



Women in the face of new reproductive technologies, who is in the service of whom?

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Are there human beings without dignity? Does human donation respond to a scientific or economic interest? A subject of great complexity in which it is important to deepen courageously the interests that underlie the new reproductive technologies and their consequences on the status of human life.

In 1978, twenty-five years ago, the first human being produced in a test tube was achieved. Since then, new reproductive technologies have achieved widespread dissemination. However, it is easy to see that the introduction into our Western societies of artificial reproduction has meant a radical change in the way we understand ourselves. The human being is no longer conceived, but produced, as is the case with objects. Thus, the modern ideal of man's dominion over nature is carried to the extreme. The author, director of the Institute of Human Rights of the University of Navarra, says the words of Saint Simon, who, raising the slogan of modernity, said that man can and should "use nature according to his whim."

The diffusion of these techniques has contributed the extension, in our days, of a "new pragmatism" that, before any technical and medical possibility, puts the decision of the patient and the results of the action to any ethical principle. This factor, among others, has determined that, despite the radical change in the new reproductive technologies in the conception of human beings and their origin, they have been introduced into Western societies with little debate or, at least, not with the rigor that this Require. Other issues, perhaps less transcendent, have deserved much more attention. Thus, few have deepened, for example, in the logic that inspires them, in the vision of women and motherhood on which they settle and, ultimately, in their budgets and consequences on the status of human life.

In particular, and concerning the consideration of women, these techniques have been sustained in a discourse, apparently congruent and articulated, supported to a great extent in a concrete vision of this. This discourse sits on certain budgets, presented as axioms or "indisputable truths". However, when analyzed with some

detail, it is discovered that, far from being "factual data" or neutral, we are, in many cases, in the face of ideological constructions, inaccuracies or even clear reductionisms. In this sense, questioning science and analyzing the ideological, cultural and social parameters and budgets of which part is not to fall into new obscurantism, but to reject its idolatry and to go to the necessary exercise of reason.

That is why I will try to analyze some of these budgets, especially when it comes to the vision of the main recipient of these techniques, the woman. I will also deal with some of the consequences of these techniques, especially for women's bodies.

Infertility is an inability to perform personal

The first budget in which I am going to stop is the fact that the new artificial techniques of human reproduction are disseminated in the shadow of the message that sterility implies, for women, inability to perform personally. Sterility, at other times considered as "a social disgrace" or a lack of femininity, is valued, to a large extent, as an impossibility of individual realization. In many cases, it also presents itself as an impediment to achieving a family life project. The non-achievement of the child is not understood as an acceptance of the nature of the woman-and of the internal logic of conception-but as a failure of her body and even of the same woman.

From this perspective, for some, the desire to have children is presented, indisputably, as a legitimate demand for personal fulfillment. As Cambron points out, "the impossibility (by sterility or infertility) to see this desire fulfilled will be lived as a supreme biological disgrace." This, sadly, often derives from a real obsession.

At the same time, it should be pointed out that our society is full of contradictions about motherhood. Some infertile women undergo, at a great emotional and physical cost, in vitro fertilization without anyone assuring them of success. Other fertile women abort for sheer convenience. While the achievement of the Son is presented, in the first case, as an inescapable requirement of personal fulfillment, in the second course the son usually appears as an insurmountable obstacle to the realization of the LIFE project.

In both cases, we find the intention to transform personal desires or preferences-and, therefore, demands of a subjective nature-in real and legitimate legal requirements. These are clear examples of the current tendency to expand, improperly, the content of certain rights, which leads to the proliferation of demands that cannot be described as legal.

In this regard, about the maternity cases of postmenopausal women, Mariapia Garavaglia has pointed out that the wishes are not rights and that children are not

consumer goods. It should not be forgotten that the son is a subject with their entity and an unconditioned ontological value. In this way, your alterity should always be safe.

But this reality is denied many times: many women who undergo the techniques of artificial reproduction do not accept the son unconditionally, but as a requirement for individual and conjugal fulfillment. This is verified when it is noted that, for some, the attainment of maternity at all costs does not repair in the sacrifice of human lives, those of embryos that remain frozen or discarded in the way of reproduction in vitro. The son's desire presented "apparently" as a right, comes to justify the death of other children, who do hold rights.

