Reviewer's report

Title: Open access intrapartum CTG database

Version: 1 Date: 2 September 2013

Reviewer: João Bernardes

Reviewer's report:

Manuscript “Open access intrapartum CTG database.” presents an extremely useful and thorough work for the continuing development of intrapartum CTG research.

Answers to the Editor’s query

1- The database is new. A very limited preliminary initiative of open-access to CTG files in .TXT format has been previously provided by other authors some years ago, but has been discontinued (Costa Santos C, et al. An interactive web site for research on fetal heart rate monitoring. Obstet Gynecol 2000;95:309-11.). The authors of the present work finally took the initiative of creating a robust common platform for universal comparative studies, something that was missing for a long time.

2. The manuscript adequately describes the importance and relevance of the database.

3. I was not able to fully assess if the user interface is easy to interact with. I tried to access the database provided by the authors and I was able to see part of the clinical data, but I was not able to do so in relation with the CTG data, provided in the .dat files. I would feel more comfortable for the assessment of the work produced by the authors if I was able to open the CTG files, namely with a .TXT format (as happened in the paper previously mentioned Costa Santos C, et al. An interactive web site for research on fetal heart rate monitoring. Obstet Gynecol 2000;95:309-11.)

4. The manuscript adequately describes how the database was constructed, the data sources and quality control.

5. The manuscript reasonably describes the user interface and how it fulfils its intended uses. Please see also my comment nº 3.

6. Please see my comment nº 3.

7. The database is claimed to be free to academic users and the availability of the database and any restrictions on use are clearly stated in the manuscript.

8. The discussion and conclusions of the manuscript are well balanced and adequately supported by the data.

9. The title and abstract of the manuscript accurately conveys what has been found.

10. The writing is acceptable.
Other minor comments and suggestions/recommendations.

1- I understand and accept the authors’ inclusion criteria, but, personally, I would be more “inclusive”, with the inclusion criteria, not excluding some tracings (e.g. with gestational ages < 37 weeks), as I think that all of them may be useful for researchers, provided they have the needed quality and information. In such a more “inclusive” way a wider choice opportunity would be given to the potential users, who finally may freely be able to select the available tracings according to their own criteria.

2- The database should specify the used equipment, as different equipments were used. Even subtle differences in the acquisition of CTG signals may influence the results of CTG analysis (please see Gonçalves H, et al. Comparison of real beat-to-beat signals with commercially available 4 Hz sampling on the evaluation of foetal heart rate variability. Med Biol Eng Comput 2013;51:665-76.)

3- Moreover, it would be important to be reassured that the potential users of the database may be able to get all the other information described by the authors in their manuscript, namely other specific information on signal loss, time to delivery, signal acquisition mode (US or FECG) and so on, as all the details may make a difference in CTG analysis (please see Gonçalves H, et al. Internal versus external intrapartum foetal heart rate monitoring: the effect on linear and nonlinear parameters. Physiol Meas 2006;27:307-19.)

4- The information provided in Table I about the database presented by Bernardes et al (referenced as nº 36) needs to be corrected, as the CTG signals used by them were not only acquired with US (in the antepartum period) but also with FECG (in all intrapartum cases).

**Level of interest:** An article of outstanding merit and interest in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests