6 - EVALUATION OF MOTOR DEVELOPMENT OF BABIES WITH DOWN SYNDROME

RITCHELLE GODOY SILVA
Centro Universitário Catarinense – FACVEST
Lages/SC/Brasil
rithy.godoy@hotmail.com

INTRODUCTION

Motor development is a continuous change ins motor behavior throughout life. It is a process involving the biological underlying influence that environmental and occupational development and motor skills of individuals from the neonatal period to old age (GALLAHUE AND OZMUN, 2005).

Childhood characterized acquisition of a wide range of motor skills that enable the child domain of your body in different postures that allow locomotion, object manipulation and provide various tools. It is subdivided into: learning (a process that produces changes in individual behavior and motor behavior in office practices). Motor control (development aspect that deals with the study of isolated tasks under specific conditions) (GALLAHUE AND OZMUN, 2005).

The first years of life are essential in the formation of physical and mental health of human beings. It occurs in childhood growth and development of high rate data, both from a biological standpoint, the psychosocial and emotional (ARMOND et al, 2002). The rudimentary movements are determined by the maturity and are characterized by a sequence of predictable appearances. The pace at which these skills appear varies from child to child and depends on external and internal factors. The baby's rudimentary motor skills represent the basic forms of voluntary movements that are necessary for survival, involving motion stabilizers such as gain control of the head, neck and trunk muscles; manipulative tasks to reach, grasp, hold, and drag-locomotor movement up, crawling and walking (GALLAHUE AND OZMUN, 2005).

Some babies and children do not follow the usual progression of development, this may be related to environmental, genetic, prenatal, perinatal, postnatal care, nutritional, cultural and ethnic groups. A very atypical or delayed development may indicate inability or deleterious influences on the infant / child (EFFGEN, 2007).

Children especially may have a pathology associated disorders that can interfere with motor acquisition of these children, often making them vulnerable to learning (TECLINK, 2002 apud ALMEIDA, 2004).

The Trisomy 21, better known as Down syndrome, is the presence of an extra chromosome on chromosome 21 (UMPHRED, 2004). Of every 800 children born in Brazil, about 1.3 are born with Down syndrome (SNUSTAD, 2001). Often children with Down syndrome are born premature, and the growth rate is slower than normal, resulting in a motor delay (GALLAHUE AND OZMUN, 2005).

A baby with Down syndrome is less active and has hypotonia, which decreases with time, and the child is gaining, though later than the others, the various stages of development. Down syndrome is the most frequent form of retardation caused by a chromosomal abnormality. It is believed that the delayed myelination characteristic of newborns and infants with Down syndrome is a contributing factor to the generalized hypotonicity and persistence of primitive reflexes (UMPHRED, 2004).

The motor development of infants with Down syndrome include: delays in the onset and inhibition of primitive and postural reflexes and hypotonia leading to a delay in reaching motor milestones. These children show levels consistently delayed motor development (GALLAHUE AND OZMUN, 2005) (EFFGEN, 2007).

The motor evaluation aims to assess, on a very small margin of error, the importance of data they detected both in normal populations and for those with developmental changes in general (ROSA NETO, 2006). The objective of this research is to evaluate the motor development of infants with Down syndrome.

REVIEW OF LITERATURE

Human organism has a biological logic, an organization, a calendar maturational evolution, an open door for interaction and stimulation. From the moment of conception, the human being goes through different transformations: prenatal (embryonic), perinatal (gestation) and postnatal (newborn, infant, preschool, puberty, adolescence, adults and seniors). During this process evolve the possibilities of the individual come to be widely and increasingly varied, complete and complex as you progress to each stage. The process of human development corresponds to a differential growth, complex and progressive, producing an identity influenced by individual characteristics and the environmental contingencies (ROSA NETO, 2006).