In this line, many have denounced the fact that these techniques do not subject to a great extent the son, because, ultimately, this becomes assimilated to an object to produce, whose entity as a subject is underestimated. In this sense, a woman subjected to these techniques showed at a round table about the desire of the son: "If you want to live with a child, then you can face the adoption...; But if you want to produce a child, which in my case, then adoption is excluded. "

In the face of it, it seems important to insist that the son is always another, someone who is not produced to satisfy a need, but a life that is accepted in all his wealth. In this regard, we can highlight the judgment of the Constitutional Chamber of the Supreme Court of Justice of Costa Rica, of March 15, 2000, which declared the unconstitutionality of the decree that approved the rules of assisted reproduction techniques. In recital IX, he says: "The technique of In Vitro fertilization and embryo transfer (...) Inattentive to human life. A human embryo is a person from the moment of conception, so it cannot be treated as an object, for research purposes, to be subjected to selection processes, preserved in freezing, and what is fundamental to the room, is not legitimate Constitutionally exposed to a disproportionate risk of death. "

In a different sense, the Spanish law 35/1988, of 22 November, of assisted fertilization techniques, states in its article 2.4: "The woman receiving these techniques may request that they are suspended at any time of its realization, and the request must be addressed". It makes depend entirely on the life of the son of the mother's desire.

Reducing maternity to biological maternity

Secondly, the child's budget as a requirement of personal fulfillment is based on a reductionist model of motherhood: it is the only a mother that conceives. As Tubert points out, it is still possible to observe the persistence of a cultural heritage that works, in fact, as a budget on which fertilization in vitro is based: the idea that biological motherhood is the essential realization of femininity, that a Woman is not true if she has no biological children.

In the face of it, it is essential to highlight a reality: motherhood is much more than a biological process. Besides, you can be a mother without having been biological. In this sense, the infertile woman who wants to be a mother should not choose to be biologically or to fall into despair. The solution is to know that you can develop your maternal sense even if you are not a biologically speaking mother.

In this line, some recent feminist theories have made a profound critique of the reduction of motherhood to an exclusively biological dimension. They have also highlighted the inconsistencies of the child's technological mindset at all costs, even risking their own lives. They have emphasized that the technology of in vitro reproduction, delving into the modern biomedical model, ignores the necessary integral protection of the physical and psychic health of the woman.

Thus, and following, among others, Levi-Strauss, it should be noted that maternity and paternity are constructions, to some extent, cultural and not only biological. Certainly, the human being is a biological reality, but at the same time, it exceeds pure biology. Among other things, it is characterized by its capacity to create its social environment. Among the answers that a person gives to internal and external situations, some correspond to their nature, and others to the cultural context and the exercise of their freedom. Maternity and paternity are not, therefore, purely biological realities. They imply, above all, a spirit of unconditional surrender, one to take responsibility for the life of another. The essentials of motherhood and paternity would not then be referred only to the organic process of reproduction, but to the transmission that defines and inserts the son into a social group, as the subject he loved for himself and responsible for his own life.

The new techniques of artificial reproduction, a solution to the suffering generated by the infertility

Thirdly, and about what has already been pointed out, it seems easy to note that in the social discourse on assisted reproduction techniques, the sensitive argument often resorts to it is legitimate to remedy the suffering generated by infertility. The existence of this suffering is a reality. We cannot ignore the pain that can be supposed, for a man or a woman, to be infertile. However, several issues should be pointed out:

In the first place, the same techniques, when presenting as possible the obtaining of the son, generate demands that otherwise would not exist. In this sense, Testard has pointed out that, in the face of the diffusion of artificial reproduction, "couples who had almost forgotten their sterility recover old procreative desires and enroll in rapidly saturated waiting lists." In many cases, the same expectations are generated that strengthen and reinforce the demand, thus increasing suffering, especially if the desired result is not achieved.

b) Secondly, despite the kindness of the target, eliminating suffering, these techniques, in many cases, turn against the same subjects who seek to help and,

more specifically, against the main recipient of them, The woman. As is well known, new reproductive technologies imply serious risks to the physical integrity-even life-of this. In reality, the very internal logic of artificial reproduction techniques ignores the physical and psychic health of women. These are issues that are relegated to the logic of outcome and success at all costs.

