

Questions to Ask if You are Considering Pre-implantation Genetic Diagnosis (#19B)

Following the birth of the first baby born through IVF where PGD was used, thousands of couples have undergone PGD to increase their chances of having a healthy baby free of a genetic disorder. PGD is used to test for chromosomal abnormalities in embryos including problems with the number of chromosomes (aneuploidy) or structural rearrangements such as translocations. Aneuploidy testing may be recommended for any woman who have had two or more miscarriages, for women over 35 who have had a miscarriage or for couples who have had two or more unsuccessful IVF cycles. PGD is also used to test embryos from couples with a genetic disease in their family. These include autosomal dominant disorders, autosomal recessive disorders and X-linked gene defects, such as cystic fibrosis.

PGD is done on day-3 embryos which have 4-8 cells. A small cell or blastomere is removed from each embryo and is tested for the genetic abnormality. The risk of damaging the embryo at this point is very low. Only embryos that show normal results are transferred back to the uterus. Studies have shown there is no increased risk of birth defects following PGD. It is important to remember that:

PGD is not 100% accurate because only one cell is tested. The technique is technically challenging and requires great expertise. Therefore, an amniocentesis or chorionic villus sampling is suggested after a pregnancy is documented.

PGD testing ranges from approximately \$2000 to \$5000 and is not covered by most insurance companies.

Not all IVF centers do PGD. The experimental techniques require great expertise and should only be done by qualified personnel. It is preferable if the lab performing PGD has a PhD or MD trained medical geneticist responsible for the PGD laboratory.

If you are considering doing PGD, make certain the laboratory is experienced, does a large number of

cases, and is certified. Ask your doctor at the IVF clinic or the lab director the following questions:

- ❑ What training has the PGD laboratory personnel who are performing the testing have?
- ❑ How long have they been doing the procedure?
- ❑ When will you get the results of the PGD?
- ❑ What will happen if all the embryos are genetically abnormal?
- ❑ What the clinic's success rate is for frozen embryo transfer following embryo biopsy?

Further information on this topic is available through RESOLVE fact sheets. For a publications order form, go online to www.resolve.org. You can also contact RESOLVE Headquarters at 1760 Old Meadow Rd, Ste 500, McLean, VA 22102 or 703.556.7172.

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