Presidential Lecture

Chairperson

Kwang-Won Kim
Gachon University, Korea

Speaker

Cheol-Young Park
Sungkyunkwan University, Korea

Cheol-Young Park

Sungkyunkwan University, Korea

• Education

Period	Affiliation	Position
– **2002**	Kyunghee University Graduate School, Seoul, Korea	Ph.D.
– **1999**	Kyunghee University Graduate School, Seoul, Korea	M.S
– **1995**	Kyunghee University College of Medicine, Seoul, Korea	M.D.

• Affiliations / Experience

Period	Affiliation	Position
– **2006-Present**	Kangbuk Samsung Hospital, Sungkyunkwan University School of Medicine, Seoul, Korea	Professor
– **2003-2006**	Hallym Sacred Heart Hospital, Hallym University College of Medicine, Anyang, Korea	Assistant Professor
– **2000-2003**	Kyunghee University Medical Center, Seoul, Korea	Instructor

• Committee Memberships

- Korean Society for the Study of Obesity / Chairperson of the Board of Directors
- the Korean Lipid and Atherosclerosis Society / Non-Standing Director

• Publications

- Association of non-alcoholic fatty liver disease with cardiovascular disease and all cause death in patients with type 2 diabetes mellitus: nationwide population based study. Kim KS, Hong S, Han K, Park CY. *BMJ*. 2024;384:e076388
- Fatty Liver & Diabetes Statistics in Korea: Nationwide Data 2009 to 2017. Han E, Han KD, Lee YH, Kim KS, Hong S, Park JH, Park CY. *Diabetes Metab J*. 2023;47(3):347-355
- Metabolic Dysfunction-Associated Fatty Liver Disease and Mortality: A Population-Based Cohort Study. Kim KS, Hong S, Ahn HY, Park CY. *Diabetes Metab J*. 2023;47(2):220-231
- Machine learning-derived gut microbiome signature predicts fatty liver disease in the presence of insulin resistance. Kang BE, Park A, Yang H, Jo Y, Oh TG, Jeong SM, Ji Y, Kim HL, Kim HN, Auwerx J, Nam S, Park CY, Ryu D.*Sci Rep*. 2022;12(1):21842
- Association Between Nonalcoholic Fatty Liver Disease and Future Deterioration of Metabolic Health: A Cohort Study. Hwang YC, Ahn HY, Park CY. *Obesity (Silver Spring)*. 2019 ;27(8):1360-1366

Presidential Lecture

Obesity and Fatty Liver: Common but Ignored

Cheol-Young Park (Sungkyunkwan University, Korea)

The global prevalence of fatty liver disease has significantly increased from 25.3% (1990–2006) to 38.2% (2016–2019), reflecting a nearly 50% rise over the past three decades. According to the 2021 data from the Korean Diabetes Association, 36.1% of individuals aged 40 and above, 53.1% of type 2 diabetes patients, and 48% of males have fatty liver disease, indicating that nearly one in two men are affected. The prevalence of moderate fatty liver disease, defined by a Fatty Liver Index (FLI) of 60, has risen by 6.7% over ten years. Notably, prevalence is highest among individuals in their 40s, with 81.5% of type 2 diabetes patients and around 60% having moderate fatty liver disease. Moderate fatty liver disease is associated with a 3.8-fold increased risk of type 2 diabetes, and significantly elevated risks of myocardial infarction (16.3%), stroke (15.9%), heart failure (22.4%), and more than twice the risk of liver cancer. Ultimately, the presence of fatty liver disease indicates a close association with various chronic diseases, cardiovascular and cerebrovascular diseases, as well as an increased risk of cancer.

Obesity, defined as abnormal or excessive fat accumulation posing a health risk, often coexists with fatty liver disease, characterized by excess liver fat that can impair liver function. Obesity reflects fat overload throughout the body, while fatty liver disease represents the liver's specific fat overload, making their definitions almost synonymous. As a result, the prevalence of fatty liver is high among obese patients and vice versa.

The first-line treatment for fatty liver disease is weight loss through calorie reduction, exercise, and healthy eating. Although pharmacological treatments are limited, they are recommended to reduce the risks associated with fatty liver disease. Despite significant efforts in drug development, only an oral thyroid hormone receptor-β (THR-β) agonist has recently been approved, although its high-cost limits accessibility. Ultimately, treating fatty liver disease is about managing ectopic fat, making obesity treatment the primary focus. Clinically, fatty liver disease remains common yet often overlooked.