The influence of dog therapy on improving the child with autism: A case study

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ABSTRACT

During physical therapy classes, the physical contact of the child with the dog and the emotions that accompany the child during the activities play an important role. Dogotherapy is made possible in several diseases and disorders occurring in children by these two factors. The aim of this research was to present the influence of therapeutic activities with a dog on the progress in treating a child with autism. The case-by-case method and the observation technique were applied. A 5-year-old boy diagnosed with early childhood autism was examined. He was qualified to a 5-person group taking part in dog therapy classes and were implemented once a week, for half a year; this was carried out in accordance with the original program of Monika Niewiadomska, developed for the needs of therapy of children with intellectual or intellectual disabilities. Evaluation of the child’s progress was carried out at the beginning of the cycle of classes, after a period of 3 and then 6 months. They were assessed on a scale of 1-3, where, 1 – refers to no task, 2 - a half task, and 3 - a well done task. At the beginning, the boy did not make eye contact with the teacher. He could not do any job himself. All were done with the help of a dog therapist or support therapist. The child did not focus on the exercises nor show satisfaction with participation in the classes. However, it showed interest in the dog itself. After a period of 6 months, the skills of the child improved considerably. At the end of the six-month cycle, the boy first made eye contact with a dog therapist. He was clearly satisfied with the tasks he performed and his concentration improved. For the first time, a conscious smile appeared on the child’s face.

Key words: Autism, therapy, dogotherapy, description of an individual case.

INTRODUCTION

In the rehabilitation of children with developmental disorders, unconventional forms of treatment are increasingly used. This is due to the fact that more effective methods that will increase the level of motivation of the child to work and stimulate his empathy, which in turn will speed up rehabilitation are still being sought. One of such methods is zootherapy, or therapy with the participation of animals, and with the participation of a dog - dogotherapy (Kulisiewicz, 2007; Kurzeja and Godawa, 2009; Więcek, 2007).

During physical therapy classes, the physical contact of the child with the dog and the emotions that accompany the child during the activities play an important role. These two factors make dogotherapy possible in the treatment of several diseases and disorders occurring in children. One of such is autism, where the spectrum of body dysfunctions includes a whole range of developmental disorders that impair the child's ability to establish and maintain social relationships as well as, communication with other people (Myers and Johnson, 2007).

Children's autism is characterized by four groups of features such as impairment of social functioning, communication disorders, a limited and repeated pattern of interests and activity, and an early onset of disorders in the child's development. The American psychiatrist, Leo Kanner, was the first in 1943 to describe 11 cases of children with such features as lack of ability to establish relationships with other people, disorders in verbal
communication, and stereotypical behavior. The group of these symptoms was described as early childhood autism. In the first years of the twenty-first century an increase in the incidence of autism was observed. Responsible for the occurrence of disorders, as shown in the literature on the subject, are multifactorial hazards, resulting from interactions between genetic and environmental determinants (Languer-Lewowicka et al., 2016). Environmental factors include factors that work in the prenatal and postnatal period.

Currently, 30 cases per 10,000 children are diagnosed (Chrościńska-Krawczyk and Jasiński, 2010). This increase has contributed to the development of scientific research in this area. They are looking for, among others new forms of therapy aimed at restoring the proper functioning of the child. The most commonly used are sensory integration, therapy according to W. Sherborn, individual work with a psychotherapist, speech therapist, hypothermia and dogotherapy (Landowska, 2014; Pisula, 2005). Unfortunately, despite the availability of different methods of therapy in children with autism, there is currently no single, universal method that would be fully effective (Wolańczyk and Komender, 2005).

The aim of this work was to present the influence of dog therapy classes on the progress in treating a child with autism.

MATERIALS AND METHODS

The method used was a description of an individual case, technique - observation. The material for the study was data obtained during the observation of a 5-year-old boy diagnosed with early childhood autism. Observation was carried out during dogotherapy classes at the National Center for Autism in Szczecin, which was attended by the examined child. The boy participated in classes, as part of a group of five, in the gym, once a week, for 60 min.

