Language and Speech Delays in Children with an Autism Spectrum Disorder

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Abstract

The Autism Spectrum Disorder, or ASD, is a disorder characterized by speech delays, language development delays, difficulties in communication, social impairment and much more. ASD is a spectrum disorder, containing many different varieties and forms, with many different symptoms and subtypes. Children with ASD show signs of language and speech delay at around age two to three, and depending on the severity of the disorder can be treated with pharmacological therapies as well as speech and language rehabilitation. About one in every eighty-eight children become diagnosed with a form of ASD and the disorder tends to be more commonly found in boys rather than girls. Intellectual impairments and issues with verbal and non-verbal communication are just two deficiencies children with Autism share, though many children succeed in areas such as art, music, and visual skills. This adds to the main focus proving ASD is a communication disorder with many different speech and language delays. The purpose of this paper is to educate and inform about language and speech delays in children with Autism, and explain prevention and management opportunities for the disorder.

Keywords: Speech delay, Language delay, autism, communication
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Introduction

When taking a look at learning disabilities in young children, a common disorder which consists of language development delays, speech delays, communication errors, social impairments is the disorder known as the Autism Spectrum Disorder (ASD). Many children diagnosed with ASD are characterized through impairment in social interaction and non-verbal communication, repetitive behaviors, and a clear delay in language accusation at early stages of development (Noterdaeme, Wriedt, Hohne, 2009). ASD is common for having normal performance IQ’s, yet lower full scale IQ and verbal IQ scores. This explains the problems some children have with expressive and receptive skills that happen within normal language development. Those who are diagnosed with ASD can be, but most likely are not severely learning disabled or mentally retarded (Bennett, Szatmari, Bryson, Volden, Zwaigenbaum, Vaccarella, Boyle, 2007). For the specific case of writing this paper, the children used for explaining the outcome of language and speech delays will not be severely impaired.

The importance of focusing on language development delays and speech delays in autistic children is to explore the issues that come with the disorder which in turn can be treated and managed later on. ASD is a disorder that encompasses a large spectrum of other disorders similar to Autism, therefore making it hard to specifically predict symptoms and outcomes of cognitive delays (Jones, Campbell 2009). Children that are diagnosed with ASD often have impairments in communication, social interaction, significant language delay, and cognitive development, as well as restrictive, repetitive, and stereotyped patterns of behavior, interests, and activities (Mayes, Calhoun 2004). These impairments often cause a halt or stagnation in language development and come with losses of language comprehension. Early signs often can
detect neurological abnormalities, which in turn help parents in planning and educating themselves on the disorder. In the article written by Jessica Mayo and Inge-Marie Eigsti, both state that studies shown in 2004 by Muller proved individuals with ASD demonstrated difficulty with skills that were implicitly learned (2012). Implicit learning abilities stem from segmenting streams of speech, determining word boundaries, and auditory pauses (Mayo, Eigsti 2012). Without the skills needed for implicit learning, children with ASD tend to have impairments with phonological and non-phonological language processes, as well as weak semantic skills despite the other normal bodily developments (Mayo, Eigsti 2012).

Communication and speech delays tend to be common in younger children with ASD. When normal children start speaking around ten to twelve months, it takes a child with ASD to start talking in two word phrases at about eighteen to twenty months, and fully developed speech at about thirty-six months (Bennett, et al, 2007). Many children used single words by age two, and communicative phrases by age three (Mayes, Calhoun 2004). The criteria for speech delay is the impairment in the ability to initiate or sustain a conversation, have repetitive language, along with social impairment and use idiosyncratic language (Noterdaeme, Wriedt, Hohne 2009). Children have trouble tuning into specific speech sounds and tend to need additional time to figure out and fix distortion errors. In a study of speech apraxia in children with ASD conducted by Shriberg, Paul, Black, and Santen, impairment that was similar to speech delay, 12% of the 3-9 children with ASD only used one word vocabulary and simple word combinations (2010). Many of these deficits are found early in life for children with ASD, and will more than likely follow the children throughout adolescence. The purpose of this paper is not only to educate and inform about language and speech delays in children with Autism, but to explain prevention and management opportunities for the disorder.
Prevention, Management and Treatment of Autism Spectrum Disorder

When discussing and focusing on the prevention, management and treatments of ASD, there are multiple ways of treating and managing the disorder, but unfortunately the disorder is found to be genetic and cannot be prevented or completely cured. ASD focuses more on the psychosocial and mental aspect of the healthcare field. There is not one way to treat the disorder, for one case is never the same as another. Individually the child can practice speaking and using big terms at home with the help of different learning devices and help from parents, but most treatments are managed using different types of therapies. Each child diagnosed with ASD has specific cognitive, learning, and communication disabilities, leading to many different ways to go about managing and treating the disorder (Liber, Frea, Symon 2007).

