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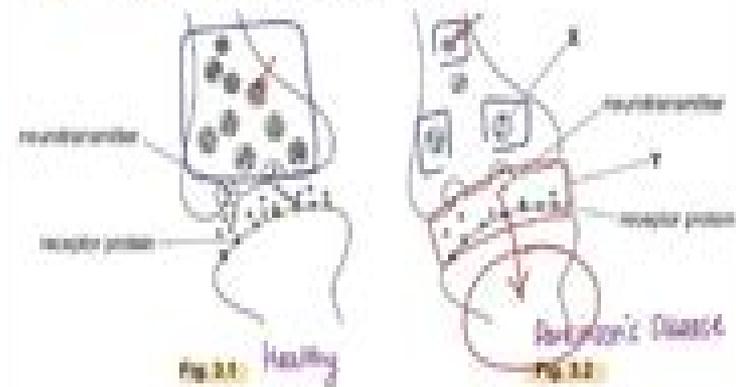
Paper 42



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1 Fig. 3.1 is a diagram of the junction between two neurones in a healthy person.

Fig. 3.2 is a diagram of the junction between the same two neurones in a person who has Parkinson's disease. This disease affects the nervous system.



(a) Identify the parts labelled X and Y in Fig. 3.2.

x vesicles

y Synaptic knob

(1)

(b) Parkinson's disease affects neurones in the brain that are responsible for movement.

Using the information in Fig. 3.1 and Fig. 3.2 describe and explain the effect of Parkinson's disease on a person's movement.

♀ Parkinson's patient has fewer vesicles [1 mark]

lesser neurotransmitter inside the vesicles [1 mark]

and lesser neurotransmitter are released [1 mark]

lesser impulses in the post-synaptic neurone [1 mark]

leading to lesser movement in the patient [1 mark]

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