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Feature Article

Early intervention for infants with autistic spectrum disorders in Japan

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Abstract

Background: To date, many researchers in Japan have assumed that the cause of autistic spectrum disorders is attributable to some disorder in the ability of the child. However, we have been working on the premise that autistic spectrum disorders are brought about by relationship disturbances in early infancy and have been attempting to validate this hypothesis through early intervention.

Methods: We have examined the developmental process of affective communication in infants with autistic spectrum disorders. We have postulated that approach–avoidance motivational conflict (Richer) is the primary factor impeding the development of affective communication and have focused therapeutic intervention on this perspective.

Results: As a result, attachment behavior was markedly improved in children, but affective communication with their mothers was not. Examing the mothers' images of themselves in infancy in mother–infant psychotherapy, problems that the mothers had themselves in infacy with attachment behavior to their own mothers affected the mothers' internal representation of their children, leading to active evolution of mother–child interaction and development of affective communication between the mother and child.

Conclusions: In this context, the basis and significance of the internal representation of both parties being determinants in the quality of mother–child communication are discussed. Our goal in early intervention is not the elevation of a child's linguistic–cognitive abilities, but the creation of a comforting relationship in which both parent and child can live securely, without strain.

Key words affective communication, approach–avoidance motivational conflict, autistic spectrum disorder, early intervention, relationship disturbance.

Introduction

Over the past 6 years, we have been attempting early intervention for infants and their caregivers, mainly their mothers, for whom problems exist in the formation of mother–child communication. We have been carrying out this work within the framework of a Mother–Infant Unit (MIU).[1]

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The principle target of our MIU is the treatment of children with autism and autistic spectrum disorders exhibiting peripheral symptoms of autism. To date, many researchers have assumed that the cause of autistic spectrum disorders is attributable to some disorder in the ability of the child. In contrast, we have been working on the premise that autistic spectrum disorders are brought about by disturbances in relationships[2] in early infancy and have been attempting to validate this hypothesis through early intervention.[3]

Autistic spectrum disorders and communication

The theoretical rationale upon which we have chosen to work, from the standpoint of relational disorders, is given below.

The primary issue in autistic spectrum disorders is the difficulty encountered in the formation of communication. In considering this problem, how one regards this formation process is of key importance. Therefore, we will first explain our concept of the structure of communication.

Dual function of communication

Communication is grounded on: (i) the normally used linguistic or symbolic mode of communication; and (ii) the affective mode of communication.[4] Affective communication denotes the sharing of affect, motivation, intentions etc. This is often expressed as a phenomenon akin to the sympathetic vibration of tuning forks. In terms of developmental levels, we first see the establishment of affective communication between a child and its caregiver, which enables the gradual development of symbolic communication using tools (i.e. words), which hold symbolic meaning.

Affective or primitive communication

Taking communication in this context then calls for an evaluation of the quality of affective communication when considering the communication problems harbored by children with autistic spectrum disorders. Considering the process of formation of any form of bilateral communication, both parties must be taken into account. The affective or primitive mode of communication, which is the principal mode of communication in the early stages of human development, cannot be established without the active, subjective involvement of the caregiver. This is the primary reason why both parties must be taken into account when speculating on problems of communication between children and their caregivers.

Symbolic communication, context and meanings

When a person utters some words or acts in any way, some intention or motivation exists, whether the person is aware of this or not. It is more often the case that some disparity will exist between a person's intentions and his/her actual words or actions. The words used or actions taken also harbor general meanings common to those in the same cultural sphere; that is, generally held beliefs or commonsense. Moreover, in accommodating such words or actions, the meaning and content of the message received will vary from person to person. In this sense, the structure of linguistic communication harbors the inherent danger of discrepancies arising in many respects. The real meaning of words or actions is largely dependent on the context in which the words and actions are used and the subjectivity of the parties involved. It is impossible to consider the meaning of words or actions objectively and indiscriminately outside their proper context. This is the very reason disorders in communication must be considered in the context of disturbances in relationships.

