

Dynamics of autistic disorders in a thirteen-year-old boy – a case study

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Summary

This article presents the case of a thirteen-year-old boy suffering from autistic disorders. Special attention is paid to the occurrence of social and communicative deficiencies combined with cognitive disturbance which limit a possibility of the autistic person to conduct a normal life. The inability to attain the coherence between various development aspects connected with different disharmonies is presented. There are distinctive disorders in respect to socialisation.

The difficulties in understanding and anticipating the social environment complexity may disturb the dynamics of behaviour and release the tendency to social withdrawal, isolation and passiveness.

Key words: autistic disorder, social, communicative and cognitive deficits, disorder of social adaptation.

The great majority of publications and research concerning infantile autism usually refer to the early stage of child's life. The importance of the earliest diagnosis is frequently emphasised as is the early therapeutic treatment [1, 2]. The aetiology of the disorder is not totally known. It is generally assumed that it appears under the influence of the syndrome of endo- and exogenetic factors [3].

The disorder has a general character. Anomalies refer to the whole function of a child in all types of situations [4]. The clinical picture is subject to changes corresponding to the dynamics of the child's development. The period up to the age of 3 is taken as a period of the development of disorder, the kindergarten age is a period in which the symptoms of autism are strongly revealed, however, the school period considerably differentiates children with autistic disorders from healthy ones [5]. For parents of younger children it is a basic problem to communicate with a child during the child's growing up they are inclined to treat those disturbances as the disorder lasting till the end of the child's life [6].

Developmental anticipations are limited. Only a small percentage of children with autistic disorders may function independently at their older age [7]. The more beneficial

anticipations are frequently pointed out in the literature describing the autistic children within intellectual norm [3, 8]. It often concerns developmental disharmonies observed in case of autistic children [1]. They cover mainly the sphere of communication pertaining to speech, social abilities as well as intellectual development.

Among researchers there is a difference of opinions on the original character of cognitive disorders and social and communicative deficiencies at the autistic persons [5]. Without cause and effect dependencies being solved it is possible to state that they appear in a parallel manner. The importance of socialising evaluation seems to be essential to enable better understanding of the way in which the autistic symptoms may change in future [9].

The theories concerning cognitive functioning in autism emphasise the fact that people suffering from autism have difficulties in integrating the information (especially social one) that results from experience and in generalising the previously learned concepts to new situations. Those persons are characterised by a disturbance in their cognitive mechanism at the level of abstraction, instead there is a visible skill to memorise [10]. In the dominating communicative and social disorders some researchers point out the importance of cognitive deficiencies, which allows for deeper understanding of the social disorder significance of infantile autism [8].

In the closely related and simultaneous development of cognitive, emotional and social functions a cognitive aspect is described by some authors as the aspect referring to structures, whereas emotional factors are presented as decisive elements for the dynamics of behaviour [11]. In autistic disorders the attention is drawn to the lack of behavioural coherence. It seems to be connected with the different functioning of the cognitive structures as well as the disturbance in the dynamics. The lacking interaction level and social transfers in autism considered as one of the basic general factors of mental development has a decisive meaning.

Description of the case

The boy, thirteen years old, stayed at the Child Psychiatry Ward for 4 weeks in July 2000 due to emotional disturbances appearing as the child's autism intensified for the period of some months. They appeared in the form of fear, threat, especially in respect to social evaluation and failure as well as a lack of spontaneous behavioural reactions. There were also tendencies to withdraw from social life, sleep disturbances and strange behaviour.

With the diagnosis of child's autism the boy had remained under the psychiatric care till the age of 6. Due to the motor and emotion hyperexcitability he was periodically treated with thioridazine. At the age of 8 his case was studied in the out-patient unit for autistic children at the Institute of Psychiatry and Neurology in Warsaw. The boy was delivered from the pregnancy II, birth – caesarean section (pregnancy I – also caesarean section). The new-born weighed 3250g and was evaluated at 10 points in Apgar scale. He was fed with human milk for about a month and a half. The static-motion development of the boy in his early childhood was proper. However, his speech development was disturbed – he started uttering the first words when he was about one

year old, he spoke very little – only a few words (up to 10). Gradually when he was one year and six months old he stopped speaking with an expressive negation (“no”). He used only three words: “grandma”, “daddy”, “give”. When he was about 3 years old he started uttering single words. In his utterances he began to use sentences at the age of 4. He frequently repeated the sentences directed to him with the identical intonation. He reversed personal pronouns e.g. he used the pronoun “he” while speaking about himself, or he avoided using them, thus creating ungrammatical sentences. His spontaneous utterances were sometimes strange e.g. instead of saying “Let’s go to the kitchen” he said: “the socks are going along the carpet to the kitchen”. He knew the letters of the alphabet when he was 4 years old. He taught himself how to read at the age of about 4–5.

