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Synaptic transmission

The presynaptic knob has synaptic vesicles containing neurotransmitters. Table 3.a summarizes different types of neurotransmitters. These neurotransmitters play vital role in mediating impulse from pre to postsynaptic terminals. The impulse in the presynaptic neuron gets the neurotransmitters released in the synaptic cleft which, in turn, triggers impulse in the postsynaptic neuron. Figure 3.7 illustrates the mechanism of neural transmission at synapse.

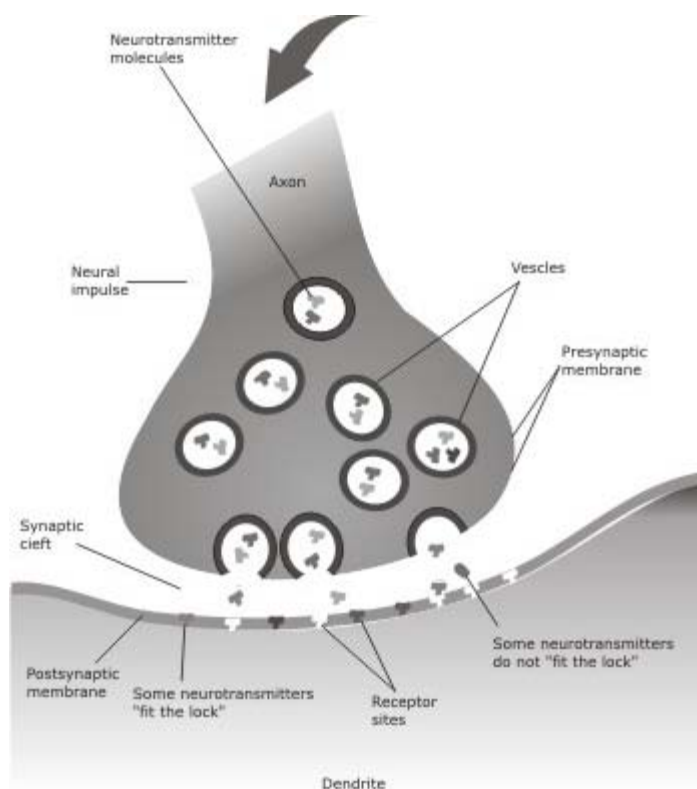


Figure 3.7: Transmission at synapse

The time needed for an impulse to get transmitted through the synapse is more than the transmission time required in the neuron. This is termed as synaptic delay. The nature of synaptic transmission is held responsible for it.

As described earlier, neurotransmitters play significant role in synaptic transmission. The first neurotransmitter was discovered in 1921 by Austrian scientist Otto Loewi. Since then research in endocrinology and other areas have added to our knowledge about the neurotransmitters. Table 3.a details various neurotransmitters and the nature of their function.