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AN ELECTRONIC SOFTWARE AID FOR THE ASSESSMENT OF DEVELOPMENTAL MILESTONES IN CHILDREN

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Background: A child developmental screening covers the four key areas of gross motor, fine-motor/ vision, hearing/ language and social skills. Medical students, GP's and paediatricians need a detailed understanding of both normal and abnormal patterns of developmental milestones. They also need a quick reference guide they can refer to in a busy clinical area.

Aim: We designed simple electronic software as reference guide for medical students and healthcare professionals when assessing the developmental milestones of children at different ages in a busy clinical area.

Design: The software is based on Microsoft windows application which is intuitively easy to use and user-friendly. It provides a database of information about normal pattern of developmental milestones with graphic illustration and warning red flags for possible developmental delay at different ages between birth and five years.

[Fig1]

Results: The computerised assessment tool acts as a quick reference for the approximate developmental age of children and requires no advanced computer skills. The software gives warning signals for developmental delay that should prompt immediate referral of children for developmental specialist review.

Conclusion:

The software programme can be utilized in the developmental assessment of preschool age children. It can identify children who might have developmental delay in the paediatric outpatient clinics or child development centres. Further study of its usefulness and effectiveness is recommended.

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MATERNAL AND TERM UMBILICAL CORD VITAMIN D LEVELS IN AN IRISH COHORT

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Background and Object: Vitamin D plays an important role in skeletal and non skeletal health. We previously reported a high prevalence (about 80%) of serum 25-hydroxy-vitamin D (25OHD) insufficiency in preterm VLBW infants. The object of this study was to assess 25OHD status in maternal and term umbilical cord samples.

Methods: Vitamin D levels were evaluated from maternal and umbilical cord samples from term normal pregnancies from January to March 2010 and evaluated by radioimmunoassay.

Results: 40 samples included 19 maternal and 21 cord samples and 15 maternal and cord paired samples. The mean ($\pm$ Standard deviation) cord blood 25OHD levels were significantly decreased compared with maternal levels (29.9 $\pm$ 8.3 versus 47.9 $\pm$ 22.0 nmol/l; $p < 0.005$). Only one maternal and paired cord sample had levels > 70 nmol/l.

Conclusions: We have demonstrated that 80% of preterm VLBW infants have insufficient 25OHD levels during early postnatal life; but 25% remain insufficient at follow-up assessment. However in addition a cohort of normal term mothers and infants