Alcohol Related Brain Damage (ARBD)

The case for Intervention

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It is apparent that patients with uncomplicated ARBD will demonstrate varying degrees of recovery provided they are abstinent, physically well and their nutritional support is maintained. Improvement may take up to 3-5 years. Residual deficits will eventually be apparent. This ‘natural’ improvement has led some authors to question the efficacy and role of active therapeutic neuro-cognitive rehabilitation (Alterman et al 1989; Godding et al 1992) but assumes appropriate social settings and support. Likewise, ‘natural’ recovery assumes abstinence. As cognitive deficits may compromise insight and decision making in relationship to alcohol consumption (Cummings, 1995; Goldman-Rakic, 1987; Luria, 1973); psychosocial interventions may be required in order to protect the patient until capacity (relating to further alcohol exposure) is restored.

Evidence for intervention

In the absence of clinical pathways of psychosocial care for people presenting with cognitive damage associated with excessive long term alcohol abuse there is a significant impact on acute hospital bed occupancy (Popoola 2008), increased morbidity, mortality and re-admissions (Price et al 1988). These findings are supported by a recent, review of a new service in the Wirral in which bed occupancy was reduced by 80% in terms of bed days per year (Wilson 2011). Cox (2004) derives information from clinical reports in the context of service provision and suggests that 25% of patients with ARBD make a full recovery. A further 25% make a partial recovery, with another 25% making minor recovery and the remainder shows no improvement at all.

Further studies relate to specific cognitive training in improving function. In a randomized controlled trial, Fals-Stewart (1994) demonstrated the efficacy of specific computerized cognitive training in comparison to a muscle relaxation group, computer typing and no treatment group. Of these drug and alcohol abusers with cognitive deficit, 25% were specifically ARBD. The authors suggest that the effect of cognitive rehabilitation can be enhanced by tailoring the intervention to the specific needs of the each patient. More specifically; practice has been shown to improve visuo-spatial skills (Forsberg and Goldman 1985). Training (Goldman and Goldman 1988) and practice (Stringer and Goldman 1987) in one cognitive task improves performance in another (Forsberg and Goldman 1987). Roehrich and Goldman (1993) have demonstrated the efficacy of bibliotherpay in terms of cognitive rehabilitation. Notably the literature emphasises the importance of integrating cognitive rehabilitation into alcohol treatment programmes (Meek et al 1989, Glass 1991). These studies have generated a number of attempts to establish specific programmes for ARBD sufferers. These are summarised by Bates et al (2002). Unfortunately little research data exists in terms of efficacy of these programmes.

In their comprehensive review of the literature Bates (2002) draws on research relating to Acquired Brain Damage and emphasizes the importance of an ecologically relevant program of rehabilitation in which patients are encouraged to acquire skills relevant to their personal functionality and to develop environmental, behavioral and cognitive processes to accommodate residual areas of deficit. This approach is supported by Badderley et al 2002 in which memory and orientation aids also play an important role in rehabilitation of ARBD patients. Examples of long term follow up studies include: Price et al (1988) who followed up 37 patients for one year following discharge into non specialised community care. Ten of these patients (27%) were successfully placed, a further 20 (54.1%) were described as dysfunctional and the remaining seven were dead. Two years earlier, Lennane (1986) followed up 104 patients for between eight months and two years, followed up by more specialised service provision. Fifty three of these patients were classified as successful placements, 11 (10.6%) had been re-admitted into hospital
and the remainder were lost to follow-up or presumed dead. In comparing these studies, Price makes the case for a specialised service provision. Subsequent studies have indicated that intervention (of varying specificities) may have an accelerant role in terms of improvement. Outcome studies of drug or alcohol abusing patients with cognitive dysfunction in long term specialist residential settings have demonstrated better outcomes (Fals-Stewart and Schafer (1992, DeLeon 1984, DeLeon & Jainhill, 1981) than when placed in generic institutions. These findings are supported by Blansjaar et al., (1992) and Ganzelves et al., (1994) in which ARBD patients referred to specialised nursing homes showed better preservation and improvement in social functioning and enhanced speed of information processing than when in non specialised homes.

**Summary:** It is evident that uncomplicated ARBD patients will recover to varying degrees. This may take up to five years. However, this does assume that the patient is placed in a supportive (and where necessary; a protective) environment so as to facilitate abstinence, physical health and appropriate nutrition. Research suggests that recovery and prognosis can be enhanced through developing patient specific rehabilitative programs, in the context of experienced service provision, that will facilitate the cognitive, behavioral and social rehabilitation of the patient. This approach has been heavily influenced by research conducted in patients with Acquired Brain Injury.
References


Cox S, Anderson I, McCabe L. A fuller life; report of the expert committee on alcohol related brain damage. Stirling: Dementia Services Development Centre. 2004. 13-3-2010. Ref Type: Online Source