Physical development occurs with changes in body structures from the moment of conception until death. These changes, in different evolutionary stages, can be analyzed using various parameters (weight, height, girth, skinfolds), providing information about the state of global growth of the organism and its adaptation to the environment. The psychosocial development brings along the middle on social conditions (family, school and society), cognitive (memory, intelligence and creativity) and emotions (conduct) of the human being in the structuring of behavior with its own characteristics (personality). Neurological development is an increasing function organized neuropsychomotor increasingly complex. The DNPM has organic substrate and depends on the integrity of the central nervous system, neurological maturation (myelination), nutritional and psychosocial (ROSA NETO, 2006).

Motor development is regarded as a sequential process, ongoing and related to chronological age at which the human being acquires a huge amount of motor skills, which progress from simple movements and disorganized ¬ nizados to perform motor skills immediately organized al ¬ and complex (WILLRICH et al, cited by HAYWOOD, GETCHELL, 2004).

Motor behavior in infancy is an important indication of their overall development. In order to have a normal development requires a balance between stable and unstable stages so there is a simple state transition state complex (CONNOLLY, 2000).

Several factors, however, may jeopardize the normal course of development of a child. Risk factors are a number of biological or environmental conditions that increase the probability of ¬ also deficits in psychomotor development of children (WILLRICH ET AL, CITED BY MIRANDA et al, 2003).

Among the main causes of delay engine are: prematurity, car ¬ seases disorders, respiratory and neurological disorders, neonatal infections, malnutrition, low socio-eco ¬ nomic and poor educational level of parents and pre ¬ maturity. The greater the number of risk factors acting, the greater the possibility of compromising with the development ¬ (WILLRICH et al,

cited EICKMANN, 2002 and HALPERN, 2000).

A baby with Down's syndrome have differences on the face (microcephaly, the back of the head may be flattened brachycephaly, face wider, flatter nasal bridge, slanting palpebral fissures, epicanthal folds, Brushfield spots, eye diseases, small mouth, sky shallow mouth, protruding tongue, small teeth and irregular shape, small ears), neck (short, loose skin folds on the back), height (low), hands and feet (can be smaller and shorter fingers, the palm can only have one palmar crease or simian line, the fifth finger can bend slightly inward called clinodactyly and feet may be large spaces between the first and second finger and deep groove in the sole of the foot) ; chest (tapered, flat sternum, pigeon breast) skin (mottled, clear, sensitive to irritation), decreased muscle tone (hypotonia, impeding the development of motor skills like rolling, sitting, standing and walking). The development of a child with Down syndrome depends largely on the degree of disability, the higher the level the slower the development (KOZMA, 2006).

Even through the application of tests, it is evident that there are qualitative aspects of intellectual functions and functional in the human body, which remain inaccessible. Yet it is undeniable, despite these restrictions, the tests are very useful, allow us to appreciate, with a margin of error too small, the data they found, both in normal populations and for those with developmental disorders. To do so, is not used a single test, but the application of a battery of tests in order to examine the child in various media (ROSA NETO, 2006).

METHODOLOGY

This study is characterized as a descriptive and diagnostic research conducted at the Association of Parents and Friends of Exceptional Children - APAE Lages / SC, with 6 (six) babies from 03 to 36 months of age, 1 female and 5 male with a clinical diagnosis of Down syndrome, duly authorized by the parents / guardians to participate in this research, through the Term of Consent (IC).

The instrument was used to assess the scale Neuropsychomotor Development Early Childhood Lezine and Brunet (1981) modified by Souza Neto and Rose (2002). It is composed of 150 items, which divide the evaluation into four areas: a) Posture - assesses the broad movements of the child, such as rolling, sitting, walking, b) Óculomotriz or behavioral adaptation to the object - assesses eye-hand coordination, manipulation of objects and solve problems; c) Language - which assesses the reception, perception and expression in language use, and d) Social - which assesses the social and personal reactions. This scale has levels that comprise the age group 01 to 36 months. It features 10 items of testing for each month, with 6 of these items related to the testing itself and four related issues that must be asked of the child's parents or teachers.

