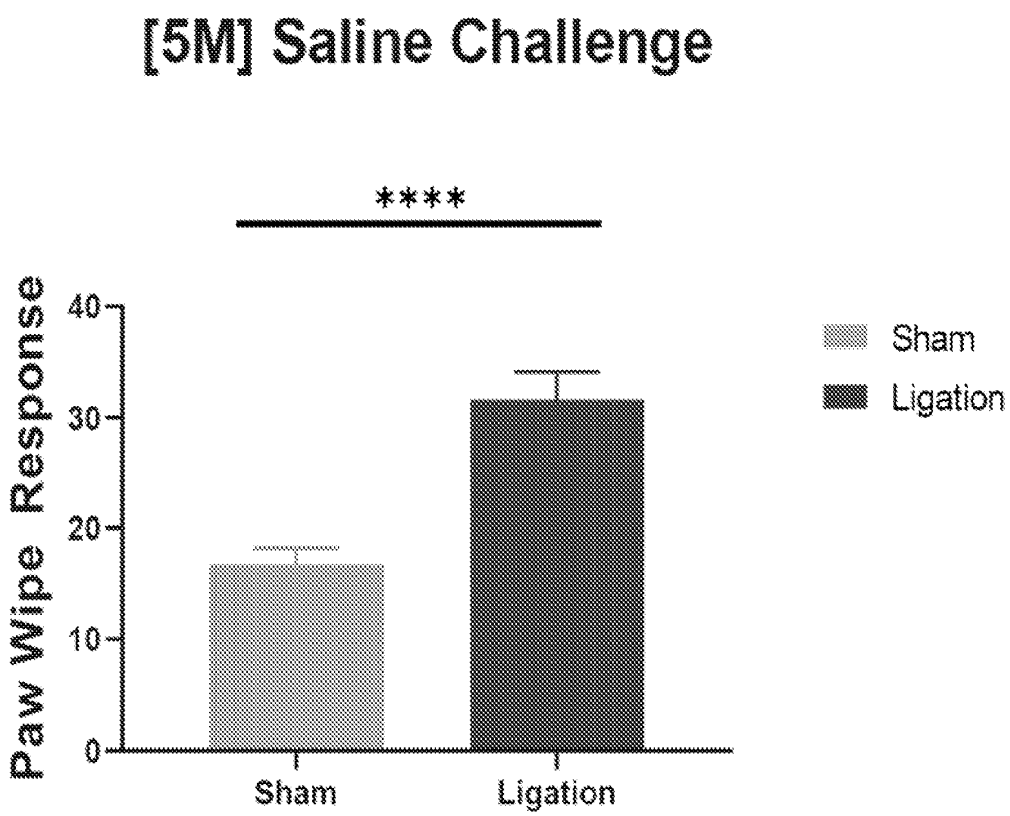


Figure 1: Response to [5M] Saline challenge at 3dps. There is an enhanced response in those animals that underwent ciliary nerve ligation compared to sham procedures.

