

7. When a spinal injury occurs, many neurones (nerve cells) die and cannot be replaced naturally by the body. Researchers at the Washington University Medical School in St Louis (USA) have reported that the injection of embryonic stem cells into damaged spinal cords of rats could enable recovery to take place.

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(a) Explain why embryonic stem cells can be used to provide replacement neurones when most other cells cannot.

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(2)

(b) The research on rats might suggest that a similar treatment could be applied to humans who are suffering the effects of severe spinal injury. Suggest why the use of such a procedure would be controversial.

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(5)

Q7

(Total 7 marks)

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