Brunet and Lezine Scale (EBL) differs qualitatively from initial studies of Arnold Gessel and Charlotte Bühler, having quantified and made accurate measurement of developmental quotients. Moreover, the importance of applying the EBL is the fact that delays in being able to distinguish different areas to avoid alarming parents and guardians as a possible result of global developmental delay, and sometimes is easily recoverable with appropriate stimulation programs (BRUNET and LEZINE, 1981).

The kit testing is composed of a small iron bell with a wooden handle, used to ring, ring 1 medium red, 8 colored cubes (2 red, 2 blue, 2 green, 2 yellow), a plastic rattle average , a small table, a large mirror, a small white baby blanket, 1 tablespoon, 2 plastic pellets (1 red and 1 blue) 1 cup medium white plastic, a toy, a board of wood geometric shapes (circle, square and triangle), a pencil, a blank A3 sheet, 1 medium red plastic ball, a book of illustrations and an average doll.

This research was directed primarily to the CEP Univesc, initially presented a term of informed consent (IC) to parents / guardians of each child.

Data were tabulated on an Simode (Monitoring System for Child Development), developed by SOUZA and ROSA NETO (2002).

RESULTS AND DISCUSSION

Based on the evaluation, we obtained an average result as inferior in 6 children (1 year and 6 months, 1 year and 7 months, 2 years, 10 months, 3 years and 3 months), ranging from normal to very low in the lower areas postural, oculomotor, language and socialization. Results are presented in three stages: 1. Data in relation to chronological age, results (in months) of points obtained in each case and negative age for each item proposed by the scale. 2. The ratio of the profile of motor development, and 3. Degree of motor development.

Chronological age showed a variation from 7.4 to 45.5 months, and as a result of motor assessment have an average 4.3 to 27.0 for age development postural, oculomotor development from 4.3 to 19.0, 4 , 0 to 15.0 in language development, social development for 4.0 to 15.0 and in the global average from 4.2 to 72.8. That leads us to have a significant perspective in relation to chronological age and developmental age of each child. Regarding the negative age in the sample shows very significant compared to chronological age, with an average 1.2 to 19.6 in postural development, 1.2 to 24.6 in developing oculomotor, 1.6 to 35 6 in language development and from 1.6 to 32.6 in social development, as shown in table 1.

Case	AC	ADP	ADO	ADL	ADS	ADG	ANP	ANO	ANL	ANS
1	24,7	16,5	16,5	15,0	13,5	15,6	6,3	6,4	7,8	9,3
2	45,5	24,0	19,0	8,0	11,0	16,8	19,6	24,6	35,6	32,6
3	14,4	9,0	10,8	5,0	7,0	72,8	3,5	1,7	7,5	5,5
4	36,1	27,0	18,0	10,0	15,0	18,1	7,3	18,3	24,3	19,3
5	23,8	13,5	10,8	12,0	10,0	11,3	8,4	11,1	9,0	11,9
6	7,4	4,3	4,3	4,0	4,0	4,2	1,2	1,2	1,6	1,6

TABLE1: Motor Development Ages of the sample in month

Legend: AC - Chronological Age; **ADP** - Age Postural development, **ADO** - Age oculomotor development, **ADL** - Age in language development; **ADS** - Age Social Development; **ADG** - Global Age development; **ANP** - Age Postural negative; **ANO** - Age oculomotor negative; **ANL** - Age negative language; **ANS** - negative Social Age.

According Umphered (2004), in the posture the child has a greater degree of hypotonia than in other stages of development, hyperextensible joints, pelvic dysplasia, and short thick hands with the little finger arched and single palmar crease, including four larger fingers, toes with similar provision of the thumb and index finger normal, lowering intellectual stature and musculoskeletal anomalies, because the majority are primitive reflexes longer primarily a reflection of plantar grasp and palmar reflex march and live. It is believed that the delayed myelination characteristic of newborns and infants with Down syndrome is a contributing factor to the generalized hypotonicity and persistence of primitive reflexes. In the area óculomotriz most children with Down syndrome have features such as almond eyes, oblique palpebral fissure with the