But it is dramatic that, based on these budgets, new reproductive techniques cannot ensure the solution to the great expectations created. According to reports provided by the most prestigious centers in the United States and Australia, the average success rate of these techniques is around 10%. Testard argues that it is necessary to analyze in detail the obtaining of these statistics since it is not usually included in the many patients subjected to hormonal stimulation and that they have not been able to conceive.

There are also situations in which are included as successes not to give birth to a living son, but the mere conception, irrespective of the occurrence of abortions, on the other hand, very common. If this is the case, the average rate would be at an even lower level. In this sense, the cruel irony is that, while reproductive technologies are "sold" as a miraculous solution for all those women who cannot conceive naturally, only a small percentage can get a child. As a result, the vast majority of women attending new reproductive techniques will go as they did: without a biological child. We can ask the following questions: In what situation are women in which reproductive techniques have failed? is the failure of the technique the failure of their lives?

Infertility as Pathology

Fourthly, the appeal to the need to eliminate suffering tends to be linked to the consideration that infertility is always a pathology (whatever its causes). As Cambron points out, researchers and physicians have built a new discourse on sterility that, inserted in its consideration as pathology, "seeks to legitimize the use of the techniques themselves and indirectly contribute to fostering the demand for Offspring".

Under this budget, the message that we are facing a medical treatment or therapy has been disseminated. This vision is, to a large extent, behind the demands of financing these techniques for public health. In this sense, for example, Spanish law 35/1988, of 22 November, of assisted fertilization techniques, in its explanatory statement alludes to the aforementioned techniques as a "treatment of sterility". Also, article 1.2. The same law maintains that "assisted reproduction techniques have as a fundamental purpose the medical performance in the face of human sterility".

Delving a little more, you can see that the new techniques are based on the budget that the non-achievement of the child is a pathology of women. And it is she who, de facto and before the social collective, carries the weight and the

scourge of infertility. For centuries, cultural traditions have not allowed even to suspect that the male could be sterile. The virility-fertility relationship has been—and is—so strong, that it has come to assimilate infertility with impotence. Proof of the permanence of this budget is that research in male infertility is scarce developed. In many cases, in the face of masculine problems such as oligospermia and asthenospermia, the woman's body is medicalizing directly, intending to be able to achieve a successful result through the new reproductive techniques. This is the case when these techniques are used because the sperm are unable, by themselves, to fertilize an egg.

But can it be considered infertility as a pathology? The issue is important, because of the consideration or not as such will depend, to a large extent, its qualification as therapy. And that will have consequences in the field of their moral and legal legitimation. Well, even though, as has been said, infertility is always presented as a disease, reality proves that it is not.

Infertility attributed to women may be due to deficiency or inability to ovulate, fertilize or gestate. In turn, this disability may be congenital, overcoming, or idiopathic. The latter refers to infertility without a known cause. It is important to note that this group constitutes one-third of all cases of infertility. As Cambron points out, from a statistical and medical point of view, sterility, although it is presented as something indeterminate, on this indetermination and inaccuracy is based on the justification of reproductive techniques. What is more, it could be added that the definition of infertility itself is made dependent on the sophistication of the technology available on the market. In this sense, says Koch: "When a new reproductive technology is introduced into the market, it changes the definition of infertility."

It is obvious that a human sexual relationship is not followed, mechanically, a conception. On the other hand, it seems clear that, in the human species, a multiplicity of factors occurs, among them the psychological ones, that determine that the conception is never something predeterminable. Therefore, infertility cannot be considered, in general, as a disease. It is only revealed to the extent that a project of conceiving appears. It is, then, the impossibility, for very complex and diverse reasons, to satisfy a desire. In this sense, it could be maintained that, except for very specific cases, infertility may not be a matter of health but a characteristic of the person.

On the other hand, even if sterility has a known pathological origin, artificial fertilization techniques are never a therapy. The technique used does not aim, in any case, to cure. Rather, it is a substitute for the interpersonal relationship of procreation by the technical relation of the production of human beings. The woman subjected to in vitro fertilization processes will thus be as sterile as she was. In many cases, the promotion, in the face of a sterility situation, of artificial reproduction techniques can indirectly produce a lack of interest and resources aimed at the basic investigation of the real causes of infertility.

