ABSTRACT

Following the advances in the techniques of Medically Assisted Reproduction (MAR), 1990 saw the first child born after the development of preimplantation genetic diagnosis. In this analysis embryos are tested for the presence of genetic anomalies at three to five days after fertilization and only unaffected embryos are transferred to the maternal uterus. The technique offers good prospects to couples at risk for conventional prenatal diagnosis. It is particularly useful where MAR techniques are necessary, in which early embryo selection avoids later termination of pregnancy.

Ethical problems related to this technique start well before the analysis with the need for detailed non-directive genetic counselling, obtaining fully informed consent for the procedure and maintaining strict confidentiality; the main ethical problems are concerned with the status, investigation and manipulating of the embryo, eugenic or sex selection and the provision of resources.

In Portugal the application of laws concerning regulation of Medically Assisted Reproduction in 2008 has clarified and formalised the medical and laboratory procedures and in some cases fundamentally changed them, particularly in the requirement to cryopreserve all high quality non-transferred embryos and in specifying conditions in which embryo experimentation may be permitted. Overall, as is shown by comparison of questionnaires from 2001 and 2010, the major ethical problems that confront professionals in this area of medicine are related to the beginning of life.

Based on the motives discussed in the thesis and foreseeing some of the difficulties in taking positions for the resolution of such problematic conflicts of ethical attitudes, the great challenge in ethics in the next few generations will be to define the limits of "embryo correction" that are considered reasonable and acceptable for the society of the future while never forgetting to apply the four fundamental ethical principles, autonomy, beneficence, non-maleficence and justice.