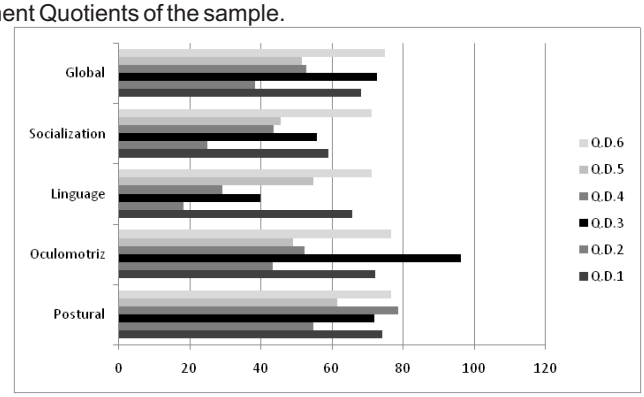
outside and a fold higher in the inner corner of eyes. Many also have conditions such as cataracts, myopia, nystagmus, astigmatism, and strabismus (UMPHERED, 2004).

In relation to language, children with Down's syndrome have features such as protruding tongue and grooved, small teeth and dentition occurs later. These factors lead the children to develop speech later or in some cases even emit sounds (UMPHERED, 2004).

The social development of a child with Down syndrome is based primarily on stimuli received by the family and caregivers, for the attachment can be beneficial to the development through actions such as sucking, crying, smiling, approach, family environment, care and play. The more the child is encouraged with love and care more effective the result (SOUZA, 2003).

These areas work in developing a global basis. A non-syndromic children tend to follow the phases of development, as a child syndrome present in these areas due to late maturation of the CNS, because it occurs later. This explains the fact that children lose syndromic primitive reflexes and reactions later, thus interfering with the development quotient.

Graph 1: Development Quotients of the sample.



According to the results obtained and compared with table 1 and figure 1, it results in an average well below the low normal, and listed children 1 to 6 as shown in Table 3.

Áreas	Normal Low	Less	Very Low
Postural	---	4	2
Óculomotriz	1	2	3
Linguage	---	1	5
Socialization	---	1	5
Global	---	2	4

Table 3: Results of the areas of motor development of the sample.

Other studies conducted with children in early childhood with Down syndrome and nonsyndromic children, using the scale Lezine and Brunet (1981) obtained significant results and comparative data.

Souza (2002) investigated in his research with 221 children from 06 to 24 months of age from public daycare centers in Florianópolis / SC, and the results showed that the average development of children is almost appropriate for their ages in the areas postural , oculomotor, social and global and a slight deficit in the area of language and socialization, but all within the average normal profile.

Caon et al (2004) demonstrated in their study of children at high social risk that children with transitional care, physical, mental and emotional problems results obtained from normal to well below average in four areas (postural, oculomotor, language and socialization). Since Silva and Solomão (2002) comparing syndromic and nonsyndromic children showed that there is a significant difference between the utterances and child behavior. Children with Down syndrome responded less to the demands of their mothers than children with normal development in the areas of language and socialization.

Ambrozio (2009) in their study of seven children with Down syndrome using the scale and Brunet Lezina with stimuli given by mothers, found that the influence and importance of mother's voice helps a lot in the child's attention, especially in the area of language and socialization, which showed a lower QD to the other areas. Therefore, data from this study concur with other research indicating that children with Down syndrome have delays in the different areas of motor development.

CONCLUSION

The child is a developing organism whose growth is expressed by behaviors or ways of responding, ranging from simple reflex to voluntary act, this is due to progressive structuring of the CNS, it is known that in children syndromic this maturation occurs later, in the case Down's syndrome this late maturation generates a delay in the loss of primitive reflexes and reactions that eventually lead to a delay in development areas.

Children with Down syndrome have a significant delay in motor areas, became evident the need for early intervention and stimulation to the child with Down syndrome may not develop their skills so late. Stimulation of the family with their environment and the school is very important for these children.