It is easy to see that efforts in the study of the causes that trigger infertility are very scarce today. On the other hand, the presentation of artificial reproduction as a therapy to a supposed disease can lead to discarding its iatrogenic causes (such as the use of intrauterine devices, contraceptives, erroneous feeding, factors environmental, etc.). It also ignores that prevention is, in many cases, the best therapy.

But it is striking that, faced with this situation of "supposed" disease, it will respond with an intense medicalization of women. Even to the point of causing very serious risks. The speed with which the different techniques are moved from the experimental phase to the clinic has already been denounced on numerous occasions. A mere formal consent of women-not seldom with insufficient information-allows the woman to be used as a test bench for new and sophisticated techniques, the side effects of which are still to be determined.

Everything is sacrificed on the altar of success, even feminine health. For her, new reproductive technologies always pose intense and progressive aggression. Thus, for example, in the application of the technique of in vitro fertilization with embryo transfer (IVF-TE) can be distinguished, roughly, four phases: hormonal stimulation, egg extraction, fertilization of the eggs and their transfer to Woman's organism and, finally, to nesting in pregnancy.

Hormonal stimulation. It consists, first of all, in applying high doses of fertility hormone-containing clomiphene, to induce ovulation. At present, we study the similarity between this drug and the Diethylstilbestrol, of prohibited use. On the other hand, the substances used to achieve follicular maturation are mainly antiestrogens and gonadotrophins. They are usually applied in combination with the clomiphene. Later, ovulation is induced with human chorionic gonadotropin.

Although these hormonal treatments may be indicated in those women who have little or no ovarian activity, it has been found that many physicians apply them to women who ovulate spontaneously, intending to try to improve the yields. For this reason, its use has been described by some as "therapeutic fiercely". Especially, if you consider that these are applications that are, in many ways, in a still experimental phase, since their side effects are still being studied. Among them is ovarian hyperstimulation, which usually generates polycystic ovaries.

The French biologist Testard-one of the most prestigious figures currently in this field-has questioned the use of clomiphene, after finding evidence of the danger of this substance.

b) the second phase of the process consists of the extraction of eggs. Various techniques can be used. The first is the puncture of follicles with a needle, practicing the woman a laparoscopy under general anesthesia. The needle is guided to the follicle and another abdominal incision introduces forceps with which the egg is attached.

The other modality is to introduce the needle through the abdominal wall, guided by ultrasound and without general anesthesia.

Both procedures are not risk-free. In this sense, says Klein that eighteen deaths of women undergoing an in vitro fertilization program appear to be related to the puncture of the follicle, by introducing the needle through the abdominal wall.

c) the third stage of the procedure is the fertilization of the eggs and its transfer to the woman's body. After obtaining the embryos, mixing the eggs with the semen, they are transferred to the woman's uterus. They move through the vagina through a catheter. Once the process has been carried out, the woman will have to undergo continuous tests to verify that the embryos continue its development.

D) Once the embryo has been transferred to the uterus, if its nesting is achieved, it is passed to the pregnancy phase. Complications that may occur at this time include abortion. This possibility is two to three times more frequent than in normal pregnancies. Extra-uterine pregnancies and multiple pregnancies are also more likely because more than one embryo is usually transferred to the mother's womb to increase the success rate. The problem arises when all or most of the embryos are nested, as this may pose a serious risk to the mother. The response to this situation is often called "embryonic reduction," a euphemism that conceals abortion from embryos considered "surplus." Finally, it should be noted that, if the pregnancy has progressed successfully, childbirth usually occurs through the Caesarean section.

In short, it can be said that subject to these techniques, the body of the woman reaches a degree of manipulation very high and not oblivious to serious risks. In this regard, the report of the National Commission on assisted Human Reproduction, published in 1998, recognized the existence of real physical and psychic risks for women.

The public character of the woman's body

Subjected to these techniques, the body of the woman is transformed into a public place, in a real "living" laboratory in which everything is worth as long as it reaches the proposed end, that identifies with the success. Sometimes your body will not only be the instrument to ensure offspring, but it will also be used for other purposes, such as improving the reproductive techniques themselves or obtaining biological material for research.

