



Clinical challenge

Questions for this month's clinical challenge are based on articles in this issue. The style and scope of questions is in keeping with the MCQ of the College Fellowship exam. The quiz is endorsed by the RACGP Quality Assurance and Continuing Professional Development Program and has been allocated 2 CPD points per issue. Answers to this clinical challenge will be published next month. Dr Jenni Parsons

SINGLE COMPLETION ITEMS

DIRECTIONS

Each of the questions or incomplete statements below is followed by five suggested answers or completions. Select the most appropriate statement as your answer.

Questions 1–4 are based on the article 'Fertility effects of cancer treatment' by Donald Marsden and Neville Hacker

Question 1

Tracey, aged 33, has cervical cancer and is to have pelvic irradiation. You tell her:

- A. ovaries are more sensitive to radiation than testicles
- B. doses up to 150 cGy are likely to cause ovarian failure in women under 40 years of age
- C. total doses greater than 800 cGy will permanently sterilise most women
- D. the effect of radiation on the ovaries depends on both the total dose and the fractionation
- E. the dose of pelvic irradiation used in treating cervical cancer is unlikely to cause infertility.

Question 2

Tom has lymphoma and is concerned about the effect of radiation and chemotherapy on his testicular function. You tell him:

- A. the effect of radiation on the testes depends on both the total dose and the fractionation

- B. testes are only affected if they are directly irradiated
- C. testicles exposed to between 10–30 cGy are unaffected
- D. alkylating agents such as cyclophosphamide and chorambucil have little effect on gonadal function
- E. testicles are less likely to be affected by chemotherapy than ovaries.

Question 3

Jane, aged 24, has recently been diagnosed with a malignant germ cell tumour of her right ovary. She asks about the effect of treatment on her future fertility. You tell her:

- A. she will need both ovaries removed
- B. she will require high dose pelvic irradiation which will render her infertile
- C. approximately 60% of patients will remain amenorrhoeic after completion of chemotherapy
- D. removal of her right ovary and tumour debulking helps preserve future fertility
- E. birth defects are likely if she does have a child.

Question 4

Fertility preserving options in cancer treatments include:

- A. translocation of the ovaries when pelvic irradiation is planned
- B. hysterectomy and pelvic lymph node dissection in stage IA1 cervical disease
- C. cone biopsy for stage IB1 cervical disease
- D. giving oral contraceptive pills during chemotherapy
- E. cryopreservation of oocytes.

Questions 5–8 are based on the article 'Management of fertility issues in cancer survivors' by Kelton Tremellen

Question 5

David, aged 30, is a survivor of childhood cancer. He and his partner are hoping to have a baby. You find that David has azospermia. Which of the following suggest gonadal failure as the cause:

- A. normal sized testes
- B. high FSH and low inhibin B levels
- C. high FSH and high inhibin B levels
- D. low FSH and low inhibin B levels
- E. low FSH and high inhibin B levels.

Question 6

You suggest to David that he have a testicular biopsy because:

- A. it would differentiate between gonadal failure and obstruction
- B. normal pockets of spermatogenesis are found in 90% of cases
- C. normal pockets of spermatogenesis are found in 10% of cases
- D. normal pockets of spermatogenesis are found in 20% of cases
- E. none of the above.

Question 7

Sophia, aged 32, had successful treatment of breast cancer two years ago. She has irregular periods but would like to conceive. Choose the correct statement:

- A. Sophia should not get pregnant until five years postdiagnosis
- B. Sophia is at high risk of a recurrence if she becomes pregnant
- C. at this stage Sophia has a high risk of having a child with congenital abnormality
- D. normal menstrual cycles equate with normal fertility
- E. early follicular phase FSH would be an appropriate investigation.

Question 8

Sophia asks about IVF treatment. Choose the most correct statement:

- A. donor oocytes could be used to achieve a pregnancy
- B. ovulation stimulation is highly effective in women exposed to chemotherapy
- C. high dose stimulation in women with decreased ovarian reserve gives good results
- D. stimulated IVF treatment is appropriate even if Sophia had an oestrogen sensitive tumour
- E. ovulation induction in IVF treatment results in oestrogen levels double that of normal cycles.

Questions 9–12 are based on the article 'Second malignant neoplasms following treatment for primary cancer' by Helen Somerville

Question 9

Sally, aged 32, was successfully treated for Hodgkin's disease (HD) five years ago. She attends for a routine Pap smear and breast check. Choose the correct response:

- A. her risk of breast cancer is equal to that of the general population
- B. screening mammography is not appropriate for Sally as she is too young
- C. the risk of breast cancer in HD patients is greater if they are younger when treated for HD
- D. Sally's risk of breast cancer is double

that of the general population

- E. clinical breast examination is not required if mammography is performed.

Question 10

In survivors of HD:

- A. there is a 2–4% excess risk of second malignancy per person per year
- B. the risk of second malignancy is greater in patients treated with radiotherapy alone
- C. there is an increased risk of solid tumours but not leukaemias
- D. there is an increased risk of leukaemias but not solid tumours
- E. reduction in dose and field of radiation given dose not decrease risk of malignancy

Question 11

In patients treated with radiotherapy:

- A. the risk of second malignancy is greater if treated at an older age
- B. second malignancy usually develops in the radiation field
- C. skin in the radiation field is no more at risk from sun exposure than the general population
- D. smoking further increases the risk of breast tumours
- E. the latency period for developing secondary solid tumours is usually less than five years.

Question 12

Sam had hereditary retinoblastoma (RB). Choose the correct response:

- A. RB has an autosomal recessive pattern of inheritance
- B. the penetrance if hereditary RB is 50%
- C. Sam's risk of second malignancy is greater if he was treated with radiotherapy
- D. the rate of second cancers is approximately 26% at 10 years of follow up
- E. most second cancers are haemopoietic.

Questions 13–15 are based on the article 'Sexuality and body image after cancer' by Kendra Sundquist and Lesley Yee

Question 13

Justine, aged 35, has been treated for breast cancer with lumpectomy, radiotherapy and chemotherapy. Choose the most correct response:

- A. as she did not have a mastectomy it is unlikely she will experience psychosexual problems
- B. if she had sexual problems she would mention them
- C. chemotherapy does not interfere with sexual function
- D. approximately half the women surviving breast cancer report severe sexual problems
- E. sexual difficulties are less of a problem in women who have had children.

Question 14

Choose the incorrect statement relating to sexual function after cancer treatment:

- A. sexual function is preserved in nerve sparing surgery for prostate cancer
- B. hormonal treatment for breast cancer can cause vaginal dryness and dyspareunia
- C. sexual dysfunction is greater in colorectal cancer patients with a stoma than with intact sphincters
- D. over 60% of patients develop sexual dysfunction if autonomic nerves are damaged by colectomy
- E. older cancer patients are often reluctant to broach the topic of sex.

Question 15

The PLISSIT model for sexual counselling does not involve the practitioner:

- A. giving the opportunity for and initiating discussion about sexuality
- B. seeking patients permission
- C. giving appropriate educational resources
- D. informing the patient as to what is normal behaviour
- E. specialist referral if appropriate.