Up to the age of 6 the boy was brought up at home, mainly by mother and grandmother, since father spent most time at work. At the age of 5 he started showing his feelings towards his parents. At the age of six he began his education. He did not cry, however, he was not willing to participate in any organised activities. He did not like drawing, he did not want to write, there were some moments in which he seemed to live in his own world. He was not interested in initiating any social contacts with other children, although he sometimes directed abusive words towards them – he learned those words from those children, he swore in English, though he never learned this language at school. He played mainly alone. Due to the diagnosis of the disharmony of cognitive development, ungrammatical speech and emotional immaturity he had to repeat the “0” school year of his education.

In the school years: I and II he learned very well. He was periodically disturbed and oversensitive. Since the beginning of his school education he has had difficulties in story telling and drawing, as well as geometry and geography (mainly in defining the directions). He told the stories “retrospectively”, thus including different plots unrelated to the subjects matters. Sometimes he surprised teachers with the information that he heard somewhere and his willingness to speak English. He showed some vivid though changeable cognitive interests. He learned by heart. He mastered the basis of grammar, orthography, and reading. He taught himself how to multiply and divide although when being asked to carry out those mathematical calculations he did not want to e.g. calculate in writing. Sometimes he refused to carry out the tasks imposed on him by teachers, his answers were unrelated. Due to the diagnosis of the disharmony in the cognitive process he has had the lowered demands since the school year IV of his education.

Recently he has been promoted to class VI. He received the average grades in education, thus fulfilling the minimum of the programme requirements. He learned in a mechanical manner, thus taking advantage of good memory. Still he had difficulties in story telling. He did not understand algebra (it happened that he did the complex calculation but he could not understand the simple ones). His mother helped him learn. When he learned on his own he mastered only 10-20% of the text required. With mother’s help he repeated the text several times and he memorised more. He spent a few hours a day on learning. He had motivation to learn – it was not possible for him to ignore the school requirements because he could have been “ashamed”. He

strongly experienced all school failures – he was worried and cried because of low grades. He was also worried by the fact that he did not have friends. In the class he was frequently exploited by his peers e.g. they copied his homework. From time to time children called him names, laughed at him calling “jerk”, which hurt him and he told his mother about those painful experiences. He became isolated from his peers. He tried to control the expression of his emotional state e.g. he avoided crying in order not to be laughed at by others. He noticed that he was treated differently by teachers i.e. in a tender manner. It happened, however, that he spoke honestly to his teachers drawing their attention to the fact that it is an improper behaviour e.g. to “pull a pupil’s ear”, not being aware of potential unbeneficial consequences. He also noticed the emotional disapproval expressed by mother. When he behaved inadequately to simple every day situations (his difficulty to find adequate words) his mother showed anger, irritation or tears in those difficult moments of her inability or doubt. The boy tended to criticise himself strongly saying “I was stupid...I made mother angry”, as if he was afraid of being rejected.

He had some problems in ordinary activities. He was able to buy something at the shop, but those were simple things. Sometimes he made an impression as if he did not know the monetary system. He could be easily cheated. He was unaware of risk (or danger) in the contacts with strangers. His behaviour was infantile. He did not differentiate reality from fantasy, jokes from truth. Children took advantage of this, making his life difficult. His last strange habits began in his every day life e.g. those referring to the time of a day – he fell asleep e.g. at 10.00 p.m. or some minutes past 10 p.m. but he did not fall asleep before 10.00 p.m. and he could not sleep for some time.

Sometimes he spoke ungrammatically. After being corrected he himself corrected his speech, but he himself did not pay any attention to grammatical rules though he knew grammar very well. Once while listening to the recordings of his childish speech in which he confused personal pronouns (using the pronoun “he” while speaking about himself) he began laughing and said critically “I was stupid”.

He spent most of his time with mother and grandmother. He talked about his problems mainly with his mother and he treated her opinions as being final at a particular moment, however he could not take advantage of them in other similar but not identical situations. Father tried to change his son’s fixed behaviour e.g. he suggested that the boy should be interested in other spheres of life and stop drawing the same pictures. The boy repeated father’s suggestions but they did not effect his behaviour.

Past diseases: diarrhoea at the age of 6 after the vaccination, when he was 4 months old he stayed in hospital with the diagnosis of Enterocolitis acuta. At the age of 9 he had his appendix removed. He has not suffered from any unconscious states or head damages. He acquired his habits of cleanliness at the proper time.

The boy is brought up in a fully reconstructed family – for both his parents it is the second marriage (they had been divorced before). Each of them has one older child from the first marriage. The mother is 47 years old. Having secondary school education she works as a white collar worker. She suffers from hypertension but she smokes occasionally and she defines herself as being nervous. Her older son is a 23- year-old man who works and studies at evening courses. He stays at his grandmother’s. The

father is 50 years old. With his secondary school education he works as a white collar worker he suffers from hypertension and heart diseases, but he smokes and sometimes he is nervous. His older son, who is 27 years old and single, is healthy. He lives and works in another city.

