

Olfactory-Visual Saccadic Pathwaysmell in a Whiff – See at a Glance

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Abstract

Introduction: *The olfactory-visual saccadic pathway involves the piriform cortex which has an extensive connection with the other parts of the olfactory network and receives the Inputs directly or indirectly from the olfactory bulb without the information being relayed through the thalamus. Activation of the piriform cortex is generally seen in all olfactory tasks, and it appears to be the region of representation of the “olfactory object”. It sends the information to other regions of the brain with the help of the dorsal and ventral (entorhinal cortex)-(interior to the rhinal sulcus) located at the medial temporal lobe , which wide spreadly functions as a network of memory and navigation ,there by which navigates the information to the frontal lobe - to be more specific to the(frontal eye field region of the brain)allowing to provide us with rich information about our environment which influences our visual attention , simultaneous movement of both eyes between two or more phases of fixation in the same direction. The aim of this study is to facilitate structural connectivity between the areas of olfactory -visual saccadic pathway*

Result: *To demonstrate that a structural connectivity exists between the areas of the brain associated with olfactory -visual saccadic pathway: The possible areas involved are area number (27) piriform cortex, area number (28) ventral entorhinal cortex, area number (34) dorsal entorhinal cortex and area number (8) frontal eye field.*

Conclusion: *In conclusion: If a structural connectivity exists between these structures, the information or perception of the smell reaching to area number (8) confirms that olfaction plays an important role in the control of visual attention and eye movements.*

Keywords: *Piriform cortex; piriform cortex; visual attention.*