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LETTER TO THE EDITOR

Impaired motor control in SIDS infants

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Dear Sir,

We read with interest the recent review by Sperhake et al. on the historical aspects and possible pathophysiological mechanisms of the prone position in infancy and its role in contributing to sudden and unexpected death [1]. The paper provides a comprehensive time line detailing the development of our understanding of the risks involved for certain infants sleeping face down. One paper that we think could have been cited, which demonstrates the true significance of medical recommendations for front sleeping, is by Gilbert et al. where they estimate that a possible 60,000 infants died as a result of promulgation of this incorrect information [2].

It would also be useful to mention impaired motor control in at-risk infants related to medullary neurotransmitter deficiencies. One of the most recent developments in this area concerns the role of substance P deficiency in contributing to impaired head and neck movements. This was first discussed at the International Stillbirth and Infant Death Conference in Montevideo, Uruguay, in September 2016 [3] and was published the following year [4]. In essence, significant reduction in levels of substance P has been shown in all three subdivisions of the inferior portion of the olivocerebellar complex: the principal inferior olivary complex (PIO), the medial accessory olive (MAO), and the dorsal accessory olive (DAO) in SIDS infants compared to controls. These nuclei function in the pre-cerebellar relay network and integrate motor and sensory information controlling, amongst other things, head and neck movement [4]. As this may provide a reason why certain infants do not simply lift their faces away from dangerous environments when lying face down, this may be quite a significant observation [5].

References

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