

George Still forum

G174 EVALUATION OF THE ROLE OF Qb TESTING IN ATTENTION DEFICIT HYPERACTIVITY DISORDER

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Introduction: The diagnosis of attention deficit hyperactivity disorder (ADHD) hinges on history of core signs of inattention, hyperactivity and impulsivity, and being able to demonstrate pervasiveness of the disorder through ADHD questionnaires, which are quite subjective. The Qb test is a computerised combined continuous performance test and activity test. It helps us objectively measure performance related impulsivity, attention as well as activity.

Aims of this audit: This project was done as an audit to assess whether the Qb test results correlate with the diagnosis of ADHD as made by using an assessment of disruptive behaviour pathway used locally as the standard.

Methods: 50 cases were selected from the Qb test database semi-randomly, which were evaluated for ADHD as per local protocol or as diagnosed by child and family guidance. The cases were analysed based on a pre-prepared data sheet to look for the symptoms of behavioural disorders and the Connor's scores were also recorded. Comorbid conditions were recorded alongside as well as the child's medication and response to medication. Qb tests for the cases were analysed and compared with the diagnosis made as per protocol. Predrug and postdrug Qb tests were also analysed where available.

Results: A total of 50 cases were reviewed (age range 5–15 years). The Qb test correlated with clinical diagnosis in 90% of cases. The test was 96% sensitive in making a diagnosis of ADHD and the specificity was 81%. The positive predictive value of the test was 87% and negative predictive value was 94%.

Conclusions: The Qb test offers an objective way to aid diagnoses of ADHD but has to be interpreted carefully and in relation to comorbidities. Children who are suspected to have ADHD should undergo Qb testing, which has been incorporated as a diagnostic adjunct along with clinical review and ADHD questionnaires in diagnosis of ADHD in our care pathway. Predrug and postdrug Qb tests help to monitor drug effect and performance and may help in dose optimisation of medication.

G175 OUTCOMES OF 17 YEAR OLDS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER AFTER 1 YEAR OF DISCHARGE FROM A BEHAVIOUR ASSESSMENT AND MANAGEMENT CLINIC

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Aims: To review post-transition care of young people from a behaviour assessment and management (BAM) service.

Method: All children who were discharged from BAM (a joint clinic between community paediatricians and child and family consultation service professional) clinics after their 17th birthday during a 12-month period ending December 2006 were selected. A total of 30 young adults met the criteria. A structured form was devised for telephone interview. The families with unobtainable telephone numbers were posted the questionnaires along with an SAE. Contact was made for a total of 20 parents and young adults (66%). The information was obtained from 17 parents and from three young adults.

Results: 10 of 20 (50%) were in education at the time of interview. Five of 20 (25%) were on medication. For the remaining 15 young adults the medication had been stopped at 15 years for four, at 16 years for two, at 17 years for six, at 18 years for two and at

19 years for one. Nine of 20 were referred and had been seen by an adult psychiatrist. One young person on medication was not sure if they had been seen by an adult team. Eight families had met psychiatrists and two found the advice somewhat helpful, others commented that no practical advice was given. One young adult had seen a key worker and was offered help for stopping drugs and found consultation very helpful. 11 of 20 (55%) in employment, seven in full time and four in part-time employment. 10 of 20 (50%) were in receipt of Disability Living Allowance; four of these were young adults in full-time employment. Nine of 20 (45%) were involved with the police for, eg, driving offences, RTA, theft and a drink-related offence. One young person was arrested three times for theft. 13 of 20 young adults smoked—55% were smoking by 16 years of age and six (30%) smoked more than 10 cigarettes per day. Five of 20 (25%) had used street drugs such as cannabis, cocaine and poppers: 16 of 20 (80%) drank alcohol—most drinking occasionally but one young person drinks daily since the age of 16 years. Most parents commented they felt well supported when under the care of the child development centre but felt forgotten, lost and isolated after discharge.

Conclusions: This study demonstrates the need for the establishment of a robust transitional care plan for these young adults involving paediatricians, child and adolescent mental health services professionals and adult psychiatrists; close working with drug and alcohol service, smoking prevention service and the police; and need to develop a post-discharge parent support system.

G176 CHILDHOOD OBESITY AND PREGNANCY SMOKING AS RISK FACTORS FOR CHILDHOOD ATTENTION DEFICIT HYPERACTIVITY DISORDER

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Introduction: Attention deficit hyperactivity disorder (ADHD) is a common behavioural disorder affecting children in the UK.

Objective: To determine the magnitude of the epidemiological association of childhood obesity and smoking during pregnancy with childhood ADHD.

Methods: A retrospective cross-sectional survey was conducted in 2006 using a standardised respiratory health survey instrument to determine the association of ADHD risk with childhood obesity prevalence and maternal smoking during pregnancy. A total of 1074 school children aged 5–11 years in Merseyside were enrolled using a parent-completed questionnaire and ADHD was defined by the question "does your child have Attention Deficit Hyperactivity Disorder (ADHD), which has been diagnosed by a doctor?".

Results: The prevalence of childhood obesity, maternal smoking during pregnancy and childhood ADHD was 9.1% (145 of 1602), 28.0% (267 of 955) and 3.4% (32 of 945) respectively. Prevalence of ADHD was 10.1% (11 of 109) in children with obesity (RR; 4.80, 95% CI 2.2 to 10.4, $p < 0.001$) and 5.6% (14 of 251) in children born to mothers who smoked during pregnancy (RR; 2.44, 95% CI 1.1 to 4.9, $p = 0.02$) and. Regression analysis adjusting for household socio-economic status, low birth weight, single parent, gender, maternal and child age showed a significant association of risk of ADHD with obesity (AOR; 4.39, 95% CI 1.48 to 13.03, $p = 0.008$) and pregnancy smoking (AOR; 3.18, 95% CI 1.07 to 9.47, $p = 0.04$).

Conclusions: Childhood obesity and maternal smoking during pregnancy were associated with the development of ADHD in childhood. Measures taken to reduce smoking among pregnant women and obesity among children could help to reduce consequences of childhood ADHD.