A new gate toward biology of cell expose to narcotic drug using single celled animals

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Cell expose to drugs has been necessarily evaluated by in vitro lab sets taken high cost, but, use of single- celled animals is uncommon. In this study *Paramecium caudatum* was presented the narcotic drug naloxone. The animal up to 600 µm was collected from natural sources and after specific determination abundantly cultivated in specific medium. A volume **1ml** of the medium containing the organisms was added into the Sedgwick- Rafter cell counter and **1µl** of drug was infused into the counter. The field of drug infusion was viewed under magnification 4X of the light video- microscope to test of reaction of animal to naloxone (**0.05- 0.4 µg/µl**). The functioning was measured behaviorally as avoidance to drug during the time interval (**0- 180 sec**). This measurement as the cell count/view was chronically done during the time points. The control group was given solely distilled water (**1µl)** and passed the whole procedure. The data were analyzed by using the analysis of varianse (ANOVA). The drug naloxone induced the avoiding behavior significantly. After pre-infusion of L-arginine (1-8 µg/µl) to naloxone the animals avoided strongly showing a molecule signaling pathway. The molecule nitric oxide (NO) may participate in cellular acting to the naloxone exposure.

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