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Sneeze Related Area in the Medulla: Signals or Neurons from The Other Areas Too Controlling It?

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Abstract
Sneezing is the rarely referred symptom in neurological practice. The proper finding of any kind of sneezing center in medulla or brainstem is yet unknown in humans. We don't know about the brain connections fully keeping that in mind we can say that the sneeze reflex is having a co-relation with the other bodily functions such as respiration i.e., lung receptors and many others. I have explained it in the discussion section below. The main thing to be consider here is that there may be leakage or transfer of signals from the respiratory centers to other nearby nuclei such as pontomedullary reticulating system.

Key words: *Sneezing, Brainstem, Trigeminal Nucleus, Sneeze Center and Pre-sneeze Irritation.*

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I. Introduction

Sneezing is the type of cranial reflex. And many of the cranial functions are unknown due to lack of the neuronal connections. The proper sneeze reflex center is not yet known in the brain but is believed to the present on the rostral side of the medulla OR brainstem. This can be used as the clinical manifestation to either stop OR evoke the sneeze reflex as per the need of an individual. Many of such uses as to protect the patient from being sneezing i.e., relief from the sneeze OR relief from the feeling of sneeze i.e., the condition of the patient in-between the continuous sneeze OR before sneeze called as the irritable phase of the pre-sneeze OR sneeze. This irritable phase is the phase in which the people feel disguised and gets restless to overcome this we can try evoking the sneeze center to forget the sneeze reflex and stop giving that irritable signals so that the patients get normalized and do not become restless. This can be done using many option one main is by evoking the strong acute life threatening bodily condition i.e. by stop breathing and making the dorsal respiratory system activate which will eventually leads to the passing of signals from the pontomedullary lateral reticular formation and beside that the charges OR signals maybe leaking and inhibiting the spinal nucleus of the trigeminal nerve that leads to the forget fulness of the sneeze reflex from the brain and the sneeze irritation can be relieved.

II. Discussion

The sneezing reflex is a cranial reflex so the nerves responsible for it will be cranial nerves. The main cause of the sneezing reflex is that:

The nerves taking the sensation of irritations are trigeminal nerves and olfactory nerve. The reflex is taken by the ophthalmic and maxillary branch of the trigeminal nerve to the trigeminal nuclei in the brainstem. The receptors in the nose which leads to the sneezing is interstitial receptors. These receptors takes the impulse to the brain via ophthalmic OR maxillary nerve of the trigeminal nerve to the part of the spinal nucleus of the trigeminal nerve. **Co-incidentally** these sneezing reflex centre lies very-very adjacent to the pontomedullary lateral reticular formation in the dorsal of the medulla. So, there is very much chances of the leaking OR transfer of the signals via interneurons or sodium leaky channels.

So, if we somehow manage to stimulate any of these nuclei eventually makes stimulation of the other nuclei too. Using this concept these we can practice one exercise that can make fast relive from the sneezing if anyone suffers from sneezing via dust OR mucous OR any other local irritant and has continuous sneezing in spite of no particular allergy the major relief may be obtain to the person with the irritation and temptation of the sneezing and may further get relief from sneezing.

III. Mechanism

The interstitial stretch receptors in the nose will be stimulated by any of the irritant and then will send the impulse via trigeminal nerve to the part of spinal nuclei of the trigeminal nuclei. And at that very same time we will ask that patient to stop breathing taking air in and make the apnoea condition in the body for a while

which will eventually stimulate the lung receptor of the body due to which the pontomedullary lateral reticular formation will be activated and the brain have to make the choice between the sneeze and to breathe so the brain obviously choose the main bodily function i.e. to breathe and will send the reflex to the external intercoastal and diaphragm muscle to contract and make back the breathing and will ignore the reflex of the sneezing for a while and person will be cured by the sneezal irritation as sneeze centre get deactivated until the new stimulation to the sneeze centre appears.