These are the principal reasons for our taking the standpoint of relationship disturbances when considering the basis for the development of autistic spectrum disorders. Based on this understanding, we established the MIU in order to undertake studies from the clinical perspective.

Difficulties in attachment formation and the approach–avoidance motivational conflict

A major reason why affective communication may not readily evolve between children with autistic spectrum disorders and their caregivers is difficulty in attachment formation between the two parties. We presume that the primary factor giving rise to these difficulties in attachment formation in cases of autistic spectrum disorders is approach–avoidance motivational conflict.[5] Children exhibiting strong approach–avoidance motivational conflicts harbor abnormal hypersensitivity and strong insecurity. They experience a heightened desire to approach their caregivers when the physical distance between them increases. However, excessive approach will trigger avoidance behavior from their caregivers. For this reason, attachment formation becomes extremely difficult between the two, allowing the vicious circle of approach–avoidance motivational conflict to set in (Fig. 1). In the case of autistic spectrum disorders, heightening of this sort of conflict situation will make the child highly susceptible to temper tantrums or panic attacks.

Approach–avoidance motivational conflict and early intervention

Therefore, our goal in the primary stages of early intervention in cases of autistic spectrum disorders is to break this vicious cycle of approach–avoidance motivational conflict. It is true that this problem can be attributed to the child's distinctive constitution and that these children are hypersensitive to approach–avoidance motivational conflict and find it difficult to harbor a sense of security. However, the role of the caregiver in recognizing and responding to such behavior is also critically important in the formation of affective communication. In other words, this is a qualitative problem regarding the internal representation of the child within the caregiver. This is the basis that gives rise to the necessity and validity of psychotherapy for the caregiver.

Taking these approaches, the following are some representative examples of our 6 years experience with early intervention for autistic spectrum disorders. In addition, some problems regarding child-care in Japan over recent