REFERENCES

ALMEIDA, G.M.F. **Avaliação e intervenção motora na síndrome de Down.** Monografia apresentada ao Curso de Especialização em Desenvolvimento Infantil do Centro de Educação Física, Fisioterapia e Desportos da Universidade do Estado de Santa Catarina, 2004.

AMBROZIO, C.R. **Participação das mães na avaliação do desenvolvimento do bebê com síndrome de Down na estimulação precoce.** Dissertação (Mestrado) da Universidade Federal do Paraná, 2006.

ARMOND, L.C. VASCONCELOS, M. MARTINS, M.D. **Crescimento e desenvolvimento infantil.** In: Carvalho A, Salles F, Armond L, Guimarães M. Saúde da Criança. Belo Horizonte: Editora UFMG, 2002, 19-32.

BRUNET, O. LEZINE, I. **Desenvolvimento Psicológico da Primeira Infância.** Tradução de Ana Guardiola

Brizolara. Porto Alegre: Artes Médicas, 1981, 159p.

CAON, G. MANSUR, S.S. ROSA, NETO, F. **Avaliação e intervenção neuropsicomotora – estimulação precoce em crianças de alto risco social.** Anais do 2º congresso Brasileiro de Extensão Universitária de Belo Horizonte – 12 a 15 de setembro de 2004.

CONNOLLY, K. **Desenvolvimento Motor: passado, presente e futuro,** Rev. Paul. Educ. Fís., São Paulo, supl. 3, p. 6-15, 2000.

EFFGEN, Susan. **Fisioterapia Pediátrica – atendendo às necessidades das crianças.** Rio de Janeiro: Guanabara, 2007

EICKMANN, SH. DE LIRA, PIC. LIMA, MC. Desenvolvimento mental e motor aos 24 meses de crianças nascidas a termo com baixo peso. **Arq Neuropsiquiatr** 2002;60(3-B):748-54.

GALLAHUE, D.L. OZMUN.J.C. **Compreendendo o Desenvolvimento Motor – bebês, crianças, adolescentes e Adultos.** 3 Edição. São Paulo: Phorte Editora, 2005.

HAYWOOD, K.M. GETCHELL, N. **Desenvolvimento motor ao longo da vida.** 3ª ed. Porto Alegre: Artmed, 2004, 344

HALPERN, R. GIUGLIANI, E.R.J. VICTORIA, C.G. BARROS, F.C. HORTA, B.L. Fatores de risco para suspeita de atraso no desenvolvimento neuropsicomotor aos 12 meses de vida. **J Pediatr** 2000;76(6):421-8.

KOZMA, C. Síndrome de Down. **Revista de Neurociências**, nov2006.

MIRANDA, L.C. RESEGUE, R. FIGUEIRAS, A.C.M. A criança e o adolescente com problemas do desenvolvimento no ambulatório de pediatria. **J Pediatr** 2003;79(Supl1):S33-42.

NASCIMENTO, R. MADUREIRA, V.F. AGNE, J.E. Avaliação do Desenvolvimento Neuropsicomotor de Crianças em Centros de Educação de Concórdia. **Revista de Neurociências,** 2008; 16/4:284 – 291.

ROSA NETO, F. **Desenvolvimento Humano**. 2006

SILVA, M.P.V. SALOMÃO, N.M.R. Interações verbais e não-verbais entre mães-crianças portadoras de Síndrome de Down e entre mães-crianças com desenvolvimento normal. **Estud. psicol.** (Natal) vol.7 no.2 Natal July/Dec. 2002.

SOUZA, J.M. **Avaliação do desenvolvimento neuropsicomotor de crianças entre 06 a 24 meses de creches de Florianópolis – SC.** Dissertação (Mestrado em Ciências do Movimento Humano). Centro de Educação Física, Fisioterapia e Desportos da Universidade do Estado de Santa Catarina, 2003.

SNUSTAD, D.P. SIMMONS, M.J. **Fundamentos da Genética.** 2001

TECKLIN, J.S. **Fisioterapia Pediátrica.** Porta Alegre: Artmed, 2002.

