Eye wipe test: validation of C-fiber desensitization

Objectives:

This behavioral test evaluates the efficacy of C-fiber desensitization following a capsaicin pre-treatment 4 days prior the eye wipe test.

Summarized methodology:

After an acclimation period, the animal is placed on a 50 x 50-cm table and a single drop of a 100 µg/ml capsaicin solution is instilled into one eye. Then, the animal is observed during a 2-min period, and the eye is extensively rinsed with physiological saline. During the 2-min observation period, the number of defensive wiping movements is counted. C-fibers are considered as desensitized when the defensive wiping movements are almost absent (figure 1).

Endpoints:

- number of defensive wiping movements as an index of C-fiber sensitivity

NB: Pelvipharm will gladly study the feasibility of evaluating C-fiber sensitivity in other experimental models to meet its client’s needs

Related Pelvipharm bibliography:
Non disclosable for confidentiality reasons

Links to applicable therapeutic areas / targeted disorders:

- Lower urinary tract
  - SCI (Spinal Cord Injury)
  - NDO (Neurogenic Detrusor Overactivity)
  - OAB (Overactive Bladder)