

A Level Biology B

H422/02 Scientific literacy in biology

Question Set 10

1. (a) (i) Physiological ageing leads to changes in the male reproductive system. These changes can cause infertility and erectile dysfunction.

Explain the difference between male infertility and erectile dysfunction.

[2]

- (ii) State one factor, other than physiological ageing, that can cause erectile dysfunction.

[1]

- (b) (i) Hormone replacement therapy (HRT) is used to treat the symptoms of the menopause in some women. However, the molecules used in HRT can cause side effects.

Fig. 4 shows the results of a study, published in 2002, of the effect of HRT on the incidence of various conditions.

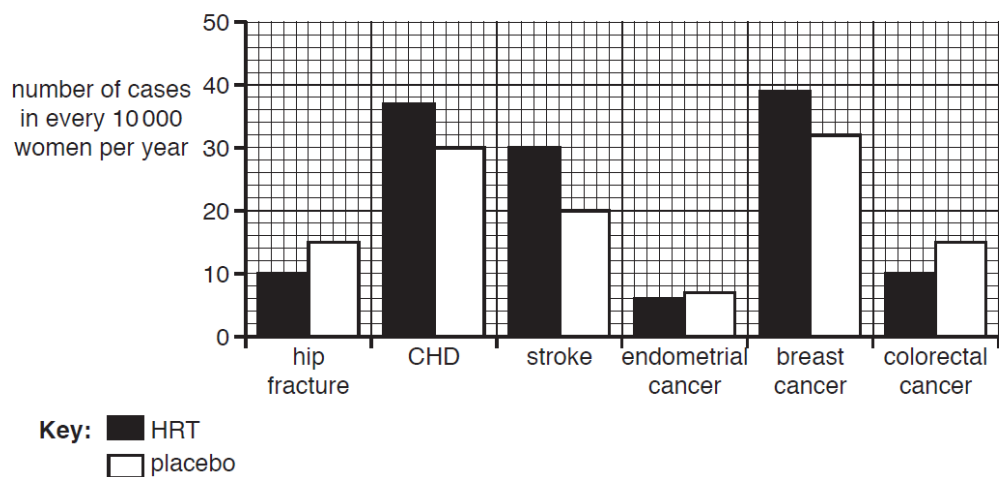


Fig. 4

Use Fig. 4 to assess the effect of HRT on the incidence of disease and injury.

[3]

- (ii)* In November 2015 the National Institute for Health and Care Excellence (NICE) issued new guidelines for managing the menopause. These included:

- Women with cardiovascular risk factors should not automatically be excluded from taking HRT.
- Oestrogen-only HRT causes little or no increase in the incidence of breast cancer; HRT with oestrogen and progesterone can increase incidence of breast cancer, but any increased risk reduces after stopping HRT.

Use your own knowledge and these new guidelines to evaluate the risks of HRT.

[6]

Total Marks for Question Set 10: 12

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