Erratum

The influence of pregnancy on sensation of ear problems – ear problems associated with healthy pregnancy: K Tsunoda et al., JLO 113: 318-320.

The author has informed us post publication that there are a number of errors in the data originally provided. The author wishes to apologize for this mistake and in order to correct what was otherwise a publishable paper we print below the Materials and methods and Results sections with new data. EDS.

Materials and methods

To address this question, data were obtained from a group of healthy women who attended the gynaecology clinic in our hospital as pregnancy cases between February 1995 and January 1998 and who volunteered to participate in our study. A control group was drawn from healthy female co-medical staff members of our hospital who had never been pregnant. Before the study, all volunteers were screened for good ear/nose health using ear and nose physical examination, pure-tone audiometry, and impedance audiometry. The final subject population comprised 228 healthy pregnant women and 29 healthy women who had never been pregnant. The data used for comparing the two groups were taken from a questionnaire about ear problems that was presented to all subjects. In addition, for 221 cases in the pregnant group, we obtained measures of blood haemoglobin level (Hb) and measures of blood pressure when they were eight months pregnant.

Results

Results from the questionnaire showed that 25.0 per cent of women in the pregnant group reported ear problems: fullness in the ear, tinnitus, and/or autophonia. Interestingly, all those reporting ear problems during pregnancy also reported that they resolved completely on delivery of their babies. Even amongst those complaining of ear problems, we could not detect any ear hearing loss or other problems in the pure-tone audiometry and impedance audiometry. Among the non-pregnant females, the incidence of ear problems was 3.4 per cent (one case, who reported experiencing ear problems during each premenstrual period). Chi-square analysis showed a significant group difference (p<0.01) in the incidence of ear problems (Figure 1-a).

To examine possible causes of ear problems in the pregnant group, the 221 cases for whom haemoglobin levels and blood pressure had been measured were divided into subgroups according to these results. In particular, they were divided into anaemic (Hb<11.0 g/dl) and non-anaemic (Hb≥11.0 g/dl) groups, and also into hypotensive (systolic pressure <100 mmHg) and non-hypotensive (systolic pressure >100 mmHg) groups. Of the anaemic women from pregnant group, 22.2 per cent reported ear problems, while the incidence of ear problems in the non-anaemic pregnant woman was 26.2 per cent. Chi-square analysis showed that this difference is not significant (p>0.05) (Figure 1-b). However, in the hypotensive subgroup, there was a 47.1 per cent incidence of ear problems, while there was a 15.0 per cent incidence of ear problems in the non-hypotensive group. This difference is highly significant (p<0.001) (Figure 1-c).