Is intrapartum CTG admissible at trial as technical-scientific evidence according to Daubert criteria?

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DOI: 10.36129/jog.2024.S128

Objective. As currently used, intrapartum CTG has limited accuracy in predicting rare conditions such as Cerebral Palsy. Nonetheless, its ex-post reinterpretation remains the cornerstone in medico-legal litigations in case of suspected intrapartum asphyxia that lead to neurological injury.

Materials and Methods. The purpose of intrapartum CTG is to detect changes in FCF related to foetal hypoxic in order to implement a series of obstetric interventions that could prevent the development of CP. However, foetal asphyxia in labour is the sole cause of PCI in only about 1/10 of cases. Nevertheless, a plethora of "expert" reports fallaciously assert that a faster delivery would have resulted in less or even no brain damage. The Supreme Court Ruling 26568/2019, postulated that scientific laws that can be used by judges must be based on the following requirements: generality; controllability; degree of confirmation (verifiability, falsifiability and knowledge of error rate; *i.e*. Daubert Criteria); and widespread acceptance in the scientific community.

Results. From the review of the literature, there are numerous limitations of intrapartum CTG: it lacks accuracy in predicting neonatal metabolic acidosis with a high false-positive rate, which has resulted in an exponential increase of vaginal operative deliveries and CS (burdened with their short and long term risks); poor reproducibility, high degree of inter- and intra-observer disagreement and high false positive rates; the tendency of operators to re-evaluate a tracing "ex-post" in a worsening manner.

Conclusions. Intrapartum CTG does not meet the Daubert criteria, hence its ex-post reinterpretation should be inadmissible at trial.