Co-Morbidity and Etiologic Evaluation Associated with ASD Diagnostic Assessment: A DBPNet study

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Introduction

Autism Spectrum Disorders are etiologically diverse and associated with a variety of co-morbid disorders , which have important implications regarding both treatment and family counseling. Recommendations for etiologic assessments in ASD have recently been published by the American Academy of Pediatrics(1), the American Academy of Child and Adolescent Psychiatry(2), and the American College of Genetics and Genomics(3), but the extent to which these guidelines are incorporated into clinical practice is not known. The objective of this study was to describe the co-morbidities found and etiologic evaluations used during ASD diagnostic assessments by physicians in DBPNet, a research consortium of twelve developmental behavioral pediatric fellowship training sites.

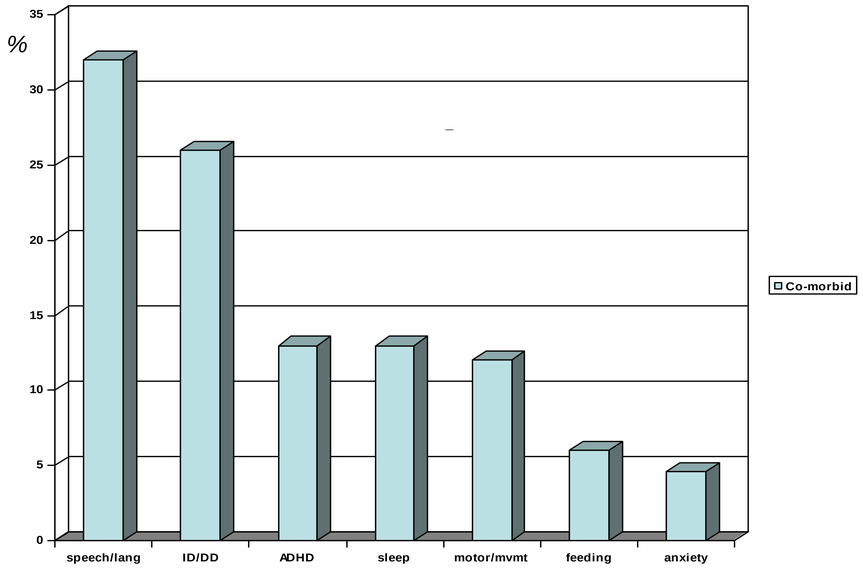
Methods

All board certified/eligible developmental behavioral (DBP) or neurodevelopmental disabilities (NDD) pediatricians at each site were asked to complete a one page encounter form of demographic/clinical information for up to 10 consecutive new cases given a diagnosis of either ASD or ADHD. 65 of 78 eligible physicians (83%) returned at least one form; 56 returned forms for ASD analyzed for this study. Data was summarized using descriptive statistics. Analysis of the statistical significance of differences between groups utilized general estimating equations to adjust for clustering by clinician within site.

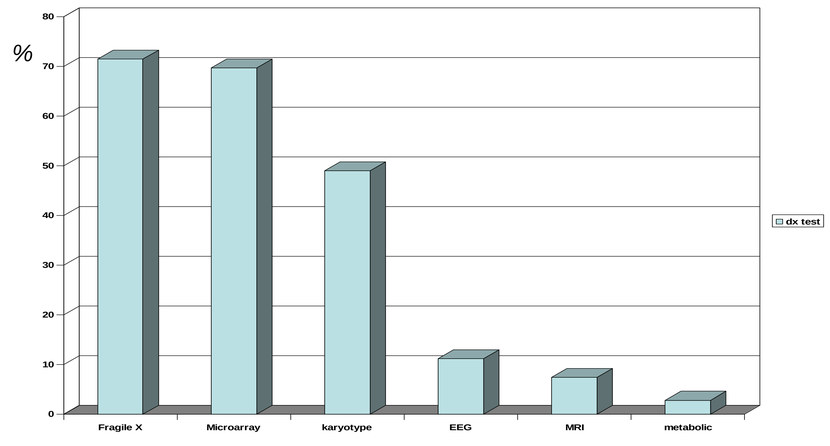
Results

284 ASD forms were submitted (range 3-49 per site); 71% had at least one comorbid diagnosis, 31% had at least 2 comorbid diagnoses, and 12% had at least 3 comorbid diagnoses.

ASD comorbidities



Diagnostic tests done or ordered



Genetic testing was more likely in children with comorbid ID/DD (microarray 65.7% without ID/DD vs 79.7% with ID/DD; p=0.025), but none of the differences in genetic testing by ID/DD comorbidity were statistically significant after adjusting for clustering by clinician. Children under 5 years of age were more likely to have both microarrays (75.0% vs 60.2%; p=0.013) and fragile X testing (79.4 vs 58.2%; p<0.001) after adjusting for clustering by clinician.

Conclusions

Developmental behavioral pediatricians are likely to diagnose co-morbid conditions in children evaluated for ASD which are important in determining treatment recommendations and reflect the multiple components of the clinical diagnostic evaluations done. Genetic tests were commonly included as part of the etiologic evaluation, particulary in younger children, consistent with recommendations by the American College of Medical Genetics., although other evaluations were rare.

References

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