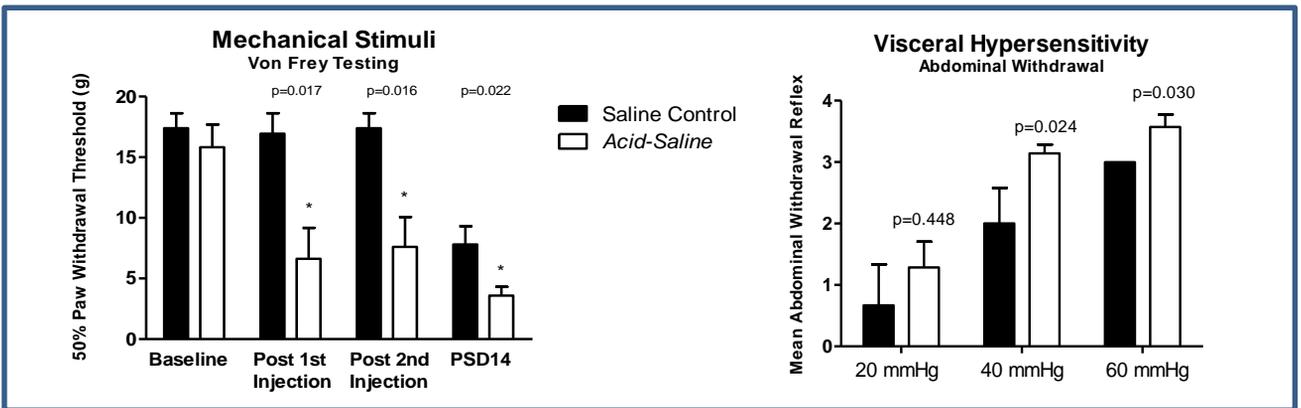


Model Overview

CNS|CRO's fibromyalgia model provides a pre-clinical evaluation of therapeutics aimed at reducing centrally mediated pain. Using a series of low pH saline injections, this rapidly-induced model allows testing of pharmacological interventions or medical devices for the amelioration of allodynia, hyperalgesia, and other associated fibromyalgia-like symptomologies. Once induced, animals display a hypersensitivity to mechanical and visceral stimulation. Histologic assessment may also be utilized for the investigation of underlying mechanistic parameters.

Model induction and testing

- Produced in adult Sprague-Dawley rats via two separate injections of a moderately acidic (4.0 pH) saline solution into the lateral gastrocnemius muscle (Sluka et al., 2001).
- Once induced, animals display allodynia and hyperalgesia, as well as visceral hypersensitivity.
- Symptoms last a minimum of 14 days post-induction, allowing for evaluation over time.
- Three control groups are available: Normal (pH 7.0 saline); Disease (pH 4.0 saline); Positive (buprenorphine administration prior to testing).

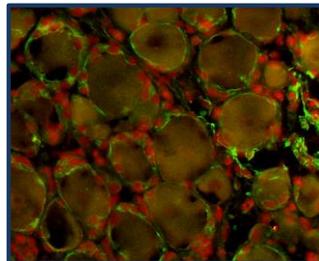


Evaluation of mechanical allodynia is performed via Von Frey monofilament testing, with acid-saline treated animals displaying a lower withdrawal threshold as compared to normal saline controls.

Animals in the acid-saline (disease) group exhibit increased visceral hypersensitivity at 2 weeks post-induction.

Histologic Evaluations Available

Micrograph of TNF α (red) and GFAP (green) in dorsal root ganglia.



This model exhibits increased sensitivity to both mechanical and visceral stimulation, making it an ideal test system for pre-clinical evaluation of therapeutic interventions.