

nternational Conference and Exhibition on tional & Alter rnat ve Medici

August 25-26, 2014 DoubleTree by Hilton Beijing, China

"Frequency-response" effect of manual acupuncture on firing rates of the dorsal horn neurons (dhns) in rats with visceral nociceptive stimulation

Shou hai Hona

Tianjin University of Traditional Chinese Medicine, China

, ifferent manual acupuncture (MA) manipulations have different effects. However, its mechanisms have not been clearly clarified. We hypothesis that different MA manipulations can elicit different electrical signals of corresponding nervous system, further generate different clinic effects. In previous research, we have confirmed that different MA manipulations appeared to change the electrical signals of wide dynamic range (WDR) neurons in spinal dorsal horn (SDH) in normal rats. In order to further explore the effects of different MA manipulations on nervous system in pathological states, we analyzed the firing rate of excitatory gastric-related WDR neurons in SDH following graded acute gastric distension (GD) in rats and compared their responses to lifting-thrusting MA manipulation with four different frequencies (0.5, 1, 2, and 3 Hz)at ST36. Results indicated that MA manipulations with different frequencies could cause specific changes of the firing rate of excitatory gastric-related WDR neurons of SDH in severe acute GD rats. And the change modes in these neurons were different. These results could be one of the physiological foundations of different clinical effects by different MA manipulations.

hongshouhai@163.com