The general condition of the boy was good when he was accepted to the ward. In the physical examination apart from the figure defects there were no other deviations from the proper condition. The orientation was proper. During the interview he was disturbed, his mimicry was poor. His speech was clear but with weak intonation. His answers were not always related to the questions, sometimes they sounded strange, e.g. when asked about three wishes he said: "three bars of butter, the first bar refers to the first wish, the second to the second wish, and the third to the third wish". As his main problem he stated his difficulties in contacts with peers and trouble with falling asleep.

At the ward he had problems with adaptation. Despite many attempts, he could not start any contacts with other children. He did not recognise jokes and he was often helpless to react to other children's behaviour. He treated each utterance as being serious (literal) and he was oversensitive (e.g. he did not know how to clean a mess, he is helpless in every day actions etc.). He was scared when other children started swearing. He spent his free time alone – looking through the books or watching TV. He did not show spontaneity in contacts with others. He was autistic, thus showing an inclination towards monologue speech and being oversensitive in respect to social evaluation. He showed few skills in all the activities connected with self-service. He did not complain in a spontaneous manner – he asked mother for her arrivals and visits. No sleeping disturbances were noticed.

In the task activity during the psychological examination the boy showed fear not to fail. He frequently called his memory back, thus saying e.g. "I remember, I can recollect" or "I don't know, I don't remember, I forgot". In the psychological examination he received the results showing his intelligence lower than average according to the scale: WISC-R: II p =73 (II sl=76; II bsI = 76); non-harmonious psycho-gram. The analysis of the psycho-gram showed lower than average knowledge, notions, lower ability to rationalise, to associate and draw conclusions, considerably lower orientation in the social situations. His well developed functions were attention, direct listening and the ability to learn. His perception and motor coordination were developed at the level of the age of 6 years and 7 months. The results in the "Who are you?" scale by Choynowski showed a high level of neuroticism.

In the previous examination the boy gained the following results: at the age of 7: II p=70 (74;72) at the age of 10: II p =74 (86;66). In all examinations of his intellectual level the attention was drawn to the disharmony in the development of his particular cognitive functions. It was visible especially during the examination of the ten-year-old boy, showing the essential verbal superiority over the executive functions. That difference diminished after 3 years (13 years old) since the concrete operations dominated in his thinking, although in terms of development it is possible to expect the appearance of the notional thinking. In the examinations at the age of 10 and 13 memory was his well developed function (correspondingly 13 and 10 points calculated).

The basic laboratory examination remained within the norm. EEG – a note about

the disorganised basic rhythm, weak directional orientation, without clear pathological features. CT scan of the head showed the proper picture of the brain and cerebellum. The cell layout as symmetrical, unmoved and not pressed.

Within 4 weeks of his stay in the ward he participated in the psychotherapy activities in groups and individually. He was treated with thioridazine. He spent time at home during the weekends. He left hospital in the good condition, behaviour – without larger changes. Further treatment in psychological outpatient unit was recommended.

Discussion

In the case presented above we diagnosed the boy's autism with the numerous developmental disharmonies. They refer mainly to speech as well as social and intellectual functions.

The boy's speech still shows ungrammaticality (although much rarely than before), a confusion of the personal pronouns and improper intonation of his utterance. It is possible to notice some disturbances in the process of rationalising thinking connected with incongruities of his utterance. The concrete operations prevail in his thinking. Memory is a function upon which he bases his problem solutions. However, it does not always include all information needed to solve difficult social situations. All the disturbances in speech precision and fluency appear in abstract thinking. Although the boy learned the grammatical rules he has problems with understanding the texts which include social points. Descriptive language creates real problems. When asked to describe the game which he had mentioned before he said: "I don't have a piece of paper!", and then he stated drawing the figure of his friend and surroundings. One's attention is drawn to untypical incoherent juxtapositions in the description of people from his environment: e.g. "One of my friends is on holiday, he doesn't like going to school, playing truant is his hobby as well as swimming", or "he sometimes is a postman, but most willingly a student". His voice imitation is typical and appears instead of or as the completion of his utterance.

While talking about his school friends he always uses their names and surnames, sometimes he gives the English version of their names. While teaching himself English he concentrated on the phonographic memory – initially he repeated only the words that he heard in TV films, then he learned them while listening to the tapes. His use of English is not accidental. He acquires the knowledge about social reality by a set of single not essential fragments. Having problems with defining the individuality of people he tries to acquire all possible characteristics including those in English so that he could have a control over the complex social environment [12]. He has difficulty in connecting the pieces of information, visible in the lack of the perception possibilities of those persons (his friends do not know English) – it becomes impossible for him to communicate since he becomes incomprehensible to others. His excellent memory appears to be insufficient from the communicative point of view.