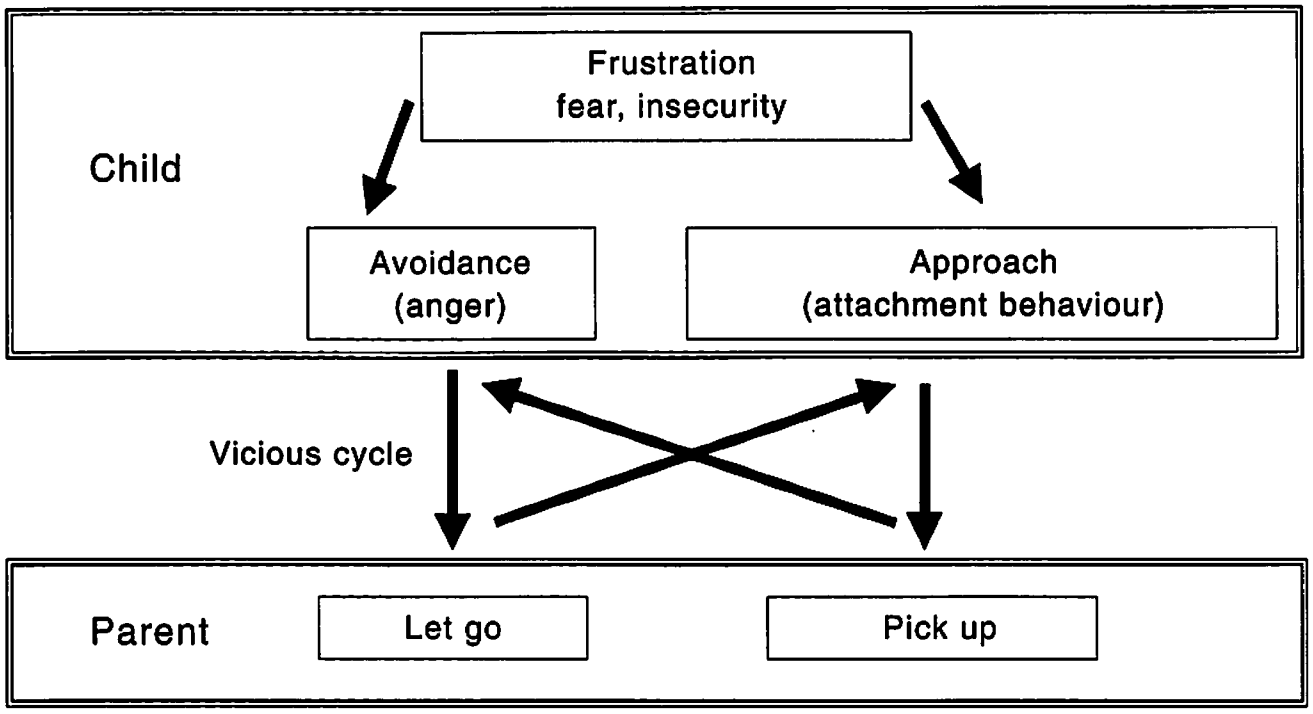

Fig. 1 Motivational conflict and the vicious cycle. (Based on Richer.[5])

Table 1 Age at beginning of treatment

	Age (years)						Total
	<1	1+	2+	3+	4+	≥5	
Male	0	2	6	6	4	0	18
Female	0	1	1	2	3	0	7
Total	0	3	7	8	7	0	25

years, which have been brought into focus through the study, will be discussed.

Early intervention in the MIU

Subjects, sex and age

The total number of subjects treated was 25 (Table 1), with 18 boys and 7 girls making up the treatment group. The age at first visit to the MIU ranged from 1 year and 7 months to 4 years and 11 months.

Subjects and clinical diagnosis (ICD-10)

Diagnoses for the 25 cases were 14 cases of autism and 11 cases of atypical autism (Table 2).

Subjects and developmental level (DQ)

Developmental levels in terms of DQ were determined to be normal in three cases, mild mental retardation (MR) for 16 cases, moderate MR in four cases and severe MR in one case (Table 3). There were no cases of profound MR. The developmental level of one case is unknown.

Effects of early intervention

In taking on any case, our first step is to observe and evaluate the state of the mother–child communication, following which we provide advice on how to interact with the children in concrete terms. We call this procedure 'interaction guidance' (Fig. 2). At this stage, we explain the child's approach–avoidance motivational conflict, citing

Table 2 Diagnostic classification of subjects (ICD-10)

	F code	ICD-10 Male	Female	Total
Childhood autism (*n*)	F84.0	9	5	14
Atypical autism (*n*)	F84.1	9	2	11
Total (*n*)		18	7	25

Table 3 Developmental level of the subjects

	Normal	Mild MR	Moderate MR	DQ Severe MR	Profound MR	Total
Male	1	11	4	1	0	17
Female	2	5	0	0	0	7
Total	3	16	4	1	0	24

The DQ was determined by the Tsumori Developmental Test.[6] Normal, DQ > 85; mild mental retardation (MR), DQ 50–84; severe MR, DQ 25–34; profound MR, DQ 0–24.

The developmental level in one case was unknown.

