## Research

## Methadone-Buprenorphine Transfer in British Opiate Addicts

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This is the first completed study of buprenorphine (BUP) in opiate addicts in the UK. Thirteen opiate addicts who met DSM-III-R criteria for opiate dependence and were stabilised on 20-30 mg/day oral methadone (M) were transferred for three days to BUP 4 mg/day sublingually as outpatients. Saccadic eye movements (SEM) were used to quantify central opiate effects. SEM have potential advantages over pupillometry as they are sensitive, reliable, can be repeated frequently and have minimal conscious input once initiated. Self report measures included the ARCI short form (MGB, PCAG, and LSD scales), the agonist-antagonist adjective checklist (agonist and withdrawal scales) and visual analog scales (VAS). Subjects received £45 (\$70) in vouchers for taking part.

## (A) Positive effects of BUP

VAS "good effects" became elevated (p=0.05) and the "drug high" score remained low over the three days. There were no significant changes in the agonist scale, the MGB scale and the observer rated withdrawal scale. Subjects reported a 77% likelihood of accepting BUP in place of M for maintenance therapy.

## **(B)** Negative effects of BUP

Withdrawal symptoms increased (p=0.006) pre-BUP on day 2 but were clinically mild. On day 3 the withdrawal score had returned to near baseline. A similar pattern was observed with the LSD and PCAG scale. However on day 3, "Bad effects" (p=0.03) and heart rate (p=0.02) remained elevated and systolic BP reduced (p<0.005). C) SEM: SEM peak velocity decreased non-significantly to the peak effect of the BUP (3 hours), and then increased significantly pre-BUP on day 2 (p=0.02) at the time of the maximal withdrawal effects. Pupillography revealed no significant differences. These findings illustrate the acceptability of BUP to British opiate addicts, and the potential of SEM as a measure of central opiate effects