E-Poster

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Characteristics of Motor Development in Infancy in Children With Autism Spectrum Disorder

Topic: Specific Target Groups (Children, Women, Elderly, Athletes, Musicians, Refugees, Ethnic Groups, Workers, and Others)

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BACKGROUND

Children with autism spectrum disorder (ASD) may show abnormalities in motor development from infancy. However, although there are scattered publications on the sociality, interpersonal relationships, and motor clumsiness of ASD children, there are few publications on the motor development and function aspects of infancy. Therefore, we report on the motor development of ASD children until they acquired walking in infancy.

METHODS

The subjects were 210 children (164 boys and 46 girls) diagnosed with ASD without any obvious underlying disease who were being treated at our hospital, with an average age of 5.9 years ± 2.3 months, and the age at which they acquired motor skills until they acquired walking was retrospectively extracted from their medical records. The motor items were divided into six items: head-settling, rolling over, sitting, crawling, standing up, and walking. The number of children was calculated by classifying them into normal range and early/late outside the normal range based on the age at which gross motor skills were acquired with a passing rate of 75-95% on the Denver Development Screening Test Revised Japanese Edition. In addition, the number of children within and outside the normal range and the order of motor acquisition were investigated.

RESULTS

The average age at which motor skills were acquired was 3.5 ± 0.9 months for head-settling, 5.4 ± 1.4 months for rolling over, 7.5 ± 1.7 months for sitting, 8.1 ± 2.9 months for crawling, 9.7 ± 2.1 months for standing up, and 14.2 ± 3.4 months for walking alone. Sixty-three children had all ages within the normal range, and 147 children had at least one item outside the normal range. In terms of the order of motor skills acquisition, 64 children acquired the skills in the correct order, and 141 children acquired them irregularly. The average age at which children with ASD acquired motor skills was within the normal range, but the standard deviation for the age at which they acquired skills after rolling over gradually increased, and the order of acquisition also tended to become more irregular.

CONCLUSION

Children who delayed motor development or an irregular order of acquisition is observed despite the absence of obvious underlying diseases, we believe it is necessary to intervene while keeping in mind the possibility of ASD, while also considering the progress of interpersonal, social, and behavioral aspects, as well as motor development.

Statement of Disclosures

None

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