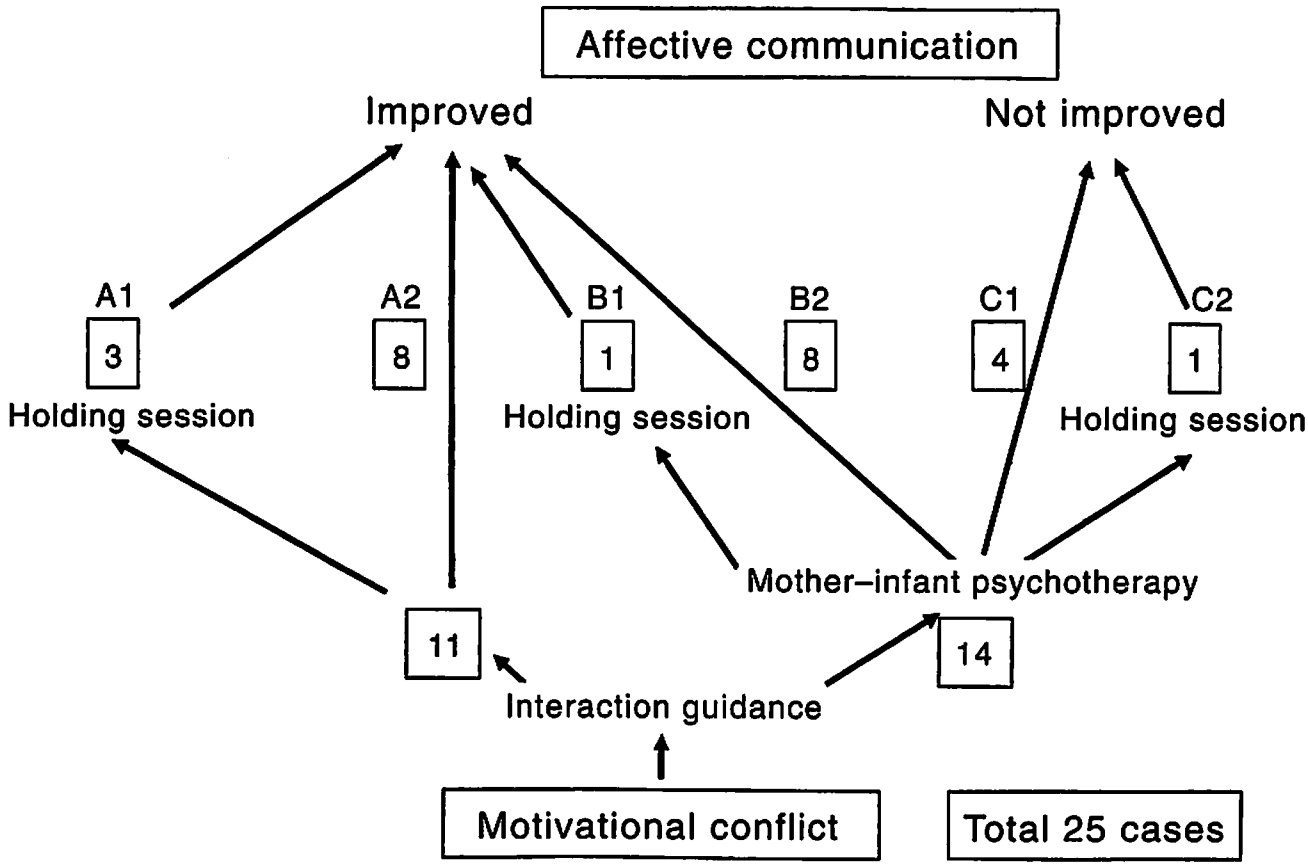

Fig. 2 Effects of early intervention at the Mother–Infant Unit.