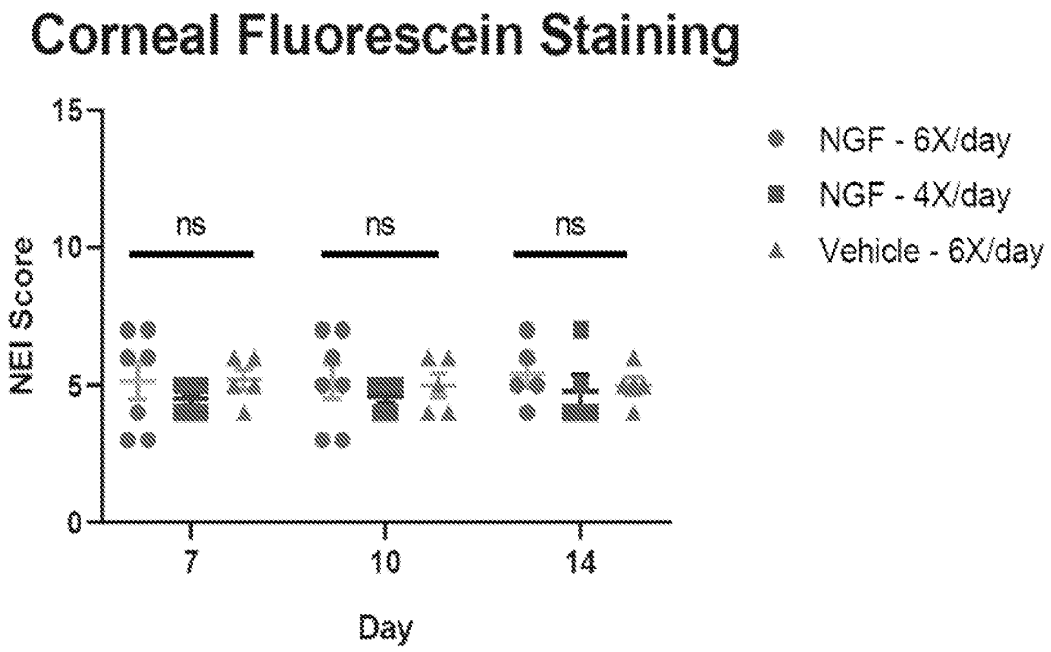


Figure 2: Corneal fluorescein staining according to the NEI scale (0-15); with higher scores indicating a worsening defect in the corneal epithelium. As would be expected, there are no significant differences in CFS between groups at any time point ($p > 0.05$). This importantly indicates that the ligation model is inducing a pure NCP phenotype, and not a dry eye disease phenotype.

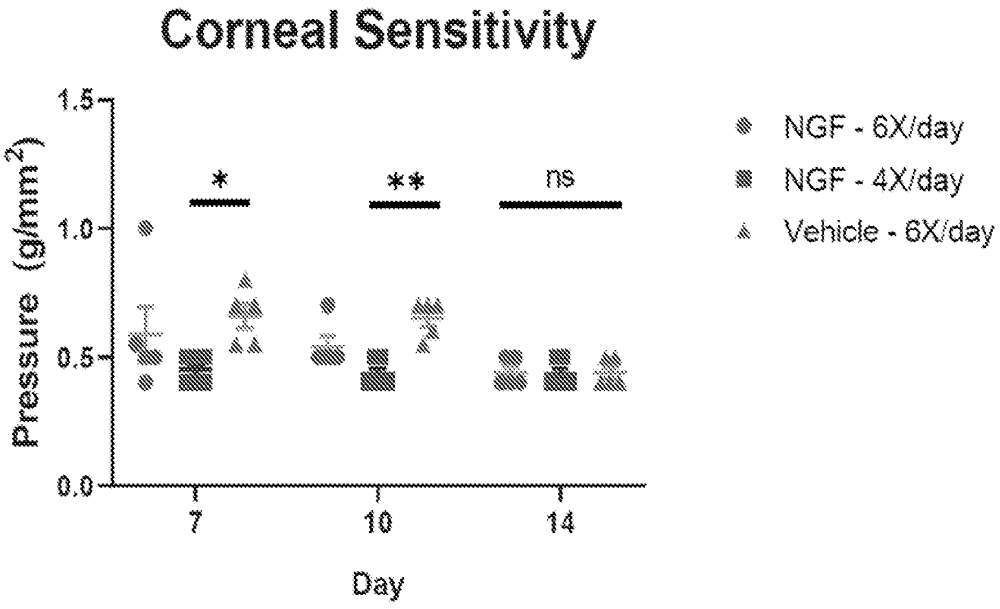


Figure 3: Cochet-Bonnet esthesiometry is an objective method of determining corneal nerve sensitivity by use of a monofilament at different lengths, thereby applying different pressures to the cornea. If corneal sensation is intact, the outcome is a blink reflex by the animal. There was a slight difference in corneal nerve sensation between the NGF 4X/day and Vehicle Groups at days 7 and 10 ($p < 0.05$ and $p < 0.01$, respectively), but not at day 14, which is the most crucial time point ($p > 0.05$). Importantly however, the ligation itself leaves corneal nerves intact and responsive to mechanical stimuli. These results were analyzed by ANOVA with repeated measures.

