Case Study: Attention-Deficit/Hyperactivity Disorder and Autism Spectrum Disorders

Dianne L. Ballance

University of Calgary

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Research indicates there are high rates of poor attention and concentration, and hyperactivity in individuals with Autism Spectrum Disorders (ASD) (Ozonoff, Goodlin-Jones, & Solomon, 2007). Despite the research and clinical experience of professionals, the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR) does not permit co-occurring attention-deficit/hyperactivity disorder (ADHD) and ASD (Ozonoff et al., 2007). However, given the chronic and life-long impairment of both disorders children and adolescents may benefit from treatment that addresses both conditions (Smith, Barkley, & Shapiro, 2006; Ozonoff et al., 2007; Wolraich et al., 2005). The focus of this analysis highlights some of the difficulties of assessing and treating both ADHD and ASD based on the case of Donald from Pliszka (2009).

Case Study Summary

Donald is an eleven year old boy with presenting issues in atypical behaviours and social interactions, abnormal emotional reactions, aggression, opposition, inattention, and impulsivity-hyperactivity. Parent interview data and the initial examination confirm a history of difficulties in these areas which had not formally been assessed, diagnosed, or treated. Several 'red flags' were indicated for both ASD (perseveration, restricted interests, rigid thought patterns, limited social and communication reciprocity, poor eye contact, potential family history, unusual prosody, language deficits in social contexts) and ADHD (interrupting, out of seat, distractibility, impulsivity, hyperactivity, disorganized, elevated scores on rating scales). The referral was prompted by an escalation in difficulties that were impacting his functioning at school.

The course of treatment primarily addressed ADHD. Further assessment in the ASD differential was recommended and pursued, but did not result in diagnosis or treatment for the

disorder. Treatment for ADHD followed pharmacological guidelines for approaching children with ADHD and ASD with mixed results. An anti-depressant was chosen as a second-line medication for the ADHD, and resulted in more success in managing Donald's oppositional behaviour, mood, and rigidity. Treatment also involved therapist support in behaviour management and peer relations, but difficulties associated with ASD symptoms prevented progress. At follow up, Donald was experiencing more success in school with school counseling support in place, and the continued medication regime.

Critical Analysis

Processes

Of primary concern in this case were the difficulties with the assessment and potential treatment of ASD. Specific practice parameters for the assessment of ASD involve a comprehensive diagnostic multidisciplinary evaluation that includes information from multiple sources and contexts (Klin, Saulnier, Tsatsanis, & Volkmar, 2005; Sattler, 2006; Ozonoff et al., 2007). These parameters provide consensus guidelines for ASD assessment to increase consistency and validity in clinical practice. Health insurance limitations prevented the assessment with the specialist in ASD, and it is unclear if the school psychologist followed assessment guidelines. Variance in scores between settings (parent and teacher) was listed as contributing to the difficulties in making the diagnosis. However, a characteristic of ASD is variability among sources and settings; and disagreements in reports do not need to be reconciled (Ozonoff et al., 2007). Information from multiple contexts can be conceptualized separately for both assessment and treatment of ASD. Another issue present in the school psychologist assessment is the use and reliance on one measure for diagnostic decisions. Comprehensive assessment in ASD involves the use of multiple measures for initial diagnosis (Ozonoff et al.,

2007). Given the multiple ASD indicators in this case, this type of assessment should have been further pursued. Other avenues such as a referral to a developmental pediatrician or a speech and language pathologist may have provided other viable options. It also needs to be recognized that symptom expression for both ASD and ADHD change through the developmental stages, further impacting future assessment and ongoing treatment requiring professional expertise (Klin et al., 2005; Smith et al., 2006; Ozonoff et al., 2007).

Interventions

Directly resulting from the lack of ASD diagnostic information are limitations in providing potentially appropriate treatments, especially when considering ASD intervention research that supports the importance of early interventions and positive changes in outcome (Kasari, 2002; Newsom & Hovanitz, 2006; Solomon, Goodlin-Jones, & Anders, 2004; White, Keonig, & Scahill, 2007). Given Donald's age, it is critical that appropriate treatment be provided as soon as possible to address potential ASD in addition to the ADHD interventions to maximize his outcomes.

