LETTERS TO THE EDITOR

Alcohol Withdrawal Syndrome in Neurocritical Care Unit: Nicotine Replacement Therapy and Thiamine Deficiency

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The review article about alcohol withdrawal syndrome in neurocritical care unit deserved comment [1].

Identification and treatment of preexisting concomitant medical problems is a major issue and Farrokh and colleagues rightly stressed that the differential diagnosis for alcohol withdrawal is extremely broad (myocardial infarction, pulmonary embolism, hyperthyroidism, infection, intoxications, withdrawal from sedating medications, etc.) [1]. However, regarding alcohol users, the most frequently associated condition is smoking and all smokers should benefit from prescription of nicotine replacement therapy when hospitalized [2]. Ventilated critically ill smokers necessitate supplemental sedatives, neuroleptics, and physical restraints [3].

For the prevention of Wernicke–Korsakoff syndrome Farrokh and colleagues rightly acknowledged that defined dosing regimen and duration are lacking. However, prevention of thiamine deficiency is not only about Wernicke–Korsakoff syndrome but also left ventricular systolic function. Thiamine prescription should be systematic in alcohol users who are malnourished or have decompensated liver disease or when prescribing parenteral glucose serum. Indeed, as thiamine is not covered by a Medicare Prescription Drug Plan in the USA, as in France despite a costly mandatory healthcare scheme, thiamine deficiency frequently occurs in the ambulatory setting as many patients cannot afford the price or cannot understand it could be effective because it is not reimbursed. Further, a variety of drugs have been associated with thiamine deficiency including furosemide and antibiotics. Dose

estimates are based on data from uncontrolled trials and from empirical clinical practice but 250 mg/day seems the minimum and overdose has not been reported [4, 5]. Polyvitamins vials only provide 100 mg. As half life is short, two or three administrations per day are warranted, intravenously or intramuscularly for the first 3–5 days as absorption can be impaired. Last, thiamine is a coenzyme to various intra-mitochondrial enzymes involved in carbohydrate metabolism also requiring Mg⁺⁺. Accordingly, hypomagnesaemia must be corrected for effectiveness.

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