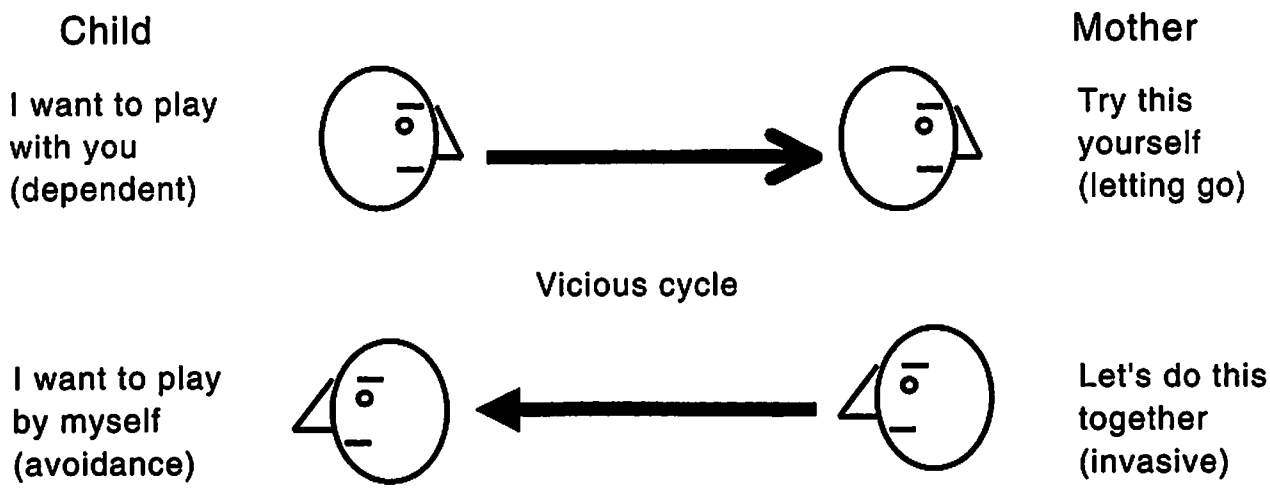

Fig. 3 Motivational conflict and relationship disturbances.

actual instances encountered in the therapy room, and advise the caregiver on ways of approaching and interacting with the child without being intrusive. For this, we have been using videotape recordings to provide parents with direct feedback from therapy, which has proven to be a highly effective technique. Improvement in mother–child communication is achieved in many cases by this method alone. We have been incorporating holding sessions for children exhibiting strong approach–avoidance motivational conflict. Through these approaches, marked improvement has been noted in 11 of 25 cases (44%) in whom deepening of affective communication became evident between the mother and child. In such cases, attachment behavior on the part of the child becomes marked, which the mother is able to recognize and firmly embrace as such.

However, there were 14 cases for whom this 'interaction guidance' alone did not produce sufficient improvement, requiring subsequent mother–infant psychotherapy. As a result, improvement was noted in nine of 25 cases (36%), while five of 25 cases (20%) did not show sufficient response.

Cases improved by mother–infant psychotherapy

In cases in which we used mother–infant psychotherapy, improvement was brought about relatively easily, primarily by taking up how the child's behavior was being perceived with regard to the discrepancies pointed out by the therapist between the child's feelings and actions. In many such cases, we encountered difficulty on the part of the caregiver in recognizing and embracing the child's attachment behavior because of the strong influence of the rapidly spreading trend of early education and excessively strict discipline arising from beliefs such as 'holding a baby too much will spoil the child'.

Case presentations

Case 1

The following is a case of a 3-year-old boy, boy A, born to a Chinese couple. Boy A was first brought to our clinic unable to communicate readily with his mother, following a period in which worry about child-care prompted the mother to return to her parent's home with the baby. The boy was diagnosed as being autistic on the basis of behavioral characteristics noted at his first visit and he was incorporated into the MIU program. Both parents always participated in the therapy sessions together.

The situation depicted in Fig. 3 was noted as a characteristic of the mother–child communication in this case. This schema is from a session at a time when boy A was gradually becoming accustomed to the atmosphere of the therapy room and had come to express his intentions explicitly through his behavior. Both parents were taking part in the session and the active approach both were taking towards the child made a prominent impression on the author. At the time, the parents were trying to get the boy to do a handstand, while the boy was emitting signals indicating that he was in the mood for cuddling up to his mother. Given the situation, the mother would prompt her son towards independence saying, 'Try it yourself'. In contrast, at times when the child was showing obvious signs of avoidance, insisting on repetitive play on his own, both parents would actively approach the child, enticing him to undertake other forms of play. At such times, we felt that boy A, with his unsatisfied demands for attachment, could only find comfort in such solitary modes of play. However, having the child persist in some peculiar activity appeared to be unbearable for the mother, in particular. When boy A wished to approach his mother, the mother would push

him away and when he wanted to be alone, away from his mother, she would insist on approaching him excessively. When this was pointed out, both parents acknowledged the pathology of this relationship. This relationship exemplifies the aforementioned vicious cycle of approach–avoidance motivational conflict, which we believe gives rise to a disturbed relationship between mother and child.

In the latter half of the fifth session, boy A began to approach his mother naturally and it appeared that both mother and child were starting to experience the pleasure of unstrained play. However, the mother was absent in the following session, being unwell. The following is an episode from that session attended by only the father and son.

