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CHANGES OF MINERALOCORTICOID RECEPTORS AND RECEPTORS-
GLUCOCORTICOID IN LOCUS CERULEUS NEURONS OF PTSD-LIKE RATS

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Objective: To invest the expression of nuclear receptors-mineralocorticoid receptors (MR) and receptors-glucocorticoid receptors (GR) in the locus ceruleus neurons of PTSD-like rats.

Methods: Single prolonged stress (SPS) was used to produce the PTSD model and rats were randomly divided into 24h, 4d, 7d, 14d and 28d groups after SPS and a normal control group. Immunohistochemical and Western blot techniques were used to observe and detect the changes in the expression of MR and GR in the locus ceruleus neurons, and image analysis and statistical analysis were performed.

Results: The expression of MR was sharply decreased at 24h, but recovered at 4d, 7d, 14d and 28d. GR was distributed in the nucleus of coeruleus neurons, GR expression was showed after 24h, 4d, 7d treatment and gradually increased, restorative downregulation was seen after 14d and 28d, but still high($P < 0.05$).

Conclusion: These results suggest that the changes in the expression of MR and GR in the locus ceruleus neurons of PTSD-like rats may play an important role in the long-term persistent neu-ropsychological sequelae of PTSD. *National Natural Science Foundation of China.