

ABSTRACT

Background

Autism is a developmental disorder characterised by impairments in communication, impairments in social interaction and repetitive or restrictive interests. Complementary medicines are believed to be widely used in treating this disorder. There is, however, a lack of unbiased and evidence-based information about these products currently available to the families of children with autism.

Aims

The first objective of this project was to identify the range of complementary medicines used in children with autism in South Australia, and establish their prevalence of use. The second objective was to determine the scientific rationale for the use of a selection of complementary medicines commonly-used in the treatment of autism, and to systematically review the evidence for their efficacy and safety.

Methods

Interviews were conducted with 40 parents/carers of children with autism. Subjects were asked why they were using or had used each particular medicine, whether or not they perceived it to be effective, where they obtained information from and/or who recommended each treatment to them. A literature review was also performed, focussing on 12 complementary medicines that are commonly used in treating autism including vitamin B6 + magnesium, melatonin, dimethylglycine (DMG), allithiamine/thiamine tetrahydrofurfuryl disulfide (TTFD), metallothionein (MT) promotion, glutathione, glutamine, colostrum, zinc, selenium, vitamin B12 and folic acid. Each of these products was assigned a rating in accordance with the grading rationale of the Mayo Clinic, to signify the level of available evidence for their efficacy.

Results

85% of subjects interviewed had used at least 1 complementary medicine in their autistic child. Zinc, used by 45% of subjects, was the most frequently-used of the 12 products being investigated, whilst glutamine was the least popular. Advice from a GP or paediatrician was the most common reason for using one of the specific products. Vitamin B6 + magnesium, melatonin, DMG and TTFD were each assigned to the Mayo Clinic category C (unclear or conflicting evidence). There was insufficient evidence to rate the remaining products.

Conclusion

The prevalence of use of complementary medicines among the interviewed sample was high. However, searching of the literature revealed a lack of clinical evidence to support their use in children with autism. In conclusion, more high-quality clinical trials of complementary medicines in autistic populations need to be conducted before any firm recommendations about their use can be made.