NEUROLOGICAL DEVELOPMENT IN INFANTS BORN TO MOTHERS WITH GESTATIONAL DIABETES

Masel Alisa, Liskina Anastasia, Konoplya Inessa, Polyanskaya Alexandra, Popova Polina, Nikitina Irina

Almazov National Medical Research Centre
Saint-Petersburg, Russia

Introduction

Intrauterine exposure to hyperglycemia during pregnancy can lead to a number of negative consequences, including the impact on neurological development of children.

Aim

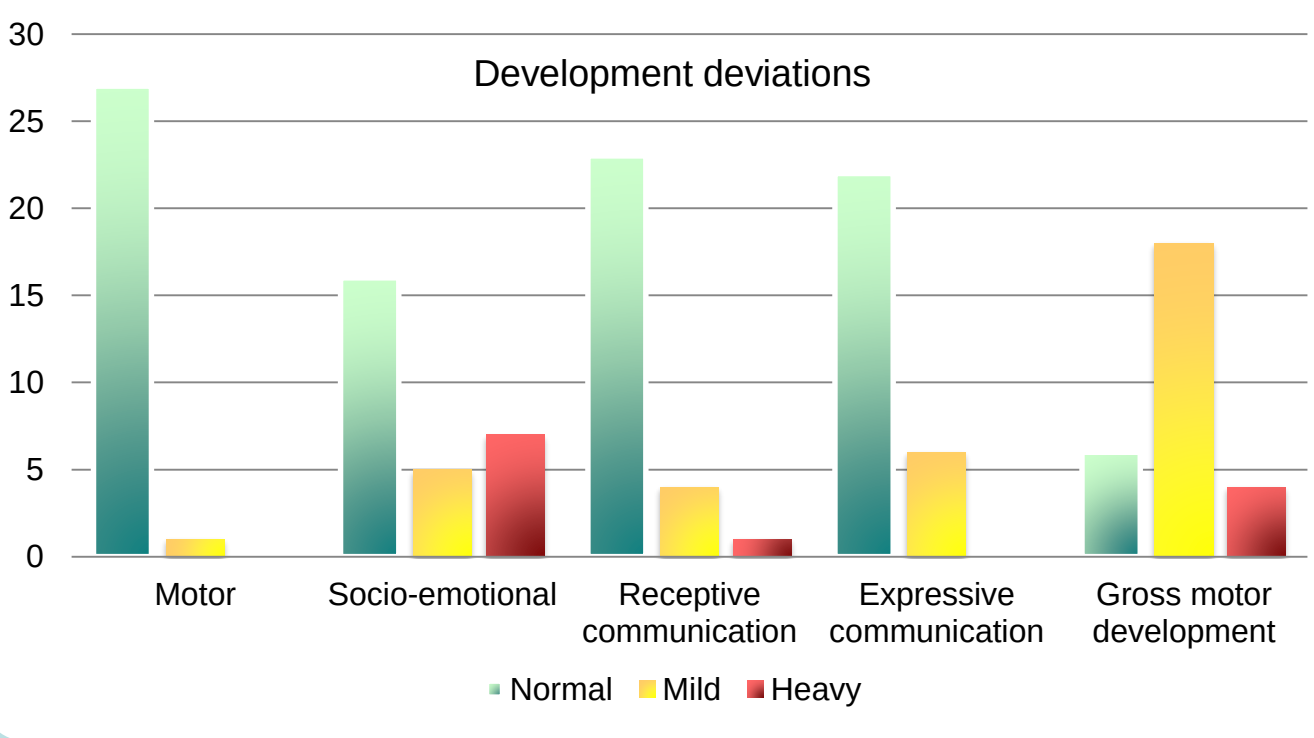
To compare the impact of gestational diabetes (GD) on neurological development in children.

Methods

28 infants born to mothers with GD, treated by insulin, were involved in evaluation of neurological development (Piaget's method) at the age of 6 months. There were investigating the elementary forms of behavior of infants (motor development, socio-emotional development, receptive communication, expressive communication, gross motor development).

Results

In 27 children (96.5%) motor development corresponded to a reference level for an age, only 1 child (3.5%) was in a zone of mild severity reduction. In the socio-emotional sphere 16 children (57%) were classified in the group of normal values. An easy degree of reduction was diagnosed in 5 children (18%), with an average severity of disorders in 7 (25%) cases. In group of receptive development reactions 23 (82%) children were assigned to the normal response group; 4 (14.5%) had mild disorders, and 1 child (3.5%) had a moderate disorder. In the expressive reactions 6 (21.5%) had a delay in development, while the rest 22 (78.5%) had normal development. In gross motor development only 6 children (21.5%) were assigned to the normal age group of development, 18 (64%) had mild disorders, and 4 (14.5%) showed an average severity of the disorder.



Conclusions. The deviations of the neurological development were represented by disturbances in the socio-emotional sphere and gross motor development; To a lesser extent - the development of receptive communication. The smallest deviations were identified in the motor and expressive sphere.