Regarding the course of treatment for ADHD, the psychiatrist followed suggested protocol for individuals with ASD that carefully considers side effects, possible treatment failure, and dosing (Pliszka, 2009; Wolraich et al., 2005). Other than the referral to the therapist to assist in behaviour management and peer relations, there were no other ADHD treatment suggestions (i.e. parent education or Behavioural Parent Training [BPT]). Waiting for the ASD assessment and possible recommendations perhaps explains the lack of further interventions in this case study. At follow-up it may have been beneficial to provide further treatment options to address any remaining concerns, and review the success of the therapist support to make any needed changes. Behavioural management programs for ADHD and ASD have some notable

differences (primarily in the use of consequences) which could be impacting the progress of this therapy or continued school support (Newsom & Hovanitz, 2006; Pelham & Fabiano, 2008; Smith et al., 2006). Once again, a clearer diagnostic assessment may provide the key to understanding Donald's needs and making intervention decisions.

Alternative Suggestions

Psychosocial treatments for Donald could be expanded upon to include aspects of parent education and BPT, which are supported in the research for both ADHD and ASD (Newsom & Hovanitz, 2006; Pelham & Fabiano, 2008; Smith et al., 2006; Wolery & Garfinkle, 2002; Wolraich et al., 2005). Even without an ASD diagnosis these interventions may provide some level of support to the parents. Although, if ASD had been assessed clearly and either ruled in/out more specific details would guide these interventions. Psychosocial treatment at the school level could have also addressed behavioural techniques to address ADHD difficulties in organization, or school related skills (note-taking, study skills) in addition to counselor support in stress management (Smith et al., 2006; Wolraich et al., 2005).

Consequences of social impairment continue into adolescence for both ADHD and ASD (Newsom & Hovanitz, 2006; Ozonoff et al., 2005; Smith et al., 2006; Wolraich et al., 2005). As such, it should also be a priority in Donald's treatment. Difficulties with social skills interventions are a potential concern as social skills training is not a supported psychosocial treatment for ADHD, but is supported to address social competencies in ASD (Newsom & Hovanitz, 2006; Pelham & Fabiano, 2008; Smith et al., 2006; Solomon et al., 2004; White et al., 2007). This points to the need of individualized intervention in Donald's case where it can be tailored to meet his specific needs. Perhaps combining organization and school skills with social initiation, social problem solving, and appropriate social responding skills interventions to target

both areas of need (Newsom & Hovanitz, 2006; Smith et al., 2006; White et al., 2007; Wolraich et al., 2005). The school and the family would likely require increased support in determining goals, techniques, and evaluation of the interventions due to the specialized nature and level of expertise. For example, including videotape recordings of naturally occurring social behaviour may support generalization of skills and has some support in the research for both ASD and ADHD, but may be time-consuming or unfamiliar to school staff (Newsom & Hovanitz, 2006; Wolraich et al., 2005).

Conclusion

The primary concern identified in this case involved assessment of ASD concerns that impacted the resulting treatment decisions. Several common evidence-based treatments exist for ADHD and ASD on a general level such as: parent education and BPT. However, details of treatment differ according to the specific deficits of the disorder. Treatment decisions become very complex when assessment issues are present. This is complicated even further when one type of treatment has opposing support for the different disorders, such as social skills training. Treatment then has to be individualized to meet the unique needs of each individual. Based on the research, several alternate suggestions were made for Donald's case at follow up, including: increased parent support, school support tailored to address ADHD symptoms and school skills (organization), and social skills training specifically designed to address ASD symptoms even without formal diagnosis. The overarching theme for ongoing support and intervention for Donald should recognize that his symptoms (for both ADHD and ASD) are likely to change with development (Smith et al., 2006; Ozonoff et al., 2007). Revisiting assessment in terms of providing more targeted interventions may become a priority.

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