

Increased incidence of apparently life-threatening events due to supine position.

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Paediatr Perinat Epidemiol. 2006 Nov; 20(6):491-6.

Gastro-oesophageal reflux (GOR) has a high prevalence in infancy. The supine position is among numerous aggravating factors. The exact relationship between GOR and apparently life-threatening events (ALTE) is not clear, although it has been repeatedly investigated. In 1992 the worldwide Back to Sleep campaign was implemented, which had a dramatic effect on the incidence of sudden infant death syndrome (SIDS) with a drop of 50%. Although the vast majority of children now sleep on their back, the effect of this position on ALTE has not been studied. In this retrospective study, we aim to define the potential association between GOR and ALTE. We hypothesise that the incidence of ALTE has increased since the 1992 recommendation. No bias in the population's selection was introduced, as our centre is the only one for paediatric emergencies in the county. A total of 107 children presenting with ALTE were identified during the study period (1987-99). A pH study was performed in the 75 patients presenting with ALTE in the last 6 years of the study (1994-99). Neither morbidity nor mortality was noted in a long-term 4-year follow-up. Our present results show that the frequency of ALTE increased sevenfold ($P < 0.005$) between 1992 and 1999. The ALTE episodes took place significantly more often in the post-prandial period. The prevalence of GOR was much higher in patients presenting with ALTE (nearly 75%) when compared with the general population. Furthermore, on medical treatment for GOR, very few patients presented with a second episode of ALTE. Consequently it is thought that GOR and ALTE are linked and that ALTE patients would benefit from GOR treatment. The worldwide marked decrease in SIDS since the implementation of the supine position possibly masks the negative effect of an increase in ALTE.

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