

## Comment on: ‘Is nuchal cord justified as a cause of obstetrician anxiety?’ by Narang et al.

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To the Editor,

Considering the literature about effects of nuchal cord on maternal and fetal morbidity, this article is of great importance to obstetricians so, we thank Narang et al. [1], for focusing on a quite frequent but undetermined subject. Most of the studies about this issue have reported conflicting results, mostly stressing on that, nuchal cord does not have an effect on perinatal outcomes [2]. But there are authors who correlated nuchal cord with some degree of hypoxia and even cerebral palsy [3, 4].

The current study seems to have some bias of design about patient selection which may lead to unintended outcomes regarding management of this patient population. The authors report that they have selected the patients with nuchal cord (single or multiple) who could give birth vaginally among 2,000 patients eligible for the study. They also claim that presence of nuchal cord had some statistically significant effects on umbilical artery acid–base status including pH and lactate but non-nuchal cord group had pathological range biochemical derangement [1] possibly regarding the pathologic cut-off for umbilical artery pH as 7.00 which is the most important parameter related with long-term outcomes. But the number of patients who were

eligible for the study but delivered with cesarean section was not mentioned. Cesarean section incidence due to nuchal cord has been reported ranging between 11.1 and 35 % [5] and nuchal cord has been reported to be one of the four leading indications for cesarean delivery in the Chinese population [6]. Based on these reports, although nuchal cord is not an indication for cesarean section on its own, causal relationship with other factors such as decreased fetal heart rate variability or failure of descent may result with need of cesarean section.

Although delivery is a complex process, the authors seem to eliminate any possible intervening factors which may interfere with the way of delivery and at this point, the number of patients who were referred to cesarean section gains importance as the only possible factor leading to cesarean might be ‘nuchal cord’ or the number of ‘nuchal cords’. This is why we suggest the authors to report about this aspect of the research. Only after then, it may be possible to claim that nuchal cord does not have a significance as a factor intervening with the process of delivery.

In conclusion, retrospectively designed population studies up to now [2], reported about the effect of nuchal cord on acid base status of the umbilical artery to some extent, supporting the results of the current study but what we do not know yet is the significance of these effects in long-term for related subjects. This ‘unknown’ makes us reach more cautious conclusions regarding this issue.

**Conflict of interest** We declare that we have no conflict of interest.

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