

## A CASE REPORT OF CARISOPRODOL DEPENDENCE

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### ABSTRACT

*Carisoprodol is a centrally acting skeletal muscle relaxant whose active metabolite is meprobamate. There have been few reports of carisoprodol abuse from India. This is a report of a case with carisoprodol dependence. The patient also had poly substance abuse of alcohol, nicotine, benzodiazepine and dextropropoxyphene. Although no specific withdrawal syndrome could be identified, the patient had symptoms of anxiety, insomnia, restlessness and craving. Clinicians must be aware of the dependence potential of carisoprodol and need to be cautious in its prescription, especially in view of its free availability in the Indian market.*

*Key words : Carisoprodol, dependence, poly-substance abuse*

Carisoprodol is a centrally acting skeletal muscle relaxant whose active metabolite is meprobamate. It is commonly prescribed as a muscle relaxant and as a substitute to opioids. One of the earliest reports of the abuse potential of carisoprodol appeared in the American Journal of Alcohol and Drug Abuse in 1978 (Morse & Chua, 1978). Thereafter, there was a lull in the number of patients with carisoprodol abuse reported till the early 1990's. Several reports of meprobamate dependence have also been reported among patients prescribed carisoprodol (Littrel et al., 1993).

In India, carisoprodol is marketed as 350 mg tablets (brand name : Carisoma, Wallace). There are few reports of carisoprodol abuse from India despite its free availability as an over the counter drug. A specific and well-defined withdrawal syndrome has not been described with carisoprodol dependence. Most patients report transient anxiety, insomnia, irritability, cranial and muscular pain and vegetative symptoms during the withdrawal period. No seizures or psychotic reactions have been described (Wyller et al., 1991).

We report the case of a person with carisoprodol dependence who presented to our

outpatient department for deaddiction.

Mr. RR, a 40 years old married Hindu male, goldsmith by profession, from a semi urban background presented to the psychiatry outpatient department of this hospital for deaddiction treatment for carisoprodol dependence. He had started consuming carisoprodol about 7-8 years back out of inquisitiveness after being told about the pleasurable effects of the drug by his friends, who compared the effects to those of methaqualone. Initially he was using about 700-1000 mg/day, and slowly increased the amount to the present level of 2800-3500 mg/day so as to get the same pleasurable effect as earlier. Under the influence of carisoprodol, the patient reported that he felt an experience of freshness, feelings of happiness, pleasure and strength in his body. He felt enthusiastic to work but was found to be very slow at it. He also reported that he felt as if "drunk", and had difficulty in walking. Others noticed him to be withdrawn and slow in responding and working at the time. He did not experience any perceptual abnormalities, racing thoughts or any psychotic phenomena. His pattern of consuming the tablets was every 2-3 hours (by which time the effect of the previous

dose would be waning).

The patient had made some attempts to abstain from carisoprodol, but experienced withdrawal symptoms like palpitations, insomnia, excessive sweating, restlessness and anxiety, which led him to restart the drug within a few hours with subsequent relief of the symptoms. He was preoccupied with procuring and consuming the substance most of the time and was significantly dysfunctional in social and occupational spheres. The patient had also been consuming alcohol (about 90-180 ml of whisky/brandy), alprazolam (1-2 tablets of 0.25/0.5 mg) and dextropropoxyphene (capsule proxyvon) occasionally. He was also smoking about 2-3 cigarettes per day since many years. There was no history suggestive of intravenous drug use and any anti-social traits.

In the past, the patient had been taking methaqualone (as tablet mandrax) for a period of 5-7 years and had stopped because of familial pressure and non-availability of the drug followed by a period of abstinence for nearly 5 years. There was family history of alcohol dependence in one first degree and one second degree relative.

On evaluation the patient did not have evidence of any abnormalities on physical examination and laboratory investigations except mild resting tremor. Mental state examination showed the patient to be well motivated to give up carisoprodol. He did not have mood, thought, perceptual or cognitive abnormalities.

The patient was managed as an inpatient with both pharmacological and psychological modes of therapy over a period of 14 days. He was treated with bromocriptine (initially 2.5 mg gradually built up to 10 mg/day) (used a putative anti-craving agent) and lorazepam (2 mg at bedtime for sedation). The patient did not report any craving during the hospital stay. Psychological treatment consisted of psychoeducation (5 sessions), aversion therapy (10 sessions), covert sensitization (6 sessions) and cue exposure. At the time of discharge, the patient did not report any craving for the substance.

## DISCUSSION

Carisoprodol dependence is not a very common presentation in this part of India, despite the free availability as an over the counter medication. To our knowledge, there has been only one other report of carisoprodol abuse from India (Sikdar *et al.*, 1993).

Our case is one of the few reported cases of carisoprodol dependence from this part of India. This case highlights the subjective experiences and objective behaviours of a patients with carisoprodol use. During the period of intoxication, the patient had feelings of happiness, pleasure and increased strength. Similar 'hypomania like features' have been reported by Sikdar *et al.* (1993) in their report from India. The patient in our report had symptoms of withdrawal like restlessness, insomnia and anxiety, and had psychological craving for the drug. On assessment, our patient did not have any antisocial or other personality traits. However, the patient did have multiple substance abuse, which has been often reported among persons with carisoprodol abuse (Wyller *et al.*, 1991). The reported similarity of effects of carisoprodol, opioids and other drugs like methaqualone may increase the risk of the user self-substituting one for another more easily and legally available preparation. This aspect has implications for regulating the availability as well as prescription practices of carisoprodol. Clinicians need to be aware of the abuse potential of carisoprodol and need to exercise caution, especially if the patient has a history of substance abuse.

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