Dogs taking part in dog therapy are two border collie females that worked with the group for a change. In addition to the attending therapist, support therapists were also present. Their task was to take care of the child's safety and assist in performing specific tasks. The initially observed boy did not speak, nor made eye contact, and did not show any feelings. It was characterized by the so-called "Blank look." He showed no aggression or autoimmunity. He was also not hyperactive. He did not try to make contact with the world around him, and often did not even signal physiological needs. During the classes with the participation of the dog, the original program of Monika Niewiadomska was developed for the needs of children with mental or intellectual disabilities. He implements issues in the field of education and shaping emotional development, as well as, in the field of developing and improving physical fitness. Its main aspects are shaping the right attitude towards animals, building a proper human-dog relationship, learning to obey rules and duties, developing self-care and others, shaping the system of values, shaping the sense of duty and conscientiousness, arousing empathy and sensitivity, learning the dog's structure, getting to know and satisfying the dog's needs, learning to take care of the dog, learning how to behave properly in a situation of contact with an alien, aggressive dog, exercises shaping large motor skills, learning and improving the throw and grip of the ball with both hands, right and left hand, learning and improving the throw to the goal, learning and improving the ball kicking the right and left leg, learning jumps, quadrupling, marching in the back, rolling from the back on the stomach, shaping exercises small motor skills, distinguishing and selecting objects, manipulating small objects, improving eye-hand coordination, and shaping balance. All elements of this program were adapted to the needs of the child being examined and appropriate criteria set which were assessed. These were 1) understanding the command, 2) ability to execute the command, and 3) establishing eye contact, 4) Satisfaction and commitment.

The detailed tasks assigned to the child were simple physical exercises such as greeting with the dog (giving paws), stroking, feeding the dog (the ability to choose one treat from among many), performing a tunnel trick (crossing the dog between the legs of the child - stance apart), throw the ball with the right and left hand, and kicking the ball with the right and left leg. Individual exercises were not assessed. On the other hand, the general assessment of coping with entrusted tasks was made. The child's work was assessed at the beginning of the classes after 3 and 6 months. The child's progress was rated on a scale of 1-3, where 1 meant no task, 2 - a half task, and 3 - a well done task.

RESEARCH RESULTS

After 6 months of the classes, the results of the research were collected and analyzed. The first assessment was made after two weeks of conducting classes, when the child got acquainted with the form of conducting classes and met dogs (Figure 1). At the beginning of the dogoterapeutical cycle, the boy did not make eye contact with the teacher. He could not do any job himself. All were done with the aid of a dog therapist or support therapist. The child did not focus on the exercises and did not show satisfaction with participation in the classes. However, it showed interest in the dog itself. It gave him hope that by continuing his classes he would eventually cooperate. Throughout the course of the class, the child showed no emotion, satisfaction, frustration, fear or anger. However, it systematically participated in all classes, and after three months another progress was made.

Figure 2 shows that after three months of classes, the child continued to do the exercises with the help of a
support therapist. However, the assigned tasks were willingly performed. We can definitely say that the child understood the commands. However, it quickly deconcentrated. Some tasks, like extending a hand to a dog during greeting, were good and he also made ball throws. His biggest problems were kicking the ball and becoming stretched. The boy was not able to choose one proper dog treat from among all available. He still showed no emotion, and did not make eye contact with the teacher. Although he heard the command and tried to do it, he placed his head sideways, avoiding the look. Another assessment of progress was made after a period of 6 months of participation in classes.

After a period of 6 months of acting, the skills of the child improved (Figure 3). After 6 months he could do exercises alone without the help of therapists. He could choose one small treat for a dog, from among a larger number and could stand at a straddle. At the end of the six-month cycle, for the first time, he made eye contact with a dog therapist. The last parameter was also definitely improved - satisfaction and commitment. The boy was clearly satisfied with the tasks performed and his concentration improved. For the first time, a conscious smile appeared on the child’s face. The supporting teacher only secured the child; he did not have to be as involved as before. The emotional sphere of the child and the expression of feelings improved

Figure 1: Evaluation of the child at the beginning of the dogotherapy cycle.

Figure 2: Assessment of a child after 3 months of participation in classes.
significantly since the beginning of the class. It is assumed that with continuation of the development activities and the way the boy function, they continued to improve. Therefore, new tasks were planned for the next six months, so that the classes would be attractive and give him the opportunity to constantly develop.

