

The arrhythmic- inhibiting property of the fish oil from Bangus (*Chanos chanos* Forsskal) in isoflurane- adrenaline- induced ventricular tachycardia in Sprague Dawley rats

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The American Heart Association estimates that ventricular arrhythmias are responsible for more than 400,000 deaths in the United States alone and more than 100 million people worldwide each year. This study dealt with the determination of the arrhythmic- inhibiting property of the fish oil from Bangus (*Chanos chanos* Forsskal) in Isoflurane- Adrenaline- induced ventricular tachycardia in Sprague Dawley rats. The fish oil was obtained by maceration with petroleum ether and further extraction using reflux distillation. This was identified through physical, chemical, instrumental tests. After 14- day olive oil supplementation, the fish oil extract was given as a supplement to 18 Sprague-Dawley rats for 28 days at doses of 0.16% w/w, 1.25% w/w and 5.0% w/w. Amiodarone HCl was used as a positive control, which was given intracardiacally at a dose of 47.5 ± 5.30 $\mu\text{g}/\text{kg}$. After pretreatment, rats of selected groups were anesthetized with 2.0% isoflurane in 100% oxygen. Anesthesia was maintained for 1-2 minutes to achieve steady- state, 11.1 ± 0.63 $\mu\text{g}/\text{kg}$ Adrenaline was then administered intracardiacally. Twenty hours after, all rats were sacrificed via euthanasia using inhalational anesthetics. Arrhythmic- inhibiting property was investigated through the echocardiogram reading of the rats' hearts from all groups. In comparison with the positive control, results showed that at 1.25% w/w and 5.0% w/w the fish oil extract could exhibit arrhythmic- inhibiting property comparable to that of amiodarone HCl. The obtained results provided evidence that the fish oil extract possesses arrhythmic-inhibiting property against isoflurane-adrenaline-induced ventricular tachycardia in Sprague Dawley rats.

Biography

Thea Ruth Frances N. Gonzales has earned a degree in Pharmacy at the age of 22 from Centro Escolar University Manila last October 2012. She took the Philippines Board of Pharmacy Licensure Examination the following year and passed it.

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