In this way, a process-as is the conception of a human being, which naturally is characterized by being inserted in a strictly intimate and private area-acquires a radically public character. It is the woman who must psychically assume this profound transformation of reality. Sometimes he will not be able, which will cause him deep suffering. There is no shortage of women's testimonies in this regard.

Duelli Klein, in a field study on the situation of women who had left the artificial fertilization programs without having achieved a child, confirms the existence of recurrent feelings of extra limitation on the part of the doctors, lack of Real information and even "the trauma of being treated like living labs." It is thus noted the conviction that their bodies have become, in some way, a tool, subordinated to the laws of success and production.

On the other hand, it is important to insist that, even when the cause of sterility has a male origin, such as the lack of mobility of sperm, the risk of treatment is relapsed into the woman. It is your body that assumes the full weight of the process. Gypsum produces a rupture of the balance between man and woman in the gestational process. The male always loses his place, both when the sperm is his own and when he is foreign. In the latter case, the position of man is reduced to that of a mere spectator of a process in which he does not have the slightest role. The author of the "creator" of the son, if he is born, is the doctor, who uses as an instrument the body of the woman.

But the methods of artificial reproduction not only assault the physical dimension of women. Also, your psyche can be affected because these techniques deepen the division between the biological and psychic dimensions of the person. While in the natural reproduction both dimensions are called to integrate harmoniously, in the artificial reproduction this integration is radically impossible. A total rupture occurs with the natural way of conceiving. The conception is transformed into a production process, the biological is separated from the psychic. Women must be delivered completely to the process; they must be subordinated to the power in a concrete and reductive way to understand the medicine. Coupled with other factors, such as the displacement of the figure of the male in the process, this leads to the fact that women are often in conflict with themselves and with family backbone relationships. Very easily, the investment-emotional, family, economic, social, etc.-that the woman does is so radical, that the achievement of the son can become a real obsession, in which the whole life project is committed.

Reducing human pain to a technical problem

In reality, when-immersed in a consumer society-the son is understood as a greater good, directly dependent on the option for a lifestyle, the budgets are eliminated that allow us to understand the logic of the nature of the human procreation. In this sense, Illich calls "structural iatrogenic" to the regression of the level of health that for him represents the increasing inability to confront essential experiences such as pain, sickness, and death, and that generates a demand for manipulation. Pain loses its human dimension and becomes a technical problem. In utter lack of meaning, its non-eradication leads to the extreme of depriving of meaning the same human life that suffers it.

It is not a question of giving the pain an absolute sense, or of not putting the means to eradicate it. However, it is important to leave him with a minimum of

space to find his meaning in human life, a life which, on the other hand, is inevitably attached to him.

In the case of women, the apparent pain of not getting a biological child, being regarded as something private of sense, is identified as a pathology to be eliminated at all costs. Therefore, there is no previous and necessary space to investigate and situate that pain, perhaps detecting a source other than the lack of the biological son. There is no place, for that in the social imaginary. As Illich emphasizes, in cases where fertilization is used in vitro is extremely exceptional for physicians to ask about the meaning of the suffering of the woman who demands a child. The usual thing is that this pain is directly referred to as organic dysfunction. In the psychoanalyst language, the demand of the patient does not usually coincide with the real or unconscious desire. For Lacan, demand always refers to a thing other than the satisfactions it claims (in this case, the son). It's always about the demand for affection and love. Therefore, it is important to consider the need to replace the strictly medical-technical vision with listening and understanding of the patient's situation. In this regard, Lesley Doya! He argues that reproductive technologies are often not used only as a response to infertility. In reality, they are often referred to as a (bio) technological response to a person's life-crisis situation.

This explains a large number of women willing to undergo all kinds of risks to reach the biological child. In this sense, several authors have maintained the inability to recognize real freedom when accessing these new technologies. They come to say that there is material violence on women, soft violence, invisible to the victims themselves.

