LETTERS

Re: Mobile phone use and brain tumours in the CERENAT case—control study

We have with great interest read the article by Coureau $et al^1$ on mobile phone use and the risk for glioma and meningioma. However, we are concerned about the results in appendix 2.

Side of mobile phone use was defined as ipsilateral for cases if the phone was used on the same side of the brain as the tumour or on both sides. Contralateral use was assigned to cases with tumour on the opposite side as the phone was used. OR for both ipsilateral and contralateral use was lower than the total OR which is not what one would expect. It seems all controls were used in the analysis without assignment of 'tumour laterality'. In our studies^{2–4} and in Interphone⁵ the matched control was given the same 'tumour side' as the respective case.

To illustrate the problem we have reanalysed our results on glioma and meningioma for the time period $1997-2009^{2-4}$ using Coureau et al's method for laterality calculations. For glioma this yielded for ipsilateral use OR=1.00, 95% CI 0.75 to 1.32 and for contralateral use OR=0.37, 95% CI 0.25 to 0.53. Both these ORs were lower than the total OR (OR=1.31; 95% CI 1.09 to 1.58). Assigning the control the same side as the matched case yielded for ipsilateral use OR=1.75, 95% CI 1.41 to 2.19 and for contralateral use OR=1.08, 95% CI 0.84 to 1.39, thus grouped around the total result. Applying Coureau et al's method to meningioma had a similar effect (ie, ORs for both ipsilateral and contralateral use lower than total OR).

Obviously we would like to see analysis of the CERENAT study using the same method for definition of laterality as in our studies and in Interphone.

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