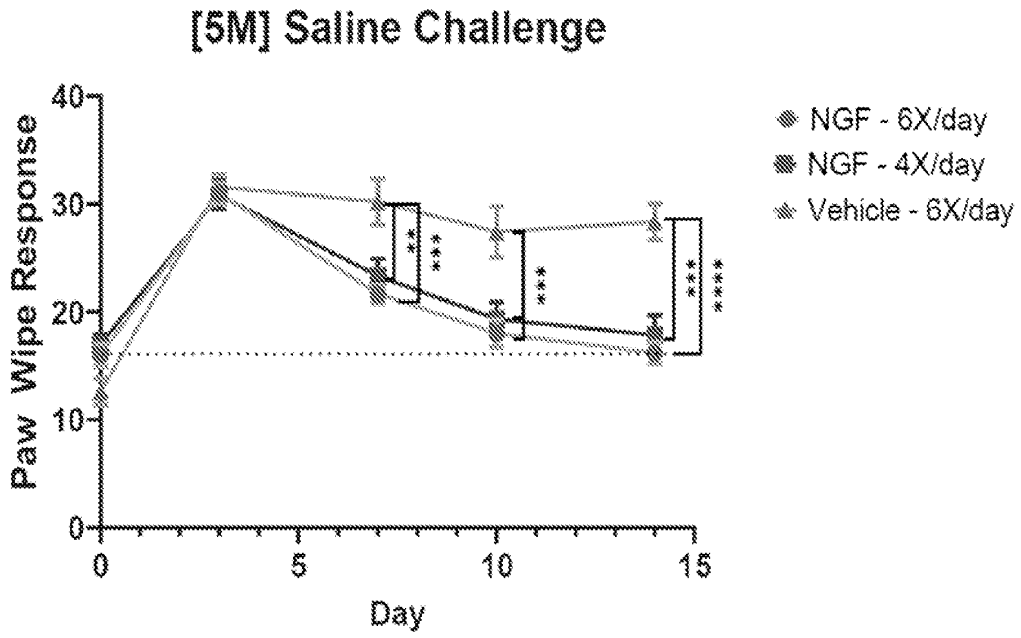


Figure 4: Response to [5M] saline challenge throughout the course of the study. As indicated there is an observable decrease in the response to [5M] saline in the NGF treated group for both doses at 7, 10, and 14 dps ($p < 0.05$). By 14 dps, the NGF 4X/day group is approaching a return to the baseline response observed prior to the induction of NCP and the NGF 6X/day group has a complete return to baseline. Statistical significance: ** $p<0.01$, *** $p<0.001$, **** $p<0.0001$). Results were analyzed by ANOVA with repeated measures.