UMPHRED, Darcy A. **Reabilitação Neurológica.** São Paulo: Manole 4 edição, 2004.

WILLRICH, A. AZEVEDO, C. FERNANDES, J. Desenvolvimento motor na infância: influência dos fatores de risco e programas de intervenção. **Revista de Neurociências**, 2009; 17 (1): 51-56.

Rua: Presidente Kennedy, nº 520, B: Copacabana.
Cep: 88504-250 – Lages/SC/Brasil
rithy.godoy@hotmail.com

EVALUATION OF MOTOR DEVELOPMENT OF BABIES WITH DOWN SYNDROME

ABSTRACT

The child is a developing organism whose growth is expressed by behaviors or ways of doing things, ranging from simple reflex to voluntary act, this is due to progressive structuring of the CNS. It is known that in syndromic children, this maturation occurs later, causing a delay in the loss of primitive reflexes and reactions, which consequently lead to a delay in development areas. Therefore, the stimulation is of paramount importance since the first months of life. The aim of this study was to evaluate the motor development of infants (3-36 months) with Down syndrome. It is a descriptive and diagnostic APAE with 6 children - Parents and Friends of Exceptional Sunbeam Lages - SC 6 children, 1 female and 5 male. The children were assessed using the Psychomotor Development Scale Early Childhood Lezine and Brunet (1981) which assesses four areas of infant motor development, resulting in chronological age (CA), age of development (ID), negative age (IN) development and the ratios (DR) in the areas of posture (P), oculomotor (O), language (L), socialization (S) and global (G). The results were tabulated on an SIMODE, developed for this scale by Souza and Rosa Neto (2002), with the final result of a low normal range, 10 to 19 lower much lower in these areas. After data analysis it was concluded that infants with Down syndrome have deficits in all areas of development, with greater deficits in language and socialization, became evident the need for early intervention and stimulation to enable them to develop their skills not so late.

KEYWORDS: Motor Development, Down syndrome babies. Brunet and Lezine.

ÉVALUATION DU DÉVELOPPEMENT MOTEUR DE BEBES TRISOMIQUES

RÉSUMÉ

L'enfant est un organisme en développement dont la croissance est exprimée par des comportements ou des façons de faire les choses, allant de la simple réflexe d'acte volontaire, cela est dû à la structuration progressive du système nerveux central. Il est connu que chez les enfants syndromique, cette maturation se produit plus tard, provoquant un retard dans la perte des réflexes primitifs et des réactions, qui, par conséquent conduire à un retard dans les domaines de développement. Par conséquent, la stimulation est d'une importance primordiale puisque les premiers mois de vie. Le but de cette étude était d'évaluer le développement moteur des nourrissons (3-36 mois) avec le syndrome de Down. C'est un APAE descriptives et diagnostiques avec 6 enfants - Parents et Amis de Lages Sunbeam exceptionnelle - SC 6 enfants, une femme et 5 hommes. Les enfants ont été évalués en utilisant l'échelle de développement psychomoteur enfance Early Lezina et Brunet (1981) qui évalue les quatre domaines du développement moteur du nourrisson, entraînant l'âge chronologique (CA), à l'âge de développement (ID), l'âge négative (EN) développement et les ratios (DR) dans les domaines de la posture (P), oculomoteurs (O), la langue (L), la socialisation (S) et mondiales (G). Les résultats ont été compilés sur un SIMODE, développé pour cette échelle par Souza Neto et Rose (2002), avec le résultat final d'une gamme basse normale, 10 à 19 inférieures beaucoup plus faible dans ces domaines. Après analyse des données il a été conclu que les nourrissons atteints du syndrome de Down ont des déficits dans tous les domaines du développement, avec plus de déficits dans le langage et la socialisation, est devenue évidente la nécessité d'une intervention précoce et de stimulation pour leur permettre de développer leurs compétences pas si fin.

MOTS-CLÉS: le développement moteur, les bébés de Down syndrome. Brunet et Lezina.

