



Neurogenetics Development of Neural Signals

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Abstract

This research discuss about the neuron Development and establishment of the their connection in embryonic period and the secretion of adhesion for establishment of neuron in the body.

Keywords: Neuralcrest; Stem Cell; Stem Cell Theory; Neuro Glial Cells

Development of the central nervous system

In central nervous system first glial cells are formed from the ectoderm and develops the supportive network and then from the stem cells the neuronal cells and then these release the adhesion substance and form the neuronal network and lead to the formation of the neuronal network leading to its growth in the intrauterine life and till 1st year of child and Development starts and growth of child slows down.

Development of spinal neurons

- Development of the spinal nerves is from the neural tubes these conjoint origin from three germinal layers
- The roots arises the dorsal root develops sensory neuron while ventral root develops motor neurons
- Somites are formed and then dermatome are formed.

Dermatome remains supplied by the neuron Which are supplied by the same neuron which arises from the vertebra at same level and plexus present during formation or present at birth.

Molecular neurons

- For development of the sympathetic neuron and acetylcholine as a neuronal hormone the gene activates is Phox2a and 2b.
- For noradrenergic neuron during differentiation the gene activates is Hand 2
- For cardiac sympathetic and parasympathetic activity, the neuron signals act on the gene TCFL7

Early detection of MI or any cardiac diseases

ADRB1 gene variation or mutation can lead to overactivation of the parasympathetic and sympathetic activity of Cardiac cells leading to the Hereditary risk of the cardiac failure, heart attack and even it can be acquired but rare cases.

Treatment

In the genetic related issue, the gene inactivation through introduction of cardiac myocytes Of modified ADRB1 gene introduction And develops new cardiac cells in heart through stem cell injury leading to the low risk of the hereditary heart attack.

Discussion

In this we discussed about neuronal Development And some of its molecular aspects and also about the hereditary Causes of Myocardial Infraction.

Conclusion

Development of the neurons occurs from the neural tube
Hereditary Myocardial Infraction; Heart attack occurs through
gene TCFL7 gene.

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