Pharmacological Evaluation of Novel Indole-2-carboxamides As Potent Lipid-Lowering Agents in Triton-WR-1339-Induced Hyperlipidemic Rats

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Z. Naturforsch. \textbf{64c}, 619–625 (2009); received May 27/July 7, 2009

The lipid-lowering effects of two novel antihyperlipidemic agents, BMI2C \([N-(4-benzoylphenyl)-5-methoxy-1H-indole-2-carboxamide]\) and DDMI2C \([N-(9,10-dihydro-9,10-dioxoanthracen-2-yl)-5-methoxy-1H-indole-2-carboxamide]\), were studied using hyperlipidemic rats as an experimental model; hyperlipidemia was developed by intraperitoneal injection of Triton WR-1339 (200 mg/kg body weight). At a dose of 15 mg/kg body weight, BMI2C and DDMI2C significantly reduced elevated plasma triglyceride levels after 7 and 24 h. Furthermore, BMI2C and DDMI2C significantly reduced elevated plasma total cholesterol levels after 24 h. Interestingly, high-density lipoprotein-cholesterol levels were significantly increased in all treated groups. These findings indicate that the two studied novel compounds have a promising potential in the treatment of hyperlipidemia and atherosclerosis.

\textbf{Key words:} BMI2C \([N-(4-Benzyolphenyl)-5-methoxy-1H-indole-2-carboxamide]\), DDMI2C \([N-(9,10-Dihydro-9,10-dioxoanthracen-2-yl)-5-methoxy-1H-indole-2-carboxamide]\), Antihyperlipidemic Activity