

Treatment / Management of ARBD



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This brief overview does not attempt to provide a comprehensive review of treatment or management approaches. It focuses on two comprehensive reviews of the scientific literature with view to providing an update on contemporary approaches to management. In understanding the management of ARBD, it is important to acknowledge that most patients with ARBD will improve in cognitive function over time. Cognition will recover as the direct effects of alcohol on the brain fades. More serious injuries can be caused through deficiency in thiamine and related nutrients (Hayes, et al 2016). These later effects can take two to three years to recover, and the individual may be left with permanent damage.

In 2020, Cabelleria et al undertook a systematic review of the treatment of ARBD. The authors identified 26 studies, 12 referring to pharmacological and 14 to neuropsychological interventions. Of the neuropsychological interventions, computerised treatments, errorless learning, and various interventions showed positive effects on working memory and general cognitive function. In errorless learning the individual is asked to repeat the learned material as soon as it is presented. He or she is encouraged to learn by avoiding trial and error (testing), presenting the learning experience as a positive experience through gradually increasing the difficulty as learning is achieved. General cognitive stimulation was also found to have benefitted the cognitive profile of participants (Oliveira et al 2015). Regarding drug interventions, thiamine (vitamin B1 IM/IV), memantine (a drug licenced in UK to treat Alzheimer's Dementia) and methylphenidate (often known as 'Ritalin' and used to treat ADHD) improved working memory, long term memory and general cognitive function. All these studies were small and require replication.

Other than thiamine treatment the evidence is not strong enough to recommend routine treatment of ARBD with these drugs. Notably, thiamine was used in people undergoing withdrawal treatment (Ambrose, et al 2001) and found to be beneficial. In another recent review of six publications, Smith et al (2021) were unable to demonstrate a consensus regarding dosage and suggest that doses \geq 100mg of parenteral thiamine should be given in cases of confirmed Wernicke's Encephalopathy. Thiamine remains the main stay of treatment in an acute setting. Patients presenting with acute WE should receive intravenous thiamine treatment: for between 3-5 days or even longer in order to achieve improvement (Royal College of Psychiatrists 2014). However, the treatment is usually more complicated than solely relying on parental thiamine, involving physical stabilisation and other interventions (NICE 2011) and should be carried out in acute hospital settings. Delay in treatment may cause more permanent brain damage. In cases of dependent drinkers who have responded to parenteral thiamine, oral prophylactic thiamine should be prescribed. Likewise, oral thiamine should be prescribed in cases of decompensated liver disease; acute or medically assisted withdrawal; or before and during a planned medically assisted alcohol withdrawal (NICE 2010).

As in Cabellera's review, Svanberg & Evans, in their 2013 review indicate that a variety of neuropsychological techniques may potentially be of use in helping improve cognition. This review included studies involving errorless learning, studies utilising assistive technology, behavioural reinforcement, CBT approaches and specific psychological interventions targeting the executive and reasoning aspects of cognition.

The review includes three studies exploring the role of specialist rehabilitation and specialist institutions. Blansjaar et al (1992) found that social functioning improved in specialised sheltered accommodation and deteriorated in those in a nursing home environment, however cognitive dysfunction was stable in all three groups. In 2008 Irvine and Mawhinney studied patients living in a supported living unit over 12 months. General health improved over the study time, and it was noted that lack of insight was associated with an increase in challenging behaviour and lowered engagement. Lastly, Wilson et al (2012) followed up 41 patients managed through a phased rehabilitation programme. It is important to note all that these are small studies. Wilson's study of 2012 was an uncontrolled naturalistic follow up study (based on the published guidance manual: ARBD.net : reference documents). Consequently, any conclusions concerning interventional efficacy can only be made with caution. Despite this, from a service delivery perspective, Price et al. (1988) compared outcomes of patients managed by specialist services with those managed by generic psychiatric services and found that specialist services performed better.

Overview

This summary focuses on two literature reviews. These provide a general impression of the literature. It is evident that most studies are too small and need replication. The lack of larger qualitative studies and randomised controlled trials means that it is impossible to make definitive statements concerning the value of specific interventions. Despite this, cumulative evidence and clinical consensus indicates a modest optimism in terms of the advantages of targeted psychological interventions and holistic, specialised service provision (Royal College of Psychiatrists 2014). This web site (ARBD.net : reference documents) includes a guidance manual for the management of ARBD generated through a follow up study (Wilson et al 2012) and

a self-help manual currently being used in the context of an alcohol treatment service in Wales.

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