# Medial parietal cortex

The medial parietal cortex is a region of the brain located in the posterior part of the parietal lobe, near the midline of the cerebral cortex. It includes several important structures such as the precuneus and the posterior cingulate cortex. This area is known to be involved in a variety of cognitive functions, including:

Spatial processing: The medial parietal cortex plays a role in spatial navigation, mental imagery, and spatial memory. It helps us understand our position in space and navigate through environments.

Episodic memory: It is implicated in the retrieval and encoding of episodic memories, which are memories of specific events or experiences tied to a particular time and place.

Self-referential processing: This region is also involved in self-referential processing, which relates to thinking about oneself, introspection, and autobiographical memory.

Default mode network (DMN): The medial parietal cortex is a key component of the default mode network, a network of brain regions that are active when an individual is at rest or engaged in internally focused tasks, such as daydreaming, mind-wandering, or self-referential thoughts.

Damage or dysfunction in the medial parietal cortex can lead to various cognitive impairments, including deficits in spatial processing, memory retrieval, and self-awareness. This region is also implicated in certain neurological and psychiatric disorders such as Alzheimer's disease, schizophrenia, and depression. Understanding the functions of the medial parietal cortex provides insights into how the brain processes information related to spatial orientation, memory, and self-awareness.