VICS PAEDIATRIC INTEGRATED CANCER SERVICE
Together for better cancer care

Fertility, reproductive and sexual health (male)

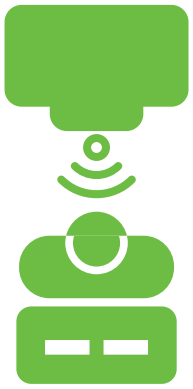
Health information after cancer treatment as a child or teenager

Some cancer treatments can affect the testes, which are responsible for sperm production and making testosterone (male hormone). Reduced fertility in males after cancer treatment is usually related to lowered numbers of sperm, or abnormal sperm function. Sperm production is separate from testosterone production, and depending on the type of cancer treatment given, either one or both of these functions can be affected.

Treatments that can affect fertility (sperm production) and testosterone production

Radiation directly involving the testes

This includes radiation treatment to the lower spine, pelvis, testes, and total body irradiation (TBI). Exposing the testes to radiation can reduce both fertility and testosterone production. Some males may need medical help to get through puberty and keep testosterone levels normal; others may only lose testosterone production later in life. Testosterone is absolutely essential for overall wellbeing. If needed, testosterone treatment is easy to access and returns sexual function to normal, but it does not restore fertility.



Radiation affecting the hormone signals to the testes

The hormone-producing areas of the brain are called the hypothalamus and pituitary gland. If these areas are exposed to radiation, it can affect the signals normally sent to the testes to enlarge and begin producing sperm and testosterone. This exposure can be through radiation treatment to the brain, head, or face. If you are in this group, your team can refer you to a specialist for appropriate monitoring and treatment.

Chemotherapy

Some chemotherapy treatments can affect fertility. This is especially true if your treatment included high doses of drugs known as alkylating agents (examples include cyclophospamide, ifosphamide, busulfan, melphalan, and procarbazine). These drugs reduce fertility by causing direct damage to the sperm-producing cells of the testes. Your team will be able to discuss the particular treatment you received – and its associated risks – with you.

Surgery

Surgery does not usually affect fertility. Occasionally, surgery near the bladder or prostate, or near the hormone producing parts of the brain, may cause problems.

Your risk of infertility is highest if you have received high doses of alkylating chemotherapy combined with radiation that includes the testes. It is important that you and your team discuss the treatment you received, and your individual risk.

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What else do I need to know?

What if I had fertility preservation?

If you had semen or testicular tissue frozen before or during your cancer treatment, you must remember to notify the storage bank of any changes to your contact details so that they can keep in touch with you about your wishes for ongoing storage.

What about my sex life?

Remember that fertility and sexual function are different! Most people enjoy relationships and sex after cancer, even if treatment has affected their fertility. For some, the cancer experience can change how their body looks, feels and works. Having normal testosterone levels is essential for sexual function, and if your cancer treatment has affected this, testosterone treatment will return your levels to normal. If your fertility has been affected by your treatment, it is important to know that your semen will not look different, even if it contains a reduced number of sperm.

If you have any concerns, speak to a trusted member of your healthcare team. They are used to dealing with these issues and can offer support and advice, including referral for specialists if needed.

Do I still need contraception?

YES! Never assume that you are infertile, even if you know you have had treatment that can reduce fertility. You need to use contraception until you are ready to start a family – and you need to protect yourself from sexually transmitted infections (STIs).

If I have children, will my treatment affect their health?

Some people who have had cancer worry about the effect their treatment might have on their future children. There is currently no evidence of increased rates of abnormalities or health problems in the children of cancer survivors. Unless someone has an underlying genetic/familial cancer syndrome, there is also no indication that children of survivors have a higher risk of developing cancer than others.

We recognise some young people reading this may not identify with their sex assigned at birth, and that sex and gender are not binary concepts. The use of female and male in this fact sheet refer to biological sex only.

Like more information?

The following are good websites and helplines to check out:

Fertility – Regenerate (ayaregenerate.com.au)

FUTuRE Fertility – www.futurefertility.com.au/resources-tab/resources-for-adolescentand-young-adult-patients/

Maybe Later Baby? A guide to relationships, sex and fertility for young people after cancer (CanTeen) – www.canteen.org.au/how-we-help/books-resources/guide-to-fertility-for-young-people-after-cancer

www.cancercouncil.com.au/cancer-information/lgbtqi/

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