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기타소속:

강연제목: Respiratory pattern during sleep promotes cerebrospinal fluid flow in human

Abstract:

Sleep's crucial role in maintaining brain health is increasingly recognized. Adequate sleep not only facilitates cognitive function but also engages in critical physiological processes, including the clearance of metabolic waste from the brain via cerebrospinal fluid (CSF) dynamics. Studies have indicated that during sleep, especially in the Non-Rapid Eye Movement (NREM) phase, there is an increased CSF flow, which plays a vital role in the removal of neurotoxic substances, such as amyloid-beta proteins. The main goal of this study is to understand the physiological components affecting CSF flow during sleep.

Brief Biosketch

Dr. Jeyeon Lee received his Ph.D. degree in Biomedical Engineering at Hanyang University in 2017. Following doctoral study, he worked as a postdoctoral fellow and assistant professor at Mayo Clinic from 2017 to 2023. He is now an assistant professor in the Department of Biomedical Engineering, College of Medicine at Hanyang University. His current research involves developing a digital healthcare system as a clinical decision support tool, particularly using neuroimaging and electrophysiology data.