One specific way to go about communication, language, and social delays in children with ASD is through the use of time-delay. Children with ASD tend to use inappropriate speech, struggle with social interaction, and have language delays. Time-delay is effective in teaching language acquisition, social uses of language, discrete behaviors, and different aspects of communication (Liber, Frea, Symon 2007). It helps children from withdrawing from social situations due to the lack of appropriate skills and discouragement from peers (Liber, Frea, Symon 2007). Time-delay uses a pause for the child to fully process what was said and reinforcement for the correct response. In the study conducted by Charlop and Walsh, a hug from a parent served as a stimulus for the child to respond “I love you”. Once the hug was given, a time delay of two seconds was given, encouraging and prompting the child’s response. When the child responded, a happy reinforcement such as food was given eventually teaching the child social communication and responsiveness is okay (Liber, Frea, Symon 2007). Time-delay offers children, parents, and healthcare professional’s options of positive interventions in social
communication for children with ASD, and shown success in spontaneous speech, longer utterances, and social communication with others.

Another way to go about the treatment and management of ASD in children is through certain therapies and pharmacological treatments. Depending on the severity of the disorder, the treatment differs. Beginning treatments usually start with behavioral and educational interventions which include rehabilitative treatments such as behavior modification and speech and language therapies (Leskovec, Rowles, Findling 2008). Most nonmedical treatments like this dealing with speech and language delays are more successful than pharmacological therapies. These treatments help the patient correct the impairments ASD causes and can be found in any hospital, school system, or private practices.

A study showed that even though nonmedical treatments are so successful, about one-third of patients with ASD take psychotropic drugs or vitamins (Leskovec, Rowles, Findling 2008). The most common psychotropic drugs prescribed for children with ASD tend to be psychostimulants, hypnotics, antidepressants, mood stabilizers, tipsychotics, and anxiolytics (Leskovec, Rowles, Findling 2008). Though these medications cannot treat ASD impairments such as language, speech, and social delays, the medications do treat the behaviors that frequently hurt the nonmedical treatments. These drugs target dysfunctional behaviors associated with social relatedness and improve on the child’s ability to interact socially as well as help with the interaction correlated with IQ (Leskovec, Rowles, Findling 2008). Another drug specifically used for helping stereotypical ASD behavior and communication impairments is known as secretin, a peptide hormone that stimulates pancreatic secretion (Leskovec, Rowles, Findling 2008). This helps improve behavior and language skills in children with ASD. The children on this hormone became able to interact socially with other peers more efficiently and easily. The
pharmacological options aided in the behaviors interfering with nonmedical treatments, which in turn help treat and manage speech and language delays in children with ASD.

Summary

Autism is a spectrum disorder that ranges from extreme severity, to slight learning disabilities. One of the key symptoms that helps define whether a child has ASD is an early speech and language delay by about age two. Children with an autistic disorder have impairments in communication, spiraling from language and cognitive delay in the left inferior parietal lobe. These speech, language, and communication delays can include sound deletions, substitutions, and distortions. Many children have a hard time putting words and phrases together, using only single words to try and speak. In social situations, the speech and language delay tend to have an effect on most children, causing them to become shy, timid, and withdrawn so the child does not have to communicate. Some difficulties came from initiating and keeping conversations going, showing signs of struggle with unnatural speech patterns.

When considering how to help a child with ASD, there are multiple ways to help combat the speech and language delay with therapies and rehabilitation and pharmacological drugs to help with the side behaviors that may counter act the successes of the therapies. Autism is a genetic disorder and has no prevention or true cure for the disorder. Psychotrophic drugs cannot cure the disorder, but can help with the side behaviors that impede on the rehabilitation to repair the speech and language delays caused by ASD. For more information about the Autism Spectrum Disorder, the National Institute of Neurological Disorders and the Autism Speaks foundation have informational pages detailing and describing ASD and can be found at http://www.ninds.nih.gov/disorders/autism/detail_autism.htm and www.autismspeaks.org.
References


