Reviewer’s report

Title: Risk of Placental Abruption in Relation to Migraines and Headaches

Version: 1 Date: 16 July 2010

Reviewer: Vilho Hiilesmaa

Reviewer’s report:

Major compulsory revisions

1. In the discussion, you only deal with migraine. I think headache in general deserves discussion – it is even included in the title of the paper. Table 2 shows that more than 100 patients had “headache” and only 44-23 had “migraine”. Patients with “headache” also had statistically significant risk (OR 1.6 – 1.7) of abruption. Why patients with “headache” show the risk of abruption? Please clarify in Table 2 whether patients with migraine are included or excluded under each of the subtitles such as “Lifetime History of Headaches”, etc.

2. In the abstract/results, you write about “trend toward increased odds” for abruption among women with migraine during pregnancy. The numbers, however, are for migraine BEGINNING during pregnancy. Furthermore, these figures are not statistically significant and therefore should not occupy such an important place in the abstract. Please replace these figures (OR 2.21 95% CI 0.4-11) with something more meaningful.

Minor essential revisions

1. Please include the number of births in the hospitals during the 2-year study period. What is the the incidence of abruption in Lima? Did you catch ALL patients with abruption or just a fraction of them? If you did not include all of them, is there any selection toward more severe/less severe cases of abruption?

2. I’d like to have the numbers of Caesarean sections for both groups, if possible. They are good indicators for risk groups, and, in the controls, they reflect the general obstetric practice in the area.

3. Is there any possibility to study whether severity of migraine episodes increase the risk. Maybe there are too few cases for this.

4. In Methods/statistical analysis, please give a figure for the POWER of the study. It is customary to say that the power of a study was N% to detect a difference of x at significance level of y. Most commonly, a power of 80% is considered appropriate.
5. I think you should emphasize in the discussion that comparing groups with an obstetric disaster (abruption with loss of baby) with a happy family event (controls) is an unusually unfavourable setting for a retrospective case-control study. The recall bias may be more pronounced than in more “neutral” settings.

Discretionary revisions

1. Introduction: I think it is too long and contains too much material found in textbooks of obstetrics. This may create aversion among busy readers who want to go straight to the point. However, you may wish to leave it “as is” if there are no space restrictions.

2. Table 1: The figures for smoking and Alcohol use seem strange: Only about 2% smokers and no less than 9% of alcohol users !! At least in Europe, 10-30% smoke and 1-2% use alcohol. Please check.

Level of interest: An article of importance 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