Reproductive choices for men and women who carry a pathogenic BRCA gene fault

Many people with an inherited cancer gene fault are concerned that they may pass this on to their children. For those thinking of starting a family, different options are available to manage the risk of having a child with the inherited condition.

If you are planning to have children you may want to speak to a genetic counsellor or geneticist to discuss the options available to you. Each option raises different emotional and practical issues. These can be discussed with your genetic counsellor.

Following is a summary of the options that would be discussed in your counselling appointment. Deciding which reproductive option is best for you is a personal decision, and will depend on your own situation.

**What are my reproductive options?**

You may choose:

**To become pregnant and have the baby tested for the gene fault while you are pregnant** (Prenatal diagnosis)

- Prenatal diagnosis involves testing a sample of the amniotic fluid from around the baby (this test is called amniocentesis) or chorionic villus cells from the placenta (this test is called chorionic villus sampling - CVS).
- The sample is taken with a needle that is inserted through the abdomen. This is guided by ultrasound.
- CVS can be done at around 12 weeks of pregnancy.
- Amniocentesis can be done at around 16 weeks of pregnancy.
- If the baby is shown to carry the gene fault, there is the option to terminate the pregnancy.

- For more information on CVS or amniocentesis you may contact your genetic counsellor.
- To become pregnant and not have the baby tested for the gene fault

You may want to consider:

- how likely it is that the child would inherit the gene fault
- if one parent has the BRCA gene fault, each child has a 1 in 2 chance of inheriting this fault
- how likely it would be that the inherited cancer would develop
- what the impact of inheriting the gene fault would be on the child’s life
- what medical care may be available in the future to prevent or treat the cancer.

**To use IVF and have the fertilised egg tested for the gene fault** (Preimplantation Genetic Diagnosis or PGD)

- IVF (in vitro fertilisation) refers to the fertilisation of an egg with sperm in a test tube.
- Each fertilised egg (embryo) can be tested for the inherited cancer gene fault.
- An embryo without the gene fault can then be placed in the mother’s womb in the hope that a pregnancy will result.
- PGD is not always available.
- In Western Australia any couple considering PGD must have an appointment with Genetic Services of Western Australia. You are welcome to contact your genetic counsellor for further details.
To use an egg or sperm donor and become pregnant through IVF

An IVF child can be conceived using sperm or eggs (as appropriate) from a donor who does not carry the BRCA gene fault.

Adoption

- You may decide that none of the options above is right for you and instead choose not to have a biological child.
- You may want to explore the possibility of adopting a child.

Genetic Services of Western Australia can arrange for you to meet experienced doctors and counsellors to review these options and help you decide what is best for you and your family.

You may want to use contraception until you have decided on the best option for your family. You may also find it useful to discuss your decision with your general practitioner and/or obstetrician.

For more information or to arrange an appointment please contact:

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This information sheet has been adapted from the pamphlet ‘Reproductive choices for people at risk of familial cancer’ produced by Familial Cancer Services, South Australia.

This document can be made available in alternative formats on request for a person with a disability.