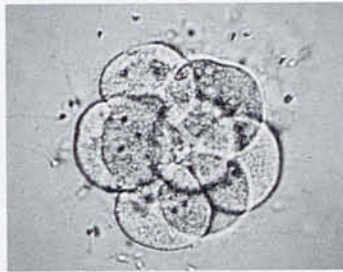


FERTILIZATION *IN VITRO*

FOUR YEARS AFTER THE START OF THE PROGRAMME,
THE CENTRE'S RESULTS ARE STABLE AND COMPARABLE
TO THOSE OF OTHER TEAMS AROUND THE WORLD.

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The fertilization *in vitro* programme carried out at the Dexeus institute in Barcelona was started in December 1983, after a visit by two of the institute's members to France and Austria to perfect their knowledge of the technique to be used.

Patients for whom this sort of treatment is suitable are those whose Fallopian tubes are incapable of transporting the ovule, either because of some blockage or else because they have been surgically removed, etc. It is also suitable in certain cases of masculine problems: immunological factors or sterility without diagnosis. First of all, the patients have to be submitted to hormone treatment to stimulate the ovaries, which in this way produce several ovules instead of just one, which is what happens in the natural cycle. The usefulness of this treatment has been sufficiently proved, since it allows the development of several ovules which, once fertilized and transferred, will increase the possibilities of pregnancy.

Strict control of the response of each patient to the treatment makes it possible to determine the best moment to collect the ovules. This can then be done with a simple intervention under a local or general anaesthetic. The ovules are then brought

into contact with the spermatozoa and kept in a medium in the ideal conditions for fertilization and for the later development of the embryos. Two days after the collection of the ovules, if the fertilization and the development of the embryos have been correct, the ovules are placed in the patient's uterus via the vagina, in a simple, harmless operation. From twelve to fourteen days after the transfer, it is already possible to tell if pregnancy has started. If this is the case, from now on it will evolve in exactly the same way as a pregnancy obtained naturally. Numerous teams of fertilization *in vitro* are emerging, both in Europe and in the United States or Australia, and the technique is used regularly and habitually in many centres.

The present trend in all the fertilization *in vitro* teams around the world is to simplify the process as much as possible. One of the steps in which this simplification has been possible is the collection of ovules: echographic puncture under local anaesthetic without hospitalization has now taken the place of laparotomy (general anaesthetic, hospitalization) in approximately half the cases and is a routine part of our programme.

Our laboratory also carries out, with pos-

itive results, the freezing of embryos by the French method. The technique proposed by Doctor J. Testart offers, at present, the best results in the world in the growth and preservation of embryos and is being adopted by a great number of teams.

Our first pregnancies using this technique are now following their course. The method increases the possibilities of success without the need for further treatment or intervention. In our programme, the best results have been achieved transplanting three embryos in a first attempt and freezing the rest for later transfers, should there be more than three.

Our centre organizes the donation of ovules to women without ovaries or who cannot ovulate, and the donation of embryos to those couples unable to produce them themselves. Four years after the start of the programme, the centre's results are stable and comparable to those of other teams around the world. We can offer between a 2 and 18 % chance of pregnancy and 14 % after the transfer of frozen embryos. Our efforts are directed towards improving our results (raising the proportion of pregnancies) and broadening the range of solutions to the problem of sterility. ■