VITAMIN D AND VITAMIN D DEFICIENCY: HOW MUCH DO PARENTS KNOW?

Background: Vitamin D deficiency is prevalent among children and the majority are unaware of their low vitamin D levels. Vitamin D is an important component for the optimal health of children, as well as playing a role in reducing the risk of various chronic health issues in the future. This study aimed to gauge the level of awareness and knowledge of vitamin D amongst the parents of paediatric orthopaedic patients.

Study design: A retrospective observational study was conducted using a paper-based questionnaire to assess parental awareness. The questionnaire was distributed to parents of children attending paediatric orthopaedic clinics in a single Teaching Hospital Trust over a period of four months.

Results: 220 parents responded to the questionnaire. 85% of respondents believed vitamin D to be important for the health of a child. 65% said they knew what vitamin D was. 40% of all parents asked were unable to write a brief statement of their basic understanding surrounding vitamin D. 17% give their children vitamin D supplementation. 2% of the respondents’ children have been told they are vitamin D deficient.

The participants were asked what they believed to be good dietary sources of vitamin D. 64% of respondents could identify oily fish or eggs. However, 46% believed dairy products to be a good dietary source of vitamin D.

The questionnaire asked respondents whether GPs have provided education or advice about the importance of maintaining adequate vitamin D levels in children, only 9% of parents said that they had received information from their child’s GP.

59% of respondents to the questionnaire wanted more information about vitamin D and vitamin D deficiency. This information was sent to each of those respondents as a short leaflet.

Conclusion: Parental awareness of vitamin D and deficiency is poor. There is a need for increased levels of parental education to ensure children have a better chance of maintaining adequate vitamin D levels.

WHAT ARE THE LONG TERM CLINICAL OUTCOMES OF SPINAL DYSRAPHIAS IN CHILDREN?

S Pal, H Fernandes, AD Sansome, Department of Paediatrics, Cambridge University NHS Foundation Trust, Cambridge, UK

Background: Spinal dysraphia is a non-fatal foetal anomaly comprising a range of spinal canal fusion abnormalities. There have been recent advances in the diagnosis, treatment and prevention of this condition. The longer term outcomes currently vary within the literature and are based historic cohorts prior to more recent advances in care.

Aims: Review the long term outcomes and symptomatology in a current cohort of children with spinal dysraphia.

Methods: Retrospective review of medical records of patients with diagnosis of spinal dysraphias. Children were excluded if there was other genetic abnormality or syndrome.

Results: We identified 70 children (mean age 10.7, SD 7.1, 41% male). There was 100% survival at 1 year of age and 68 (97%) children were still alive at time of the review. Mortality in both children was secondary to meningitis. Diagnosis was made antenatally in 37%, and postnatally in 63% with 3 children (5.7%) being diagnosed at school age. 51 (73%) were symptomatic and 22 (31%) had evidence of neuropathic bladder and bowel. Antenatal diagnosis (p = 0.047), higher level of lesion (p = 0.044) or shunts in situ (p < 0.001) were all predictive of greater symptomatology. If a patient was found to be symptomatic in one area, they were significantly more likely to also have other symptoms (p < 0.001) supporting the need for regular review in these children. There was a high incidence of urinary symptoms (11.7%) constipation (37%) and orthopaedic problems (such as scoliosis or lower limb abnormalities) (48%) in the absence of neuropathy. Mental health issues were documented in 4 children (5.7%).

Conclusions: Spinal dysraphia is associated with high rates of morbidity (73%) with a significantly lower mortality (3%) and incidence of mental health issues (6%) when compared to previous studies. The current follow-up of patients with spinal dysraphias varies, therefore further studies are needed to develop appropriate follow-up strategies for this high risk patient group; including the evaluation for comorbidities and psychosocial complications.