DISCUSSION

Early childhood autism is the focus of several researchers. According to the ICD-10 classification, it belongs to the group of overall developmental disorders (F84). The concept of autism spectrum disorders functions in the colloquial and scientific language (Chojnicka and Płoski, 2012). This classification combines four holistic developmental disorders, autistic disorder, Asperger’s disorder, child disintegrative disorder, and overall developmental disorders undiagnosed differently. Since the time of Kanerra, who described this disorder, many ideas have arisen regarding the genesis of autism. The diagnosis of autism is based on the occurrence of two axial symptoms, communication disorders/social interactions and repeated stereotypical behaviors (Langauer-Lewowicka et al., 2016). About 50% of children in the autism spectrum are intellectually disabled and one third have speech disorder. In addition, developmental disorders of the musculoskeletal system and chronic somatic diseases may occur.

Currently, most therapeutic programs are based on close cooperation with parents (Witkowska-Ulatowska, 1999). As part of the National Institute of Mental Health in the USA in the eighties, a holistic education program was introduced. It was focused on spontaneous communication with the environment at every level of child development and modification of abnormal behaviors (Campbell et al., 1996; Witkowska-Ulatowska, 1999).

In Poland, Grodzka (1984) started pioneering attempts to treat early childhood autism. Like the holistic education program, a lot of emphasis was placed on cooperation with her parents and introduced the method of "a back-turned clock", which consisted of dealing with the patient as if he was younger than the real age indicated. In her therapy, she placed great emphasis on the positive impact of nature. Dog therapy is excellent. It was found that therapies involving animals are of great importance for the human psyche (Chmiel et al., 2014). In fact, it could be considered that the influence of animals on human psyche is invaluable. The psychological functions of zootherapy have long been noticed. Sigmund Freud observed that the presence of a dog during psychotherapeutic sessions meant that patients were more willing to open their spiritual "interior" to him. Such a beneficial effect of animals on the psyche meant that the first health care units where animals were introduced were centers for the mentally ill and nervous. Patients who survived a severe nervous breakdown returned to balance under the influence of animal classes (Chmiel et al., 2014). The use of dogotherapy in the therapy of people with autism took place in the 1950s. In 1953, Boris Levinson noticed that the autistic boy examined would sooner become friends with the therapist's dog than make contact with the therapist himself (Fine, 2010).

Zootherapy, also known as animal therapy, is a contact therapy and the animal's interaction with the patient can take multiple forms (Chmiel et al., 2014). However, it is proved that contact with animals has an invaluable impact on the psyche of the sick and disabled. Moreover, in healthy individuals, having a pet brings many benefits and helps to maintain a balance, for example, after experiencing a trauma related to the loss of a loved one, and in dealing
with difficult stressful situations, both in children and adults. It has been found that drug addicts or criminals who have contact with an animal are able to recover from their addiction or begin to function properly in society more quickly. Many researchers indicate that children from the autism spectrum do not perceive touching and stroking the soft, fluffy hair of a dog, cat or horse as an “intrusion” into their internal world. Indeed, the opposite is true - they accept more “intrusions”, they learn about more words, and a smile usually appears on their faces, while cooperation with the therapist and caregivers gets better (Filozof, 2005; Herzyk, 2007; Przewloka, 2005). Similar results were obtained in the case described. The presence of the dog calmed the boy, who eagerly touched the animal. During the therapy, the subject clearly showed signs of satisfaction, and a smile appeared on his face. At the end of the therapy, eye contact was even made with the boy. This end effect posed the most difficult challenge and was, at the same time, the greatest achievement in the therapy process.

The influence of dogotherapy classes is very extensive, and covers the mental, physical and educational spheres. Combining dogotherapy with other forms of therapy significantly influenced the progress in the case described. When considering the various forms of therapy, it is difficult to decide which one would be the best. The different methods used affect the patient in different ways. In the case of the boy described in this paper, dog therapy had a significant impact on mitigating his disorders. Currently, specialists are seeking new and innovative methods of therapy. Many have an unequivocal influence on the more optimistic prognosis in children diagnosed with autism and there is no doubt that many of these methods bring relief to children. Unfortunately, despite such great efforts, most children with autism still require institutional care in adulthood.

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