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**Structural and serological characterization of 5,7-diamino-3,5,7,9-tetradexy-non-2-ulosonic acid isolated from lipopolysaccharides of *Vibrio parahaemolyticus* O2 and O-untypeable strain KX-V212**

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Lipopolysaccharides (LPS) of *Vibrio parahaemolyticus* O2 and O-untypeable (OUT) strain (KX-V212) isolated from a individual patient were shown to contain 5,7-diamino-3,5,7,9-tetradexy-non-2-ulosonic acid (NonIA) which was readily released from LPS by mild acid hydrolysis. GC-MS and NMR analysis identified the NonIA from LPS of O2 LPS to be 5,7-diacetamidido-3,5,7,9-tetradexy-D-glycero-D-galacto-non-2-ulosonic acid (5NAc7NAcNonIA) and that from LPS of KX-V212 to be 5-acetamido-7-(N-acetyl-D-alanyl)amino-3,5,7,9-tetradexy-D-glycero-D-galacto-non-2-ulosonic acid (5NAc7NAlaNAcNonIA). ELISA inhibition analysis using 5NAc7NAcNonIA, 5NAc7NAlaNAcNonIA and N-deacylated and N-acetylated 5NAc7NAlaNAcNonIA suggested that 5NAc7NAcNonIA might be related to the serological specificity of O2 LPS as one of main epitope(s) involved in O2 LPS.