Henry Ford Hospital Medical Journal

Volume 30 | Number 3 Article 14

9-1982

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Henry Ford Hosp Med J
Vol 30, No 3, 1982

Clinical Note: Use of Clonidine to Detoxify Opiate-Addicted Patients

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This study investigated the utility of systematically administering clonidine to detoxify opiate-dependent inpatients. Fifteen patients received a 0.1 mg dose of clonidine orally at 8:00 am, 12:00 noon, 4:00 pm, and at bedtime. A 0.1 mg dose was also administered as needed if any withdrawal signs were evidenced, but this additional dose was rarely needed after the second day of treatment. Night sweats were the only significant complaint reported. All 15 patients were successfully detoxified after ten days of treatment.

Clonidine hydrochloride is an alpha adrenergic agonist that may prove beneficial in the detoxification of opiate addicts.

Recent studies (1-5) have shown that a single dose of clonidine, or several small doses throughout the day for ten days, relieve signs and symptoms of opiate withdrawal for both outpatients and inpatients.

We studied the capability of clonidine to detoxify inpatients addicted to opiates when the drug was administered systematically on a strict schedule.

Patients

The subjects were 15 opiate-dependent inpatients who requested detoxification. There were 11 men and four women ranging in age from 25 to 35 years. Their addiction ranged from two to 15 years, but they had no serious medical or psychiatric illnesses. Nine subjects were taking clinical maintenance doses of methadone (20-30 mgs), three were actively abusing heroin, and three were abusing more than one drug simultaneously (methadone, heroin, dilaudid, tussionex, codeine, and other opiates in combination or singly with occasional use of various tranquilizers). All subjects had taken methadone and/or heroin on the day they were admitted to our hospital. On previous occasions, all had unsuccessfully attempted to withdraw from opiates, either by reducing their doses of methadone or by abstaining completely ("cold turkey").

Methods

Patients were started on oral doses of clonidine (0.1 mg) at 8:00 am, 12:00 noon, 4:00 pm, and at bedtime. A 0.1 mg dose was also given as needed between each scheduled dose if the patient experienced any signs of withdrawal. However, an additional dose was rarely needed after the second day of treatment. The time between doses was not to exceed four hours. Each patient's blood pressure was taken before and one hour after each dose. Clonidine was not administered when the systolic blood pressure was 90 mm or lower. This cut-off point was determined after we made numerous attempts to implement a diastolic blood pressure and/or a higher systolic cut-off point but found that none would aid in the treatment. With this regimen, no problems occurred either through a hypotensive episode or a disruption in the time span when clonidine was to be given.

All 15 patients received this treatment for five days. On the sixth day, the 4:00 pm dose of clonidine was omitted first; on the seventh day, the 12:00 noon dose was omitted; on the eighth day the 8:00 am dose; and, finally, on the ninth day, the dose at bedtime was omitted. By the tenth day patients were not receiving clonidine at all. If an extra dose had been added to this regimen (e.g., instead of receiving a 0.1 mg dose of clonidine at 4:00 pm, the subject received 0.2 mg), this extra dose was omitted first.

Submitted for publication: October 21, 1982
Accepted for publication: November 21, 1982

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Results

All subjects were physically non-dependent on opiates after completing the ten-day treatment. Nine patients experienced night sweats on the second day of treatment. No other significant complaints were reported. Neither the patient's body weight nor the length of time the patient had been an addict affected our results.

Comments

Clonidine is best known to physicians as an antihypertensive drug. However, several recent studies had reported its utility in the detoxification of opiate addicts (1-5). These studies provide clinical support for the hypothesis that non-adrenergic hyperactivity is involved in triggering the syndrome of opiate withdrawal. Our clinical test of systematically administered clonidine appears to be an effective regimen for opiate withdrawal in an inpatient setting. The need for an ongoing psychosocial rehabilitation process for a minimum of six months after discharge is also a significant factor in helping subjects to remain drug free.

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