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Open Field test to assess spontaneous locomotion behavior in parkinsonian mice

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ABSTRACT

The Open Field task is a simple sensorimotor test used to determine general activity levels, gross locomotor activity, and exploration habits in rodent models of CNS disorders.

MATERIALS

- Square, white Plexiglas box
- Overhead camera.

Open Field Test

1d

Total duration: 1 day

Protocol

1h 5m

2 Place the animal cage in the testing room to allow the animals to acclimate. 01:00:00



3 Place the animal in the testing boxes. The animals are transferred to the center of a 40cm by 40cm box in the quiet dark room.

5m

4 Video record and record freely moving behavior in the testing cage. (5) 00:05:00

5m

5 Return the mouse to its cage.

Analysis

6 The footage is then analyzed by an automated tracking system for the following parameters: distance moved, velocity, and time spent in pre-defined zones.