NOTE: The sympathetic nervous system is not involved anywhere in the full mechanism as the body is awaked and no sympathetic nuclei is been lying near to the full neuron pathway length (discussed above) OR nuclei region.

TO CONCLUDE: We can say that there are some kinds of neurons present between the reticular formation and spinal nucleus of the trigeminal nerve which is responsible for the cessation of the sneeze irritation from any person activating other life-threatening reflex (mainly breathing cessation).

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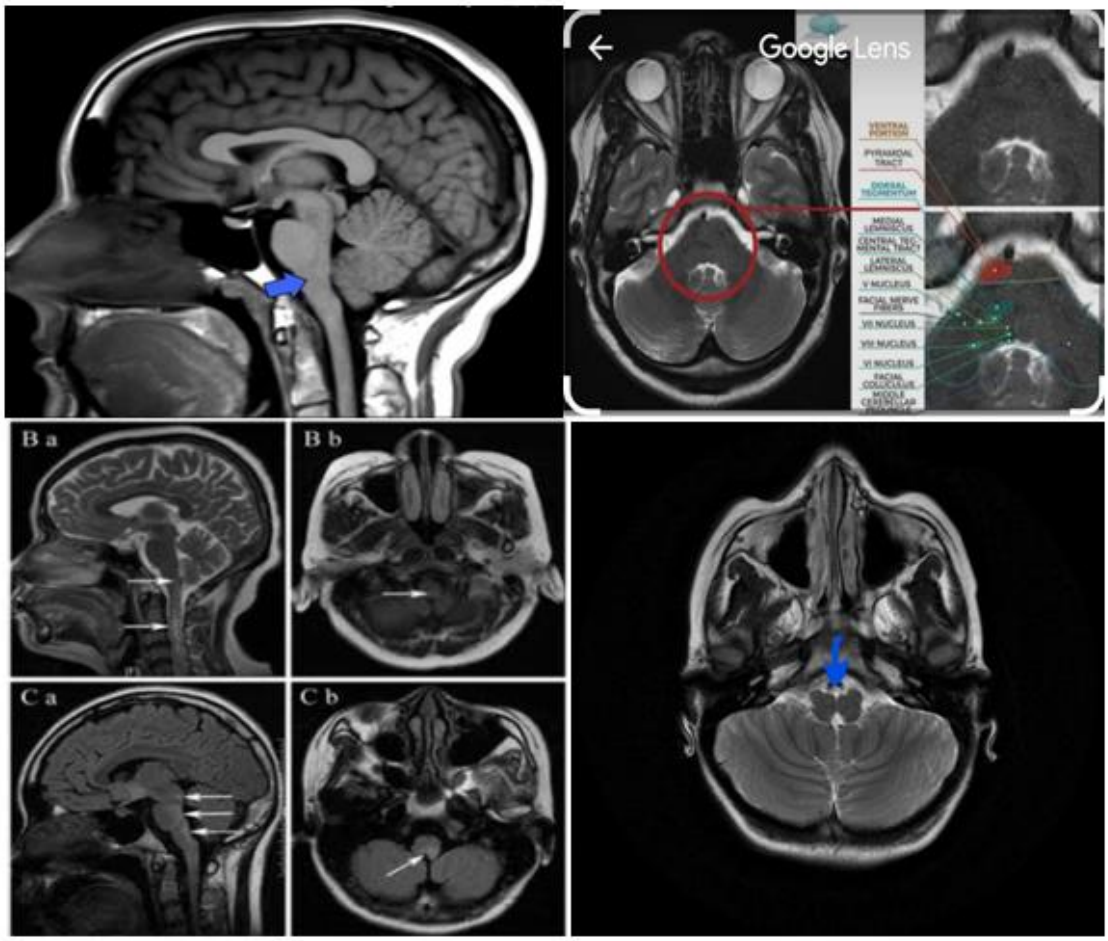
FIGURES:



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