Sleep Studies in Angelman Syndrome

Research Extract

Extract from Dr Mary Heald's PhD Thesis, 'Refining the Behavioural Phenotype of Angelman's Syndrome', Unpublished PhD thesis, University of Birmingham.

Summers et al. (1992) conducted a sleep/wake intervention with one child with Angelman syndrome aged nine years. During the intervention, the researchers restricted the child's sleep in order to impact the sleep/wake cycle. Although this intervention was shown to be successful in reducing many of the reported sleep difficulties, the effects cannot solely be attributed to the behavioural intervention, as melatonin (medication often used to treat sleep difficulties) was administered throughout the course of the intervention. However, the results are supported by a subsequent behavioural intervention for sleep in a larger sample of children with Angelman syndrome. Allen, Kuhn, DeHaai, and Wallace (2013) conducted a sleep intervention with five children with Angelman syndrome aged two to 11 years. The behavioural package targeted both child and parent behaviours including sleep hygiene, sleep/wake schedule and interactions from parents during the night. The authors reported improvements in a range of "difficult" behaviours after the intervention including night time disruptions, sleep onset and independent sleep initiation. The alternating treatments design highlighted that the effects of the intervention persisted two to three months post treatment. Overall, the results from this study provide initial evidence that behavioural interventions may be successful in reducing many of the difficulties with sleep reported in Angelman syndrome, including sleep duration and maintenance.