

## **Research Article**

## Advances in Neurology and Neuroscience

## Memory Retrieval and Significance and Function of Psychical Cortex

#### **Kunal Joon\***

University, Noida International Institute of Medical Sciences

#### \*Corresponding Author

Kunal Joon, University, Noida International Institute of Medical Sciences.

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#### **Abstract**

Memory is retrieved from the different cortex through the memory retrieval circuit. This circuit involves psychical cortex which convert them and comprehend them and send to motor speech area and person recognize it

#### **Objective**

- Memory retrieval process
- Memory retrieval circuit
- Mystery of psychical cortex

Significance and Fate of Psychical Cortex

Keywords: Neuroscience, Neuro, Neurology, Psychology, Memory

#### I. Introduction

This research covers the process of memory retrieval and significance and functioning of psychical cortex and treatment of dementia and Alzheimer diseases.

## 2. Psychical Cortex

Area number 9 to 12

It forms the anterior part temporal lobe.

It connects in the retrieval memory circuit connected to every cortex through cingulate gyrus and above corpus callosum

## 3. Memory Retrieval Circuit

**Step 1:** Memory Stored in The Various Cortex Travel Through Psychical Cortex

Step 2: In Psychical Cortex Memory Is Converted into Visual Memory

**Step 3: Memory Travel in Hippocampus and Converted into The Recent Memory** 

Step 4: Recent Memory Is Comprehended in Speech Area Werneck Area

**Step 5: Memory Get Retrieved** 

## 4. Photo Visual Memory Process

Step 1: Memory Received from Retina

**Step 2: Passes Through Psychical Cortex That Is Anterior Lobe of Temporal Lobe** 

**Step 3: Memory Travel Through Hippocampus** 

**Step 4: Recent Memory Is Comprehended in Wernicke Area Step 5: Memory Is Visualized for Seconds When Eyes Are** 

Closed.

#### 5. Auditory Memory

**Step 1: Memory Received from A Pattern** 

Step 2: If Same Pattern Is Stuck or Visualize in Brain

**Step 3: The Memory Stored in Auditory Cortex** 

Step 4: Travel Through Psychical Cortex and Get Comprehend

**Step 5: Memory Is Retrieved** 

#### 6. Olfactory Memory

Step 1: Memory Received from An Olfaction

Step 2: If Same Type of Olfaction Is Received in Brain Through Olfactory Nerve

**Step 3: Memory Stored in Olfactory Cortex** 

**Step 4:** Travel Through Psychical Cortex and Get Comprehend

Step 5: Memory Get Retrieved

## 7. Taste Memory

**Step 1:** Memory Received from The Taste

**Step 2:** If Same Type of Taste Received Brain Stimulates Through Hypoglossal

Step 3: Memory Stored Kn Gustatory Areab

Step 4: Travel Through Psychical Cortex and Get Comprehend

**Step 5:** Memory Get Retrieved

#### 8. Memory Retrieval Circuit

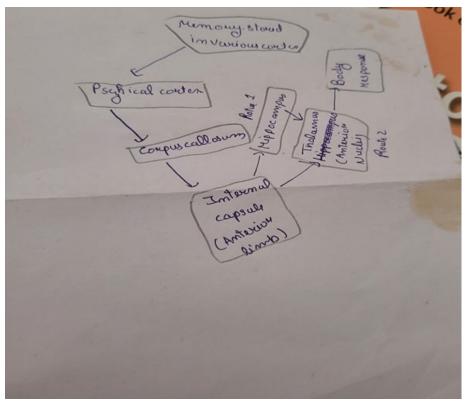


Figure 1.1: shows about memory retrieval circuit routes.

**Route 1 :** It Includes Hippocampus As In This Route Hippocampus Convert Long-term Memory Into The Recent Memory For Retrieval

**Step 1:** Memory Received from Cortex

Step 2: Travel to Psychical Cortex and Gets Comprehend

Step 3: Travel to Corpus Callosum Than to Internal Capsule

**Step 4:** Travel to Hippocampus and Grts Converted into Recent Memory and Gets Retrieved

**Route 2:** This Type of Circuit Involves in Sudden Memory in Which Sudden Response Is Required

Step 1: Memory Stimulus Received

Step 2: travel to psychical cortex and gets comprehend

Step3: Travel to Corpus Callousm Than to Inter Al Capsule

Step 4: Go to Anterior Nucleus of Thalmas and Get Retrieved

#### 9. Function of Psychical Cortex

The main Function of psychical cortex area 9 to 12 or anterior lobe of temporal lobe This area plays a main role in the memory retrieval circuit ad it act as a comprehend circuit it combines and comprehend the memory stored in the cerebral cortexes

## 10. Significance of Psychical Cortex

The main Significance of psychical cortex is that it helps in comprehension combination of various memory from different areas of cerebral cortex.

