What else is there to consider?

- Having PGD is a relatively complicated and lengthy procedure. It takes approximately 6-9 months between your first PGD appointment and the start of treatment. It will involve about four hospital appointments per cycle.
- There are risks associated with having PGD treatment, e.g. hyper-stimulation of the ovaries (where the ovaries become very large and fluid may accumulate, which may also cause abdominal swelling). This can lead to admission to hospital.
- Some women have a poor response to the fertility drugs and therefore there are no eggs for collection. There is also a chance that no embryos will grow or there may be no unaffected embryos.
- There is a small risk of an error occurring in the testing. This will be discussed with you in greater depth if you pursue PGD.
- PGD can be a very emotionally and financially demanding process to go through.

How do I get referred to a PGD clinic?

To be referred to a PGD clinic please ask your geneticist or genetic counsellor to refer you for a discussion.

This appointment should give you the opportunity to ask questions and find out more about PGD before reaching your decision. The appointment is free of charge if it is an NHS clinic.

Further information

Human Fertilisation and Embryology Authority
www.hfea.gov.uk

Guy's and St Thomas’ Centre for PGD
www.pgd.org.uk

Feedback

We appreciate and encourage feedback. If you need advice or are concerned about any aspect of your care or treatment please speak to a member of staff or contact the Patient Advice and Liaison Service (PALS):

Freephone: 0800 183 0204

From a mobile or abroad:
0115 924 9924 ext. 65412 or 62301

E-mail: pals@nuh.nhs.uk

Letter: NUH NHS Trust, c/o PALS, Freepost NEA 14614, Nottingham NG7 1BR

www.nuh.nhs.uk

If you require a full list of references for this leaflet please email patientinformation@nuh.nhs.uk or phone 0115 924 9924 ext. 67184.

The Trust endeavours to ensure that the information given here is accurate and impartial.

Adapted from leaflet by Clinical Genetics at Guy’s and St Thomas’ NHS Foundation Trust.

Janet Rezzougui, Clinical Genetics © August 2018. All rights reserved. Nottingham University Hospitals NHS Trust. Review August 2020. Ref: 1039/v3/0818/AH.
Preimplantation genetic diagnosis (PGD) is a technique designed to help couples who are at risk of having a child with a serious genetic condition. PGD can also sometimes help couples who have had recurrent miscarriages because of a genetic condition.

This leaflet will provide you with some general information about PGD, in order to help you reach a decision about whether or not you would like to pursue this option.

**What is PGD?**

PGD involves using IVF (in vitro fertilisation) to create embryos in the laboratory from a couple’s eggs and sperm. Each embryo is then tested for the particular genetic condition (this is called cell biopsy). An unaffected embryo is then transferred into the uterus (womb), in the hope that a pregnancy will occur.

**Who can have PGD?**

PGD is currently offered in various NHS and private centres in the UK for a number of conditions. Details about the different centres is available on the Human Fertilisation and Embryology (HFEA) website (see back page).

The HFEA website provides a list of conditions that PGD has been licenced for. If a condition is not on the list, this may be because the condition is not yet approved or it was approved after the website was last updated. If it is not approved then a clinic can apply to the HFEA for a licence which may be granted if the condition is considered serious enough.

**What does PGD involve?**

Even though most couples who are going to have PGD are able to become pregnant themselves, they will need to undergo (IVF) to produce embryos for testing.

First, the ovaries of the female partner are stimulated to produce several eggs. This is achieved by using a combination of fertility drugs, which are taken by nasal spray and by daily injection.

Once the eggs are mature, they are collected from the ovaries under ultrasound guidance. A fine needle is passed through the vaginal wall to collect the eggs one by one. The procedure is carried out under deep sedation and usually takes around 20 minutes.

A semen sample is produced by the male partner on the same day.

The sperm are then used to fertilise the eggs in the laboratory. The sperm may be mixed together with the eggs (IVF), or a technique called intra-cytoplasmic sperm injection (ICSI) may be used.

Eggs which are successfully fertilised begin to grow and divide. They are now called embryos.

About 3-5 days later, once the embryo has grown to at least six cells in size, one cell is very carefully removed (this is called the embryo ‘ biopsy’). This cell is then tested for the particular genetic condition.

The following day, one or occasionally two unaffected embryos are placed into the uterus (womb) using a fine tube or catheter. Ten days later a pregnancy test is carried out to see whether the PGD treatment has been successful.

**What are the chances of success with PGD?**

As PGD involves using IVF, the success rate is relatively low compared to the chances of conceiving naturally. Success rates are about 1 in 3 for every embryo transferred. You can check success rates with individual providers.

**How much does PGD cost?**

The cost of self-funding PGD will vary depending on the clinic but is around £12,000 per cycle. Prices may vary in different centres. Many patients will be eligible for NHS funding. Each referral is considered individually. Since April 2013 NHS England agreed to central funding for couples living in England if defined criteria are met. If you decide to pursue PGD, the clinic (private or NHS) will usually apply for funding on your behalf.