Erratum

Double immunofluorescence staining of Fos and Jun in the hypothalamus of the rat

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On page 5, the first and second complete paragraphs should have read as follows:

The serum specificity of the antibodies was supported by absorption of a mixture containing both anti-Jun and anti-Fos serum with either Fos or Jun peptide. In the first case, only a positive reaction for Jun was found, whereas all Fos-IR was abolished and, in the second case, only Fos but no Jun immunolabelling was detected. The specificity of the antisera was further evidenced by the fact that no signal was found at either FITC or rhodamine excitation after absorption of the anti Fos/Jun sera mixture with both authentic Fos and Jun.

We attempted to assess the degree of co-localization of Jun and Fos in magnocellular neurons of the SON by determining the percentage of double-labeled cell nuclei. Our results suggest that approximately 87.4% percent of the cells of the SON were immunostained for Fos and Jun at 90 min after hypertonic saline injection.

Due to the relatively low level of sensitivity of the immunostaining, we cannot state if the 4 to 8% of the cells immunolabelled for Fos or Jun, but not both antigens, is biologically significant, or if in fact Fos and Jun are always coexpressed in hypothalamo-neurohypophysial neurons after osmotic stimulation. Furthermore, it should be noted that Fos may not only be induced by osmotic stress in vasopressin neurons but also in oxytocin neurons of the SON (Giovanelli et al. 1990). The possibility of differences in Fos/Jun induction and dimerization between these neurons cannot be excluded at present. In addition, it was reported that the induction of these transcription factors is not necessarily coupled in other systems such as hematopoietic cells or P19 embryonal carcinoma cells (Auwerx et al. 1990; De Groot et al. 1990).