

Abstract Type : Poster

Abstract Submission No. : PO-1784

Potential of L-Arginine in Salmonid Fishes as Renoprotective agent in Renovascular Hypertension Disease: Systematic Review

Bastomy Eka Rezkita

Department of Pathology Anatomy, University of Sebelas Maret Surakarta, Indonesia

Objectives: The aim of these study is to determine Potential of L-Arginine in Salmonid Fishes as Renoprotective agent in Renovascular Hypertension Disease

Methods: The study is a literature review of scientific article through several online database including PubMed and ClinicalKey using keywords related to the clinical query. Our review was arranged by 67 Journals selected by this method.

Results: Several study about the L-arginine function in renovascular hypertension disease have been collected. Rat model of chronic kidney disease with hypertension has renal NO decrease in parallel with decline of renal function but supplementation of L-arginine showed ameliorate the progression of kidney disease in this model. Another study have also shown similar effects in similar model of remnant kidney disease. A meta-analysis of RCTs in Europe showed that L-arginine can provide protection against ROS in cell culture thorough anti-inflammation and anti-oxidant role.

Conclusions: L-Arginine in Salmonids has renoprotective function through several mechanisms that can prevent worsening of renovascular hypertension disease