




# Answer to the Letter to the Editor Regarding the Article “Obstetric Paralysis: Who is to Blame? A Systematic Literature Review”

## *Resposta à carta ao editor referente ao artigo “Paralisia obstétrica: De quem é a culpa? Uma revisão sistemática da literatura”*

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We appreciate your considerations to the article. Our aim was to debate how the evolving medical knowledge, now supported by the digital revolution, has challenged some long-standing, classic definitions. We discussed data from the former Medical Insurance Association of America, from January 1985 to December 2001, referring to malpractice charges to the birth attendant physician in cases of obstetric paralysis.<sup>1</sup> Since the publication of the study by Jennett et al.,<sup>2</sup> in 1992, we believe that publications from the last 20 years or so have been changing how brachial plexus injury at birth is viewed; in our opinion, this is a better denomination than obstetric paralysis.

Regarding the title, a systematic literature review is defined as a secondary study with the aim of grouping similar studies, published or not. It critically evaluates the methodology of these studies and, whenever possible, includes a statistical analysis, in a so-called meta-analysis. Since it synthesizes data from similar primary studies of relevant scientific quality, it is considered the best level of evidence to make therapeutic decisions and establish medical management strategies.<sup>3,4</sup>

To avoid an analysis bias in a systematic review, data selection and assessment methods are defined beforehand in a well-defined, rigorous process. Initially, a clinical hypothesis is elaborated to define the focus of the study. Next, a wide literature search is carried out to identify the largest possible number of studies related to the subject. Papers are selected, and then their methodological quality is assessed based on the original study.<sup>5</sup>

Therefore, we partially agree with the criticism regarding the title and classification of our study. The study was called “systematic review of literature”, and not just “systematic review”, because it uses all the elements required to make a classic systematic review, which assesses primary studies, that is, randomized clinical trials, summarizing findings from systematic review articles alone. Thus, we used only outcomes from these systematic reviews that are important for evidence-based medicine, obtained from the primary studies previously evaluated by these reviews. Such (systematic) organization assures the same technical-scientific quality for our study, since several primary studies were indirectly evaluated.

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Although systematic reviews of randomized clinical trials are more frequent, there is an increasing number of reviews based on observational investigations, such as case-control, cross-sectional, cohort, report, and case series studies, in addition to qualitative studies and economic assessments.<sup>6</sup> For this reason, we believe in the validity of our study, whose methodology contained a detailed explanation of how the study was produced, strictly following the steps of a good systematic review: 1) development of a research hypothesis; 2) active literature search; 3) selection of articles of interest; 4) data extraction; 5) assessment of methodological quality; 6) data synthesis/meta-analysis (the only step not performed in our article); 7) evaluation of the quality of the evidence; and 8) writing and publication of the findings.<sup>7</sup>

Our review demonstrates a change in the main etiology of obstetric paralysis, removing the high burden of malpractice from the attending physician and his/her team.<sup>8,9</sup> In addition, we also argue that shoulder dystocia is not the main cause, as previously described.<sup>10-16</sup>

A paradigm shift has been indicated by the literature. For more than 100 years, since Duchenne (1872) and Erb (1874), the person responsible for childbirth was deemed guilty of the obstetric paralysis. Our intention is to review who is to blame, which is certainly not just the doctor or any professional delivering the child.

#### Conflict of Interests

The authors have no conflict of interests to declare.

#### References

- 1 McAbee GN, Ciervo C. Medical and legal issues related to brachial plexus injuries in neonates. *J Am Osteopath Assoc* 2006;106(04):209-212
- 2 Jennett RJ, Tarby TJ, Kreinick CJ. Brachial plexus palsy: an old problem revisited. *Am J Obstet Gynecol* 1992;166(6 Pt 1):1673-1676, discussion 1676-1677
- 3 Atallah AN, Castro AA. *Revisão Sistemática e Metanálises*, em: *Evidências para melhores decisões clínicas*. São Paulo: Lemos Editorial; 1998
- 4 Clarke M, Horton R. Bringing it all together: Lancet-Cochrane collaborate on systematic reviews. *Lancet* 2001;357(9270):1728
- 5 Mulrow CD. Rationale for systematic reviews. *BMJ* 1994;309(6954):597-599
- 6 Centre for Reviews and Dissemination. *Systematic reviews: CRD's guidance for undertaking reviews in health care* [Internet]. York: CRD, University of York; 2009 [cited 2020 July 05]. 281 p. Available from: [http://www.york.ac.uk/inst/crd/pdf/Systematic\\_Reviews.pdf](http://www.york.ac.uk/inst/crd/pdf/Systematic_Reviews.pdf)
- 7 Galvão T, Pereira M. Revisões sistemáticas da literatura: passos para sua elaboração. *Epidemiol Serv Saude* 2014;23(01):183-184 Disponível em [http://scielo.iec.gov.br/scielo.php?script=sci\\_arttext&pid=S1679-49742014000100018](http://scielo.iec.gov.br/scielo.php?script=sci_arttext&pid=S1679-49742014000100018)
- 8 Zaki MS, el Sabbagh MH, Aglan MS. Familial congenital brachial palsy: a report of two affected Egyptian families. *Genet Couns* 2004;15(01):27-36
- 9 Noble A. Brachial plexus injuries and shoulder dystocia: medico-legal commentary and implications. *J Obstet Gynaecol* 2005;25(02):105-107
- 10 Sandmire HF, DeMott RK. Erb's palsy causation: a historical perspective. *Birth* 2002;29(01):52-54
- 11 Krause M, Feige A. [Shoulder dystocia from a legal standpoint]. *Z Geburtshilfe Neonatol* 2005;209(06):201-209
- 12 Allen RH. On the mechanical aspects of shoulder dystocia and birth injury. *Clin Obstet Gynecol* 2007;50(03):607-623
- 13 Doumouchtsis SK, Arulkumaran S. Are all brachial plexus injuries caused by shoulder dystocia? *Obstet Gynecol Surv* 2009;64(09):615-623
- 14 O'Shea TM, Klebanoff MA, Signore C. Delivery after previous cesarean: long-term outcomes in the child. *Semin Perinatol* 2010;34(04):281-292
- 15 Doumouchtsis SK, Arulkumaran S. Is it possible to reduce obstetrical brachial plexus palsy by optimal management of shoulder dystocia? *Ann N Y Acad Sci* 2010;1205:135-143
- 16 Anderson JE. Complications of labor and delivery: shoulder dystocia. *Prim Care* 2012;39(01):135-144