A specified somewhat mechanical character of those relations which the boy initiates with other persons may be illustrated by his utterance: "I sing to him that I love

him. I love Z. K., who has black shoes, blue jeans, red shirt, green eyes, black backpack and freckles". This utterance gives an impression of being incoherent, slightly strange – words showing the emotional approach appear close to numerous but external features of the person's description, with a tendency to avoid defining their internal meaning [13]. It is possible to notice the continuation of irrelevant details in order to present the person.

The tendency not to differentiate himself from others and the disturbances in recognising and accepting the difference of others and himself are also noticeable in some utterances of the boy's – e.g. he talked about himself: "I am under mother's care, father works, mother doesn't work she is under my care", about his friend: "He belongs to me, sometimes to others, to some friends", or "Would you tear me Michel?", when he talked about the cards addressed to a friend to whom he wrote that he loved him.

Failures in the attempts to start contacts with his peers were connected with a lack of understanding the social situations and difficulties in integrating the information concerning his own perspective and other people are visible in the following utterance: "Sometimes I write to him some letters to say that I love him, I want to hit him and then he crosses it out, tears the cards and throws them away because he doesn't like it..." and then: "I know that one cannot kiss his friends, because I kiss him. He doesn't like it [...] I know because the teacher says so".

The conclusion from this psychological examination may seem superficially contradictory to the information given by his mother, concerning his ability to notice social situations e.g. (at school he notices a careful approach of his teachers towards his own person). It may be understandable in the light of dynamic role of his experience and its internal character, however, the standard tests of his intelligence contain impersonal cognitive sentences, not necessarily being within his emotional interest, yet his own experiences may be valuable to provide the order in his social perspective. The truth is that his perception is limited – it appears in the situations that are characterised by stability and repetition, which corresponds to the boy's expectations – and it is still of fragmentary character, nevertheless the appearance shows a dynamic aspect of his developmental potential. It is possible to notice the boy's huge independence from the society, and a strong need for being accepted. In fear of being rejected he criticises himself strongly as if trying to cut off from his behaviour that may encounter an unfavourable opinion of those closely related. A lack of emotional flexibility in connection with his limited perceptive skills sometimes evokes his ambivalent behaviour. His difficulties in understanding all complex social contest e.g. when his friends behave differently than they used to (as he remembered) he takes ambivalent approaches to them (he wants to be a friend of theirs, he wants to hit them).

Disturbances in social integration and transfer may have the turning effect on the boy's cognitive limitations and malfunctioning. It may be interesting to refer to the theory of thinking [14, 5] according to which it is possible to conclude, explain and anticipate human behaviour on the basis of the human mind.

The boy has difficulties in understanding those social situations in which he may be cheated by others – he does not understand their intentions, only after the explanation given by mother he is inclined to perceive the behaviour of his friends in the

right perspective. His inability to understand such complex social situations in which somebody tries to manipulate him, treat him ironically, may contribute to the visible tendencies to withdraw and remain passive. Probably, it has its reflection in a high level of neurotics. In the boy's descriptions of those situations and persons there are negative categories dominating, e.g. "bad" weather, "barbarian", "enemy", "a friend pinched me, he frightens me" etc., which may certify about the perception of the world not completely understood due to a failure experienced in contacts with others, which is socially incomprehensible and may lead to the social withdrawal. During his stay in the ward the boy almost never smiled. His quotations coming from comedies which he liked watching were not funny; there was incoherence between content and emotional expression, they sounded strange and inadequate to the defined social context.

The presentation of a single case of the autistic disorders does not authorise to draw any general statements. In the process of "overcoming autism" the important factor is the development of expressive speech. It is connected with the level of intellectual functioning. It can be easily noticed that there is a parallel level of speech development, social skills and cognitive functions as well as typical disharmony. With the passing time what is more visible is a lack of reaching the coherence in respect to particular developmental aspects.

Whatever the aetiopathogenetic concept of autism is whether accepting, emotional-social, or cognitive there are some limitations to reach the complete adaptation. Disturbances in respect to speech, social development and disharmony in the intellectual development lead to difficulties in performing the well defined social roles.

Changes in the clinical picture of autism are possible to be noticed in pace with the development of a child. Disturbances in social adaptation become more visible. Difficulties in social functioning and frequent failures in the attempts to start new contacts with the time passing by may lead to the appearance of emotional disturbance and limit the possibilities of finding pleasure in every day situations. Difficulties in understanding and anticipating a complex social context connected mainly with the memory functions and the dominating fragmentary character of cognition may disturb the dynamism of behaviour evoking a tendency of social withdrawal, avoidance, escapism and passiveness or lead to the ambivalence behaviours, which may deepen the disturbances in social performance.

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