Time-Course of Buprenorphine Dose Increase in a Maintenance Program for Heroin Addicts: Retention in Treatment and Clinical Meaning

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Buprenorphine; Heroin addiction; Buprenorphine maintenance

,QWURGXFWLRQ

Buprenorphine is a major therapeutic option in the treatment of opiate addiction [1-13]. Peculiarly, increasing dosages do not grant higher and higher levels of agonism, but a plateau is soon reached due to it's the high DyQLWy the μ-receptor (ceiling HvHFW [14-16]. In terms of anticraving action, the ceiling level of agonism seems to be equivalent to that provided by 80 mg of methadone.

GLvHdutHQW In other words, similar dosages may correspond to treatment termination or treatment successfulness according to the rapidity by which they are reached, and mirror GLvHdutHQW levels of opiate-balance.

0DWHULDO DQG 0HWKRGV

Subjects were a series of consecutive patients admitted into the outpatient buprenorphine maintenance treatment program run by the VP Dole Research Group at the University of Pisa. Sixty-seven patients, who were being administered buprenorphine for the }UVW time, were included in the study. Mean age was 31.74 ± 7.5 (range 16-45), 72.9% were male.

Sample features are shown in Table 1. Socioanagraphic variables and addictive features were registered by means of an anagraphic form and the DAH-S [20]. Diagnosis was made by two psychiatrists and FRQ}UPHG by a senior psychiatrist according to DSM-IV criteria.

First day buprenorphine dosage, amount of buprenorphine administered during the }UVW week (or until treatment termination for earlier dropouts) and maximum buprenorphine dose ever administered were registered. Time spent in treatment before being administered one's maximum dosage was calculated, and ripidity was also calculated as the maximum-dose/time-to-maximum dose ratio.

Buprenorphine was administered as an anticraving agent, in order to stabilise addictive behaviours while on treatment. No subjects were terminated because of enduring drug use, but buprenorphine dosage was increased as a trend in order to handle cravings and relapsing behaviour. No preset dose schedule was followed, and no dosage was regarded as too low as long as HvHFWLYH

Student's T-test with and χ^2 test were employed to compare retained patients with dropouts, for continuous and categorical variables respectively.

5HVXOWV

treatment initiation, so that he was not excluded from the study sample.

Dropouts have a lower educational level (18.3% vs. 41.9% c χ^2=8.091, p=0.018) and more R V H V Q amphetamines (50% vs. 19% χ^2=5.604, p=0.017). R X J K disorders are displayed by 17% of retained subjects vs. no dropout (χ^2=3.937, p=0.047). No other G L v H U H Q F H V between groups were found.

First day dosages (2.44 ± 1.6 vs. 2.58 ± 1.9 mg) cumulative } U V W Z H H N dosages (20.79 ± 13.0 vs. 23.68 ± 18.1 mg) and maximum dosages (6.62 ± 2.9 vs. 8.92 ± 6.6 mg) are Q R Q G L v H U H Q W between retained subjects and dropouts. Time taken to reach the maximum dosage is G L v H U H Q W for retained subjects vs. 31 ± 46 days for dropouts (Table 2).

Similar being maximum dosages, such a G L v H U H Q F H means that dropouts escalate more rapidly their buprenorphine dosage to the maximum value. H U H I R U H increasing buprenorphine dosage has a G L v H U H Q W meaning according to the ripidity of increase: Rapid, earlier escalation may indicate poor opiate balance, with a wider gap between anti-withdrawal and anti-craving dosages. Later, more gradual increases of buprenorphine dosage indicate rapid opiate balance followed by dose-adjustment in order to optimize the control of cravings during spontaneous rehabilitation.

All subjects were made aware they would have a G L v H U H Q W treatment chance by a G L v H U H Q W option that is methadone maintenance, in case buprenorphine would not prove

First day (mg/day)	2.44 ± 1.6	2.58 ± 1.9	-0.35	0.729
Cumulative first-week (mg)	20.79 ± 13.0	23.68 ± 18.1	-0.067	0.506
Maximum (mg/day)	6.62 ± 2.9	8.92 ± 6.6	.106.106	

5HIHUHQFHV

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