Quantification of the benefits of Pabrinex® in alcohol dependent

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Thiamine deficiency is a major factor in alcohol-related Wernicke’s Encephalopathy (WE) which if untreated is fatal in 20% of cases and in those who live, may progress to Korsakoff’s Psychosis (KP) and subsequent institutionalisation (Thomson et al., 2008; Kopelman et al., 2009). If diagnosed sufficiently early, Wernicke-Korsakoff Syndrome can be successfully treated with the high potency vitamin complex, Pabrinex® (ascorbate 500mg, nicotinamide 160mg, pyridoxine HCl 50mg, riboflavin 4mg, thiamine HCl 250mg) and it has been proposed that this treatment should be given prophylactically to those at risk of developing WE and therefore KP (Thomson & Marshall, 2006). Within the South London & Maudsley (SLaM) NHS Foundation Trust, Pabrinex® is now given routinely to clients attending a community drug and alcohol service who have elected to undergo detoxification (DTX) as well as those receiving DTX as inpatients. In order to quantify the potential efficacy of this treatment, we have devised a 10-point self-rating Nutritional Deficiency Assessment (NDA) which we tested at one of the SLaM community clinics and hospital units.

A total of 28 alcohol dependent (F10.2; ICD-10) patients (43.7 ± 9.8 yr; mean ± SD) consented to enter the study. The majority of the group were male (71.4%), White British (82.8%) and unemployed or on sickness benefit (85.7%). Just under half (46.7%) had a first degree relative who was dependent on alcohol. Both cognitive state (MMSE score: 25.2 ± 3.4) and body mass index (24.3 ± 3.9 kg.m⁻²) were normal. Problem drinking began at 26.6 ± 11.41 yr with withdrawal symptoms first experienced some 10 yr later. Current alcohol intake was 23.3 ± 10.6 unit.d⁻¹ with 85.7% of the group drinking every day over the last month. Only four reported using another recreational drug, cannabis (1-2 joints daily). The NDA was made before, and 7 d after, the first dose of Pabrinex® i.m. (Archimedes Pharma UK Ltd).

Of the original 28, seven inpatients and 14 outpatients, completed the study. The NDA score of 7.57 ± 4.48 was significantly reduced (t = 4.20, P < 0.01) after Pabrinex®. Separate analysis of the inpatients (P<0.05) and outpatients (P<0.001) showed significant decreases in the NDA score in both groups.

Our pilot study using the brief self-rating NDA showed that Pabrinex® significantly reduced the symptoms associated with alcohol use and improved general well-being in our sample. This result was independent of the effects of chlordiazepoxide or oxazepam used during inpatient DTX or the number of Pabrinex® injections (inpatient: n = 5, outpatient: n = 3).

This study was approved by the joint SLaM and Institute of Psychiatry NHS Research Ethics Committee (Ref. No. 08/H0807/36)


Thomson AD et al. (2008) Alc Alcohol, 43, 180-186