



김 종 국

동아대학교 의과대학 신경과학교실

## Role of Campylobacter Jenuni in Korean Guillain-Barré Syndrome

Jong Juk Kim, MD, PhD

Department of Neurology, Dong-A University College of Medicine

Guillain-Barré syndrome (GBS) is the post-infectious auto-immune neuropathy with diverse clinical manifestations as acute motor axonal neuropathy (AMAN), Miller Fisher syndrome (MFS) or acute inflammatory demyelinating polyradiculoneuropathy. Campylobacter jejuni is known to be the most frequent preceding infection especially in AMAN or MFS subtypes. Molecular mimicry of lipo-oligosaccharide from cell membrane of C. jejuni with human ganglioside is the possible pathomechanism. Data of from the Korean study with a cohort of 119 GBS patients were reviewed. Retrospective analysis was performed according to preceding infections in relation to positive C. jejuni serology and anti-ganglioside antibodies. C. jejuni O:19 antibody is detected in high proportion from GBS patients with preceding diarrhea. It was associated with anti-ganglioside antibodies especially to gangliosides GM1 or GD1a. ELISA for C. jejuni is useful tool for understanding the pathomechanisms of GBS.

**Key Words:** Guillain-Barre syndrome, Campylobacter, Ganglioside, Molecular mimicry

Jong Kuk Kim, MD, PhD

Department of Neurology, Dong-A University College of Medicine,  
3-1 Dongdaesin-dong, Seo-gu, Busan 602-715, Korea  
Tel: +82-51-240-5260 Fax: +82-51-244-8338  
E-mail: advania9@chol.com