presented to the outpatient clinic with a desire to stop carisoprodol use, which he had been using for 10 years.

He initiated the recreational use of "country liquor" at the age of 17 years and progressed to dependent use by the age of 25 years (usual amount: 375-750 ml/day). Over the next few years he progressed to daytime drinking (750-1100 ml/day) with significant socio-occupational dysfunction.

At the age of 42 years, he tried carisoprodol tablets on insistence of his friend. The patient described the effect, "even better than country liquor and to resemble that of English whisky." He reported feeling that carisoprodol provided similar subjective effects as alcohol, without any obvious smell in breath. He started taking carisoprodol tablets in place of alcohol especially during daytime and at his workplace (10-15 tablets/day; 5250 mg/day) to escape detection by his coworkers. He started spending more time to plan and procure them and at times had to visit several medical stores to ensure adequate supply.

At the age of 49 years, he shifted primarily to carisoprodol use approximately 30 tablets/day (10,500 mg/day) in a divided

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fashion throughout the day. On days when he could not manage to get tablets, he would have anxiety, restlessness, and insomnia and in addition, complained of vague pains and aches in body and "not feeling fresh." The same pattern continued for the next 3 years till he presented for treatment and was admitted. There was no past history of medical or psychiatric illness. The family history was suggestive of alcohol dependence in three first-degree relatives. General physical examination, systemic examination as well as a mental state examination revealed no abnormality. An ICD-10 diagnosis of mental and behavioral disorders due to use of sedatives or hypnotics, dependence syndrome (F13.2), and

alcohol dependence syndrome (F10.2) was made.

The complete hemogram, renal, and liver function tests revealed no abnormality. His withdrawal symptoms were managed with tablet diazepam 40-50 mg/day (in three divided doses) which was tapered gradually. He reported improvement in sleep and anxiety over next 10 days, but persistence of prominent somatic symptoms (pain in legs and body aches) along with craving. Tablet disulfiram (250 mg/ day) was started as a relapse prevention measure for his alcohol use after informed consent. The patient also received psycho-education sessions and relapse prevention sessions in group setting as well as on individual basis and was advised for regular follow-up.

DISCUSSION

Carisoprodol is an easily available, relatively cheaper, and uncontrolled drug. In this patient, the easy concealment of tablets, convenient oral intake, and no associated breath smell like alcohol coupled with easy availability probably led to its preference over alcohol.

Some authors have documented its abuse for sedation,[1] mindaltering effect, [2] and as a substitute for illicit drugs. [3] In our case, the perceived effects of carisoprodol resembled that of "whisky," and hence, the patient reported liking it better than the "country liquor" that he normally used. This resemblance of its acute effects to alcohol and interchangeable use with alcohol as reported by the patient is a new information and an issue for concern considering the wide-spread alcohol use and liberal availability of carisoprodol.

The presence of withdrawals, especially somatic symptoms in this case, has confirmed some of earlier reports.[3-5] Though the nature of carisoprodol withdrawal syndrome is debated in the literature, there is reportedly a risk for seizures from meprobamate (the active

metabolite) withdrawal in up to 10% of cases. [6] Benzodiazepines were thus started immediately in this patient with a gradual taper. As of now, there is no specific pharmacological agent available for the long-term treatment of carisoprodol dependence. The mainstay of treatment in this patient was nonpharmacological with focus on relapse prevention sessions.

The physicians are by and large unaware of its abuse potential.^[7] There is a need to generate awareness and sensitization among physicians. Even in a substance abuse treatment center, the facilities for urine screening for carisoprodol/meprobamate are not commonly available.

This report highlights the need for greater awareness, adequate regulatory measures, and research facilitation about various aspects of carisoprodol abuse and management.

REFERENCES

 Reeves RR, Pinkofsky HB, Carter OS. Carisoprodol: A drug of continuing abuse. J Am Osteopath Assoc 1997;97:723-4.

- 2. Rust GS, Hatch R, Gums JG. Carisoprodol as a drug of abuse. Arch Fam Med 1993;2:429-32.
- Venugopal D, Deepak G, Murali N, Kumar KB, Sharma PS. A case of carisoprodol dependence. Indian J Psychiatry 2000;42:211-3.
- Sidkar S, Basu D, Malhotra AK, Varma VK, Mattoo SK. Carisoprodol abuse: A report from India. Acta Psychiatr Scand 1993;88:302-3.
- Reeves RR, Parker JD. Somatic dysfunction during carisoprodol cessation: Evidence for a carisoprodol withdrawal syndrome. J Am Osteopath Assoc 2003;103:75-80.
- Charney DS, Mihic SJ, Harris, RA. Hypnotics and sedatives. In: Hardman JG, Limbird LE, editors. Goodman and Gilman's The pharmacological basis of therapeutics. New York: McGraw Hill, Medical Publishing Division; 2001. p. 399-428.
- Reeves RR, Carter OS, Pinkofsky HB, Struve FA, Bennett DM. Carisoprodol (soma): Abuse potential and physician unawareness. J Addict Dis 1999;18:51-6.

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