#### 11. Dementia Treatment

Aim: To study eeg of dementia patients Material required: eeg graph of dementia patient [1]

#### 12. Methodology

- 1) Basically, eeg graph is to study varies brain pattern of the person
- 2) Theta wave gives the identification of memory retrieval and its process
- 3) Eeg graph used in studying the various waves pattern of patients
- 4) Theta waves are studied to check the problem of the patient
- 5) Alertness of mind and Psychological diseases are interlined with area 9 to 12 which is the 13. psychical cortex
- 6) Pscyhical cortex is the anterior lobe of temporal lobe
- 7) It comprehends the memory which is less functioning in the dementia case

#### 14. Observation

## On Studying the Dementia Patients Eeg Graph Shown Below

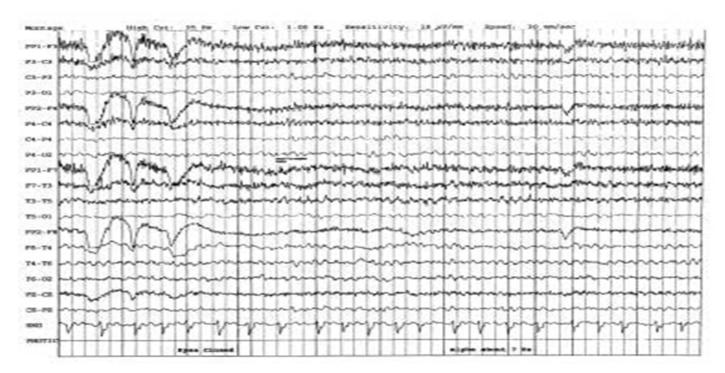


Figure 2: Eeg Graph of Dementia

We observe irregular wave pattern of theta wave which determines the convulsions Confusion and split brain in dementia patient. It also gives records of the forgetfulness Of dementia patients the more the irregular is wave pattern more is the forgetfulness [2]. Of dementia patients.

#### 15. Treatment of Dementia Patients

As dementia is a temporary condition. As patients is in depression [3].

## 16. Treatment Can Be Given in Two Ways

1) Psychological way: in this patient is given a Psychological therapy by understanding

Mental situation of patients and asking his /her problem and resolving its problem

In his / her own way or your own way be like his /her

2) Symptomatic treatment: this treatment includes drugs which excites the neuron and treatment given is antidepressant which makes patient to come out from dementia and Resolve his /her problem to lead his /her normal life [4].

#### 17. Alzheimer Diseases Treatment

Aim: to study eeg graph of Alzheimer diseased patient Material required: eeg graph of Alzheimer diseased patients

## 18. Methodology

- 1) Alzheimer diseases is the basically a degenerative disease in which neurons gets degernate
- 2) Entagles occur in the neurons in Alzheimer disease
- 3) Symptoms included forgetfulness , loss of basic skills , depression  $\ \ \,$
- 4) Eeg pattern of patient is studied [5]

# 19. Observation **Eeg of dementia**

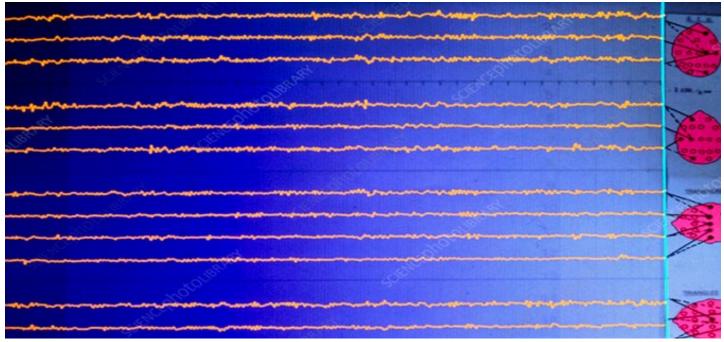


Figure 3: Eeg Graph Of Alzheimer Diseased Patients

## **Showing Eeg Of the Patient with Alzheimer Diseases**

In Alzheimer disease patient Alertness goes and memory retrieval and storage circuit affected as the theta wave pattern is nil here shows in the figure even theta wave are not produced in frontal lobe shows that area 9 to 12 or pscyhical cortex are also affected

#### 20. Treatment

Treatment is only by one way is that Regeneration cell therapy As cell has a dna code and it's dna act as a architecture so a dna from patient body can be used as a source for Regeneration of cells and lead to treatment for patient with Alzheimer diseases

## **Treatment of Parkinsonism Diseases [6]**

Aim: To Study Eeg Of Parkinsonism Diseased Person Material required: Eeg Graph of Parkinsonism Diseased Person

## 21. Methodology

- 1) Parkinsonis diseased person works slowly
- 2) Parkinsonism is the case in which dopaminergic neurons gets exhausted
- 3) Eeg graph is used to study gama wave to see the irregularity of dopaminenergic neurons
- 4) Also sense the Alertness and focus of the patient

