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# Tail suspension test to assess depression/anxiety behavior in parkinsonian mice

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natalia.lopezgonzalezdelrey[1]

[1]Northwestern University, Feinberg School of Medicine, Neurology Department

Natalia Lopez-GonzalezdelRey
Northwestern University





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**We use this protocol and it's working**

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## Abstract

The Tail Suspension Test is a mouse behavioral paradigm measuring behavioral despair or “depression-like” behavior and learned helplessness.

## Guidelines

All mice should be carefully monitored for any adverse effects during the test and are quickly removed if they display signs of unusual distress (i.e. constant vocalization or damage to their tails).

## Materials

Adhesive tape

## Tail Suspension Test

1 The mouse must be suspended using a piece of adhesive tape. The tape should be strong enough to prevent the mouse from falling and should not damage the skin of the tail. Tape length may vary with specific systems) and should only be applied to the very end of the tail (with 2-3 millimeters of tail remaining outside of the tape).

2 Total duration: 3 days.
Total test duration per day: 6 min

3d

## Protocol

6m

3 The test lasts for 6 min and the immobility time is usually measured during the final 4 minutes as nearly all mice attempt to escape in the first 2 minutes, but immobility scores can be reported for the entire time of suspension.

6m

4 Video record for 6 min.

5 If a mouse climbs up his/her tail, they will be gently guided back down with a probe by the investigator and the trial is continued. Mice that climb up their tails for approximately more than 20% of the total trial time should be removed from the analysis.

6 All mice should be carefully monitored for any adverse effects during the test and are quickly removed if they display signs of unusual distress (i.e. constant vocalization or damage to their tails).

7 The chambers are cleaned with approved disinfectant at the start and end of the day and before and after each animal is tested.

## Analysis

8 The total amount of immobility time (defined as the time during which the animal is hanging passively and motionless) is measured for each animal, and considered as an index of “depression-like” behavior.

## Protocol references

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