

Nutritional profile of children with hydrocephalus

Perfil nutricional de crianças com hidrocefalia

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Hydrocephalus is a disease that can present many clinical manifestations, compromising the growth and development of the child. Risks of complications as infectious processes and impairment of the immune system can be attenuated in the presence of nutritional deficiencies. **Objective:** To describe the nutritional profile of children with hydrocephalus. **Methods:** This is a cross-sectional study developed at the Neurosurgery Ambulatory of the University Hospital in Sergipe, Northeast Brazil, from August 2010 to May 2011. **Results:** From the 35 studied children, 17.1% were low weight, 31.4% were malnourished, presenting with linear growth impairment, 40.0% had anemia, and 37.2% presented low levels of pre-albumin. There was a significant difference for body mass index (BMI)/age ($p=0.022$), hemoglobin ($p=0.031$), haematocrit ($p=0.011$) and pre-albumin ($p=0.024$) in patients aged from six to 24 months. The diet showed significant difference between age groups for the energetic value ($p=0.002$), calcium ($p=0.005$), folate ($p=0.015$), vitamin D ($p=0.011$), vitamin E ($p=0.005$), cereal group ($p=0.002$) and group of meat/egg ($p=0.033$); diet impairment was concentrated in children from 25 to 76 months. There was inadequate intake of the meat/egg group also among children aged 6 to 24 months. **Conclusions:** Malnutrition affecting weight, levels of pre-albumin and anemia was present in children aged from six to 24 months. Inadequate food consumption was prevalent among children aged 25 to 76 months.

Key words: children, food consumption, hydrocephalus, nutritional state.

Assessment of fetal tridimensional cerebellar volumes between genders

Avaliação tridimensional do volume cerebelar fetal entre os gêneros

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ABSTRACT

Introduction: The object of this study was to assess the tridimensional cerebellar volume between genders and its correlation to other fetal growth parameters indices. **Methods:** The author carried out a cross-sectional and prospective study involving 125 normal pregnant women from 22 to 36 weeks of gestation. The assessment of fetal cerebellar volume was performed through Virtual Organ Computer-aided Analysis. The author also assessed other biometric fetal growth indices: biparietal diameter, occipitofrontal diameter, abdominal circumference, head circumference, femur length, anteroposterior cisterna magna diameter, lateral ventricle atria width and estimated fetal weight and its correlation to cerebellar volume. The Mancova analysis and Pearson's correlation coefficient were used with gestational age as independent variable and cerebellar volume as dependent variable. **Results:** The results showed highly correlating to gestational age, biparietal diameter, occipitofrontal diameter, head circumference, femur length and estimated fetal weight (r -value above 0.90 and $p<0.0001$). Comparison between genders did not show any significant difference in fetal cerebellar volume throughout pregnancy. **Conclusions:** The assessment of tridimensional cerebellar volume showed no difference between genders, but there was increasing throughout the pregnancy ($p<0.0001$).

Key words: cerebellar volume, tridimensional ultrasound, fetal gender.