

## Inflammatory Large Bowel Disease in BALB/cA-Hfh11nu Naturally Infected with *Helicobacter hepaticus*

Bang Hyun Kim<sup>1</sup>, Young Suk Won<sup>2</sup>, Chul Ho Lee<sup>2</sup>, Byung Hwa Hyun<sup>2</sup>, Dae-Yong Kim<sup>1</sup>  
and Yang Kyu Choi<sup>2</sup>

<sup>1</sup>*Department of Veterinary Pathology, College of Veterinary Medicine and School of Agricultural Biotechnology, Seoul National University, Suwon, Korea and* <sup>2</sup>*Genetic Resources Center, Research Institute of Bioscience and Biotechnology, Daejeon, Korea*

The slowly growing microaerophilic *Helicobacter* strains were isolated from the fecal pellets of 2 BALB/cA-*Hfh11<sup>nu</sup>* mice with rectal prolapse. The rectums of these mice protruded approximately 2 to 3 mm from the anus and varied in color from pale pink to deep red. Histopathologically, chronic proliferative colitis and proctitis were observed. The epithelium were hyperplastic and lymphocytes infiltrated markedly in mucosa and submucosa. Our isolated bacterial strains were characterized by morphological, physiological, molecular methods and special staining, and they were found to be *Helicobacter hepaticus*. We could not find any other pathogens from both mice. These results demonstrate that this organism may be a pathogen of the inflammatory large bowel disease in immunodeficient mice.