

CODEINE COUGH MIXTURE ADDICTION MIMICKING THYROTOXICOSIS

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SYNOPSIS

It is not widely known that cough mixture preparations containing opiates can be addictive or produce dependency states. The side effects of such addiction and dependency with the attendant withdrawal syndrome, may closely mimick thyrotoxicosis. We describe such a case in this paper.

CASE REPORT

WFT is a 41-year old Chinese man who works as a clerk. He first presented in 1972 with thyrotoxicosis and periodic paralysis. The patient underwent subtotal thyroidectomy 8 months later.

Post thyroidectomy, however, he still complained of weight loss, tremulousness, sweaty palms and was noted to be irritable and anxious. At no time was there biochemical evidence of relapse of his thyrotoxicosis. He finally admitted to being dependent on increasing doses of codeine cough mixture (LTR) since 1970 and had also been seeing a psychiatrist for Depression. His consumption of codeine had gradually increased over the years, and, when admitted here in December 1983, he was taking 4 oz, 6 hourly.

DISCUSSION

Codeine is commonly used in medical practice for its analgesic and cough suppressive properties. Its effect on gastrointestinal motility is also well known and it is utilised in the symptomatic relief of diarrhoeal illnesses.

With regard to its anti-tissue properties, it is the main active component of cough syrups like Linctus Tussi Rubra (LTR) and Phensydryl. LTR contains 10mg/5ml of codeine but its use in the government medical services was discontinued 8 years ago. Syrup phensydryl is a most popular preparation consisting of 9mg/5ml codeine phosphate, 7.2mg/5ml ephedrine hydrochloride and 3.6mg/5ml promethazine hydrochloride.

Other codeine containing preparations in the market include Actifed, Benylin with codeine, Linctifed Expectorant, Tercoda and Terpalin (Trade Names).

Taken in large enough amounts, codeine can produce effects and side-effects common to the opiate group of drugs. In fact, the literature does report anecdotal instances of addiction and dependence on codeine containing preparations (1, 4, 5).

Hence, it is naive to assume that cough mixtures containing codeine do not have any addictive potential as it is purely a matter of dosage i.e. because the potency of codeine is comparatively less than that of morphine.

Himmelsbach (3) listed the following factors which made codeine preparation likely candidates for abuse; its injudicious use in the practice of medicine, inadequate legal control and difficulty in obtaining the usual addiction drugs.

The literature also reports instances of codeine cough syrup abuse and Seevers in 1967 reviewed the available figures during an International Narcotic Enforcement Officers' Association meeting in Montreal. (1). In addition, there are reported cases of codeine syrup being used to enhance the effect of other agents (5).

Withdrawal and abstinence symptoms do occur when codeine use is discontinued (1). These are, however, less severe than that produced on discontinuing morphine. The effects of autonomic overactivity are evidenced as increased sweatiness, tremulousness, irritability and excitement. As in the case of our patient, these symptoms closely resemble thyrotoxicosis. We have been unable to trace similar reports in the literature.

In conclusion, codeine containing cough mixtures have been in use for many years for its effective anti-tissue properties. However, in using such preparations, one must realise that the potential for abuse is ever present. In a patient so addicted, some of the presenting features may closely mimick thyrotoxicosis.

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