

Title : 3D Structural Connectivity In Healthy Adults: Detecting Structural Connections And Their Underlying Substrates For Olfactory Saccadic Pathway

Abstract

This confirmatory study aimed to unravel the neural structural connectivity of Olfactory-Saccadic pathways extending between Piriform and Entorhinal Cortices to Frontal Eye Field (FEF), and to correlate its functional importance with possible clinical implications, using Diffusion Imaging fiber Tractography. The confirmatory observational analysis used thirty-two healthy adults, ultra-high b-value, diffusion imaging datasets from an Open access platform in Human Connectome Project (HCP). In all the datasets from both the sexes, fibers were traced and the neural structural connectivity was confirmed. The hemispheric differences between male and female subjects were analysed using independent sample t-test. Thus, the study confirmed the structural existences of Olfactory-saccadic pathways that may be involved in influencing the movements of the neck and eyeball gaze (saccadic eye movement), towards the spatial orientation of olfactory stimulus.

For more details :

https://www.researchgate.net/publication/329338940_3D_Structural_Connectivity_In_Healthy_Adults_Detecting_Structural_Connections_And_Their_Underlying_Substrates_For_Olfactory_Saccadic_Pathway