

MANGOSTEEN AND LIVER FIBROSIS

Liver fibrosis is an excessive accumulation of scar tissue resulting from inflammation and cell death. A marker of injured hepatocytes is transforming growth factor-beta 1 (TGF- β 1), while alpha-smooth muscle actin (α -SMA) and tissue inhibitor of metalloproteinase 1 (TIMP-1) are markers of activated hepatic stellate cells. Alpha-mangostin, a major xanthone derivative from the mangosteen pericarp, has been shown to have antioxidant and anti-inflammatory activities. The objective of this study was to determine whether alpha-mangostin has a protective effect on thioacetamide (TAA)-induced liver fibrosis in rats. The rats were treated by intraperitoneal injection of compounds for eight weeks. Two hundred mg/kg BW of TAA was administered three times weekly. Alpha-mangostin was administered at 5 mg/kg BW and silymarin at 100 mg/kg BW, both twice weekly. TAA induced histologically recognizable liver damage and fibrosis, as anticipated. Furthermore, it increased immunohistochemically detectable TGF- β 1, α -SMA and TIMP-1. Co-administration of alpha-mangostin or silymarin with TAA prevented or ameliorated the effects of TAA administration alone. The anti-fibrotic effect of alpha-mangostin was stronger than that of silymarin.

ABOUT THE SPEAKER

Associate Professor Wisuit Pradidarcheep obtained his PhD degree in Anatomy from Mahidol University in 1998 and pursued his postdoctoral training at the Liver Center, Academic Medical Center, University of Amsterdam, Netherlands from 2000 to 2003. He is now an Associate Professor of Anatomy and Head of the Department of Anatomy in Faculty of Medicine, Srinakharinwirot University, Bangkok, Thailand. Associate Professor Pradidarcheep is currently the Vice President of the Anatomy Association of Thailand. His present research interest focuses on the medicinal effects of Thai herbs on liver fibrosis, cirrhosis and hepatocellular carcinoma.

Monday**18 February 2019****10.30am - 11.30 am****Seminar Room, MD10****Level 2, Anatomy Museum****A/P Wisuit Pradidarcheep****Head of Department, Anatomy
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