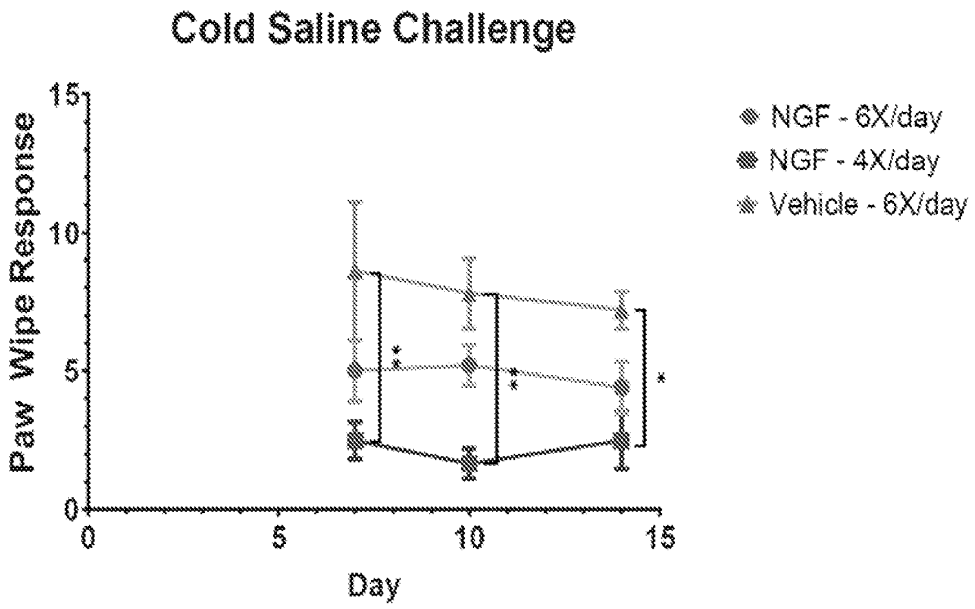


Figure 5: Responses to the cold saline challenge were variable; although interestingly, there was a significant difference between the NGF 4X/day and vehicle groups at days 7, 10 and 14. At this point it is unclear if this is a specific effect of the NGF 4X/day dose, which would be an interesting implication for differential dependence of nociceptors on NGF, or a result of surgeon improvement over time. Results were analyzed by ANOVA with repeated measures. Statistical significance: * $p<0.05$, ** $p<0.01$.

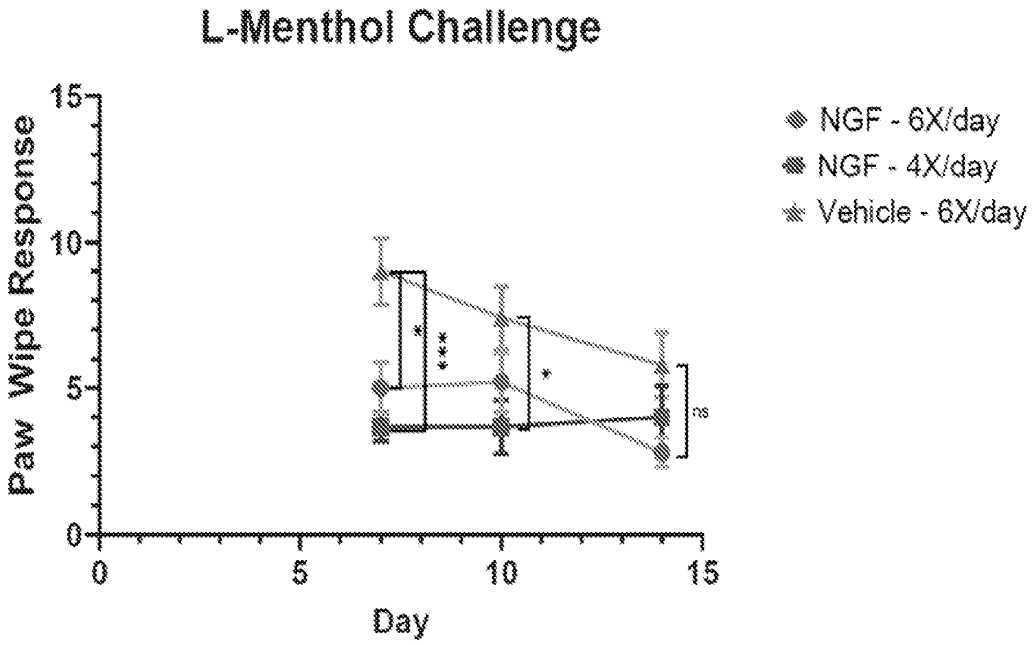


Figure 6: Responses to the L-menthol challenge were also variable; there was a significant difference between the groups at early time points but this was lost by day 14. This may indicate that there for this particular assessment there is a partial benefit of NGF early on, but that time ultimately overtakes this at later time points. Importantly, however, time itself was not a significant contributor to this finding. Results were analyzed by ANOVA with repeated measures. Statistical significance: * $p<0.05$, *** $p<0.001$.