CS02-01

IMAGING THE SEROTONERGIC SYSTEM

R. Lanzenberger, Functional and Multimodal Neuroimaging
Department of Psychiatry, Medical University of Vienna, Wien, Austria

Biological markers are an important objective in psychiatric research. Molecular and functional neuroimaging techniques are promising tools to provide these biomarkers that may be used for early detection, indication of presence and severity of psychiatric disorders, prediction of treatment response and clinical prognosis. In this lecture, recent results from molecular imaging with positron emission tomography (PET) will be presented, including cerebral quantification of several major players in serotonergic neurotransmission, i.e. the serotonin transporter, the serotonin 1A, 2A, and 1B receptor subtypes, and the degrading enzyme MAOA. Differences between psychiatric disorders will be discussed. Furthermore, pharmacological effects on these targets and brain activation will be shown using PET and functional magnetic resonance imaging (fMRI).

https://doi.org/10.1016/S0924-9338(11)73475-7 Published online by Cambridge University Press