EVALUACIÓN DEL DESARROLLO MOTOR DE NIÑOS CON SÍNDROME DE DOWN

RESUMEN

El niño es un organismo en desarrollo, cuyo crecimiento se expresa en conductas o maneras de hacer las cosas, que van desde la simple reflejo de acto voluntario, esto se debe a la estructuración progresiva del sistema nervioso central. Se sabe que en los niños el síndrome, esta maduración se produce más tarde, provocando un retraso en la pérdida de los reflejos primitivos y reacciones, que por lo tanto dar lugar a un retraso en las áreas de desarrollo. Por lo tanto, la estimulación es de suma importancia ya que los primeros meses de vida. El objetivo de este estudio fue evaluar el desarrollo motor de los bebés (3-36 meses) con síndrome de Down. Se trata de una APAE descriptivos y de diagnóstico con 6 niños - Padres y Amigos de Excepcionales Lages Sunbeam - SC 6 hijos, uno femenino y masculino 5. Los niños fueron evaluados utilizando la Escala de Desarrollo psicomotor temprano Lezina Infancia y Brunet (1981), que evalúa cuatro áreas de desarrollo motor, resultando en la edad cronológica (CA), la edad de desarrollo (ID), la edad negativa (EN) desarrollo y las relaciones (DR) en las áreas de la postura (P), oculomotor (O), lenguaje (L), socialización (S) y global (G). Los resultados fueron tabulados en una SIMODE, desarrollado para esta escala de Souza Neto y Rose (2002), con el resultado final de un rango bajo lo normal, 10 a 19 baja mucho menor en estas áreas. Tras el análisis de datos se concluyó que los bebés con síndrome de Down tienen un déficit en todas las áreas de desarrollo, con un mayor déficit en el lenguaje y la socialización, se hizo evidente la necesidad de intervención y estimulación temprana para que puedan desarrollar sus habilidades no tan finales.

PALABRAS CLAVE: Motor de Desarrollo, a que los bebés síndrome. Brunet y Lezina.

AVALIAÇÃO DO DESENVOLVIMENTO MOTOR DE BEBÊS COM SÍNDROME DE DOWN

RESUMO

A criança é um organismo em desenvolvimento cujo crescimento se expressa por comportamentos ou maneiras de agir, indo do simples reflexo ao ato voluntário, isso se deve a estruturação progressiva do SNC. Sabe-se que em crianças sindrômicas, essa maturação ocorre mais tardiamente, gerando um atraso na perda de reflexos e reações primitivas, que conseqüentemente levará a um atraso nas áreas do desenvolvimento. Por isso, a estimulação é de suma importância desde os primeiros meses de vida. O Objetivo desse estudo foi avaliar o desenvolvimento motor de bebês (3 a 36 meses) com síndrome de Down. Trata-se de uma pesquisa descritiva e diagnóstica com 6 crianças da APAE – Associação de Pais e Amigos dos Excepcionais Raio de Sol de Lages – SC em 6 crianças, sendo 1 do sexo feminino e 5 do sexo masculino. As crianças foram avaliadas através da Escala de Desenvolvimento Psicomotor da Primeira Infância de Brunet e Lezine (1981) que avalia 4 àreas do desenvolvimento motor infantil, obtendo-se idade cronológica (IC), idade do desenvolvimento (ID), idade negativa (IN) e os quocientes do desenvolvimento (QD) nas áreas postural (P), óculomotor (O), linguagem (L), socialização (S) e global (G). Os resultados foram tabulados no programa SIMODE, desenvolvido para esta escala por Souza e Rosa Neto (2002), tendo como resultado final da escala 1 normal baixo, 10 inferior e 19 muito inferior nestas áreas. Após analise dos dados concluiu-se que os bebês com síndrome de Down apresentam déficit em todas as áreas do desenvolvimento, com maior déficit em linguagem e socialização, ficando evidente a necessidade de intervenções e estimulação precoce a fim de que possam desenvolver suas habilidades não tão tardiamente.

PALAVRA CHAVE: Desenvolvimento motor, Síndrome de Down, Bebês. Brunet e Lezine.