## 22. Observation

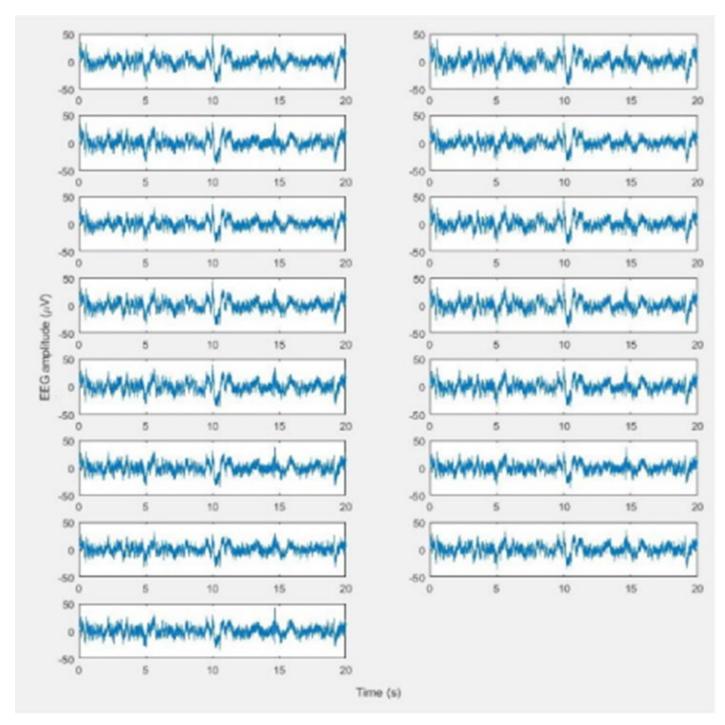
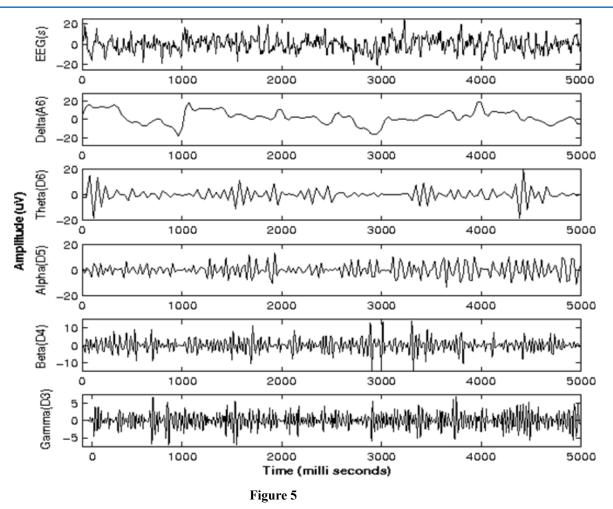


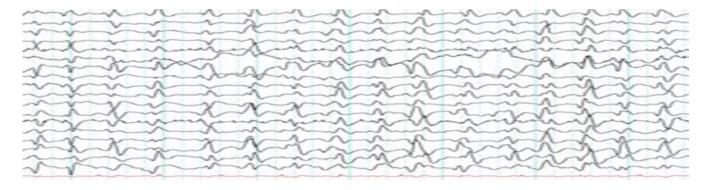
Figure 4: Shows Early Parkinsonism Diseased Patient in Which the Gamma Waves

Are regular pattern but on careful observation we observe an early lurching gate Pattern in the gamma waves [7].



Shows Different Wavelet and Clear Picture of Eeg In Which We Can Observe

The lurching gate pattern in gamma waves and this figure tells about the patient functional defect in the dopaminergic neurons which is shown that on giving stimulus neuron excites but less tells about exhaustion of neurons in the patient [8].



**Figure 6:** Eeg Graph Of Parkinsonism Shows About The Proper Parkinsonism Diseased Patient In Proper Irregular Pattern Of Gamma Waves Are Visible Which Tells Full Exhaustion Of Dopaminergic Neurons And Less Excitation Of Dopaminergic Neurons Which Makes People Less Excitable Towards Their Works.

## 23. Treatment

- 1) Parkinsonism Symptomatic treatment is known by giving L dopamine (8)
- 2) Proper treatment of parkinsonism diseased patients can be done generating more

Dopamine synthesing neuron through stem cell therapy also by implanting more dopaminergic neurons in the patient through stem cell therapy 3) By making body synthesing more dopamine by catacholamine decomposition [9].

## 24. Discussion

**Discussion Was Conducted On** 

- Eeg of dementia
- Eeg of parkinsonism
- Eeg of Alzheimer diseased patients [10]

Proper patients' history was taken and proper eeg and studies were performed.

#### 25. Conclusion

That psychical area helps in the comprehension and retrieval of memory And injury of this can lead to the Alzheimer diseases and also stem cell therapy can Be used for the treatment of parkinsonism, Alzheimer's Disease and dementia.

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