Boy A exhibited signs of being unable to settle down from the start of the session and was unable to concentrate on anything; he was observed to drift aimlessly around the room. In the latter part of the session, he lay down on the floor, tossing and turning. The father would repeatedly ask the child, 'What's wrong? Are you sleepy?', attempting to coddle him into a better mood. The boy appeared to be at a loss, uncertain of how he ought to behave. Because the therapist felt that the boy's behavior arose from the loneliness he felt in his mother's absence, he casually remarked, voicing the child's feelings, 'You miss Mother, don't you?' The father took this in straight away, saying 'So that's it. You're lonely', and picked up his son, to which the child responded smoothly, settling in his father's arms with obvious contentment, pressing his chest against his father's body and even wrapping both arms around his father's neck. Up to that point, the father had been unable to perceive his son's feelings and was being driven into a state of distress bordering on irritation; however, coming to recognize his son's feelings upon the therapist's intervention, he was able to respond instantly to his child's expectations.

Following several such episodes, boy A came to exhibit increasingly stronger attachment behavior towards his mother. However, the difficulties in adapting to Japanese society following the family's move from China and a cultural inclination towards fostering early independence in children was of note in these parents.

This case is an example of a Chinese family. Among the Japanese, an oft-noted tendency is difficulty in appreciating the actual state of one's own child, due to excessive concern about how they appear to others. The emphasis on upper-education in Japanese society and the excessive competition this has created has made it difficult for parents to capture the vivid picture of their children before their very eyes, also giving rise to the unique Japanese mentality of behaving with how you appear to others constantly in mind. The difficulties in recognizing children for what they are portrays how this mentality is also deeply reflected in the child-rearing culture of Japan.

Case 2

There are some exceptional cases that require psychoanalysis-oriented psychotherapy. The following is one such case. Boy Y was aged 3 years and 2 months at his first visit. The mother was the principal participant in the MIU therapy sessions. In this case, holding sessions in the early stages of intervention resulted in rapid promotion of attachment behavior towards the mother. However, the mother frequently exhibited expressions of bewilderment, unable to grasp the meaning of the change in her son. It appeared that she found embracing her son's approaches wishing for closeness unbearable. Hence, working on what the mother found distressful regarding child-care, she eventually related a history of an eating disorder in adolescence. It was also determined that the mother herself had harbored the rigid belief in her own childhood that a desire for closeness with and demands for attention from her mother were things that were simply not allowed.

Through the course of therapy, approaches promoting mother–child interaction, such as those encouraging the mother to focus on physical sensations, enabled her to gradually become capable of feeling the joy of interacting with her child. Deepening of affective communication accompanied this transition and the mother became capable of perceiving her son's feelings through physical contact.[7]

Cases not improved by mother–infant psychotherapy

There were five of 25 cases (20%) that did not respond to our attempts at early intervention. The majority of these mothers were incapable of perceiving the ebb and flow of their child's feelings, seeing their children on just the behavioral level from a critical viewpoint. When the Adult Attachment Interview[8] was conducted on a number of these mothers, it appeared that this attitude was deeply associated with the 'not secure type' (i.e. the dismissing, unresolved or preoccupied type) classification. A characteristic of this type of mother–child communication is a propensity for viewing the child's attachment behavior negatively.[7] Other common characteristics in this group of mothers were a hyper-sensitivity to evaluation by others or overconsciousness of how they appeared to others and a tendency for the imposition of discipline or education too early for the child. It is believed that such child-care attitudes of the mothers are deeply associated with the values of society in general and lack the supportive foundation of a family surrounding the mother and child.

Conclusions

Our goal in early intervention is not the elevation of a child's linguistic–cognitive abilities, but the creation of a comforting relationship in which both parents and child can live securely, without strain. For this, we believe it to be of paramount importance to restore the emotional relationships that were important aspects of the Japanese character in the past, such as represented by the concept of '*amae*',[9] or a form of dependency on others.

The first step in fostering affective communication in children with an autistic spectrum disorder is for us to step into their world, not of words, but of amodal perception,[10–12] with affect at its core. Doing so will enable, for the first time, the establishment of a basis for communication. Once this common ground is established, it should not be long before we can persuade them to step over into the culture and world in which we live.

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