Behavioral changes in the course of chronic renal insufficiency in rats.

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In addition to the changes in various biochemical parameters chronic renal insufficiency (CRI) leads to progressive behavioral disturbances both in humans and rats. To further characterize these changes, the present study aimed to investigate locomotor, exploratory and emotional activity of rats with experimental CRI. Our experiments with the open field test have shown a marked decrease in locomotor, exploratory and emotional activity of the animals suffering from CRI. These changes were parallel with an increased water intake, reduced food intake and body weight. Thus, behavioral disturbances accompanying CRI in rats are similar to those occurring in human patients. The experimental model of CRI described by us seems to be a good tool for pharmacological studies.

Key words: chronic renal insufficiency, behavior, open field test, food intake, water intake, rat