They deserve to quote here some ideas and statements collected by Silvia Tubert in her book *Women without Shadow*. Maternity and technology, obtained in field studies on specific cases of women who went to the maternity section of the health city of La Paz in Madrid, in demand of an in vitro fertilization:

"Everyone tells me: Go for all, because, if not, you're going to regret one day thinking that you could have done it and you haven't done it. "

"So many tests and things traumatize you a little, you get tired. When nature doesn't give it, you don't have to force it. I had decided to leave him, but the doctor was kind enough to call me: I'm back. "

"In the village my family, the people... They told me to go to the doctor. " Koch describes what he understands as the problem of "access to infertility." Or, in other words, the right to assume one's reality. Their denial has as a consequence that women who "surrender" without risking everything, even the most experimental treatments, must accept their degree of "guilt." They will always be seen as responsible-at least in part-of their situation.

Legal protection of the right to life and the health of women

Nobody argues that one of the functions of the social state of the law is to guarantee, as a demand derived from the right to life, the health of its citizens. In this sense, the Spanish Constitution guarantees, in its article 15, "The right to life and to the physical and moral integrity", which implies a commitment to the promotion and real enjoyment of the means necessary to maintain the health.

This, in turn, is a control of the products and techniques available on the market concerning their safety on human health. It also entails the establishment of legal sanctions for those who injure the physical and psychic integrity of the citizens. As it has been proven, Spanish legislation mistakenly assimilates new reproductive technologies with a therapy. In this way, it is understood that the woman who is subjected to these techniques do it to cure or to remedy a pathology. It is based on the assumption that these techniques are always voluntary so that women must take on the inevitable side effects.

Law 35/88 does not envisage the possibility of injury to women. This is added to the fact-empirically verified-that women who undergo in vitro fertilization often ignore, due to the lack of information provided, the true risks of bodily and psychic injuries, inseparably linked to the new Reproductive technologies. Often the medical team, to increase the chances of success, takes decisions in which women have little to do, even if those decisions affect their physical integrity. Then, the woman, with a mere formal consent, can be exposed to interventions that carry important risks and whose side effects are not yet contrasted.

Conclusion

We are faced with a subject of great complexity and should not be treated superficially. It is important to deepen courageously the interests that underlie the new reproductive technologies, the logic that inspires them, their consequences on the status of human life, as well as the vision of the woman on which they settle. Following the foregoing, it is surprising that from various instances the use of these techniques is boosted, and even public funding is demanded, in the name of a pretended right to freedom and the health of women. It is thus ignored that they are a true assault on women's lives and health. The public authorities should question the unconditional support, fundamentally economic, that lends to the techniques of artificial reproduction.

Instead, important items of economic resources should be allocated to research on the origins of sterility and its true therapy.

On the other hand, if what is intended is to give a child to a family and that this is loved by itself, it would be much more congruent for the public authorities to support more adequately the processes of adoption. Because the economic costs and bureaucratic procedures make it very difficult-sometimes impossible-to get many children to have something that is not merely a desire, but a real right: a family.

In this sense, it would be desirable to expedite and institutional support for adoption processes, and even their public subsidy.

Are there human beings without dignity?

Angela Dearisi Miralles

A few weeks ago, the report of the Advisory Committee on Ethics in Scientific and technological research on stem cell research was made public. This report, while dealing with other issues, actually aims to answer a disturbing question: what should we do about the embryos currently frozen in Spain?

As is well known, and it is expressly indicated in the official text, in Spain there are thousands of frozen human embryos left over from the in vitro fertilization processes. Our law of assisted reproduction techniques, one of the most permissive in the world, establishes that surplus embryos of an in vitro fertilization, not transferred to the uterus, are cryopreserved for up to five years. However, the law does not clarify what its fate will be.

The report admits that the use of these embryos for research (mainly the extraction of their stem cells) generates ethical problems. However, compared to other alternatives, it recommends its use for the derivation of stem cells, which implies its destruction. In this sense, the report argues that the human embryo has a value, but ponderable concerning other values. Therefore, it establishes that "the current legislation should be amended to establish an adequate legal framework about research with stem cells from surplus human embryos". In practice, these recommendations imply a denial of dignity to the human embryo.

Our Western legal culture is built on a clear budget: the distinction between person and thing, between subject and object. It was a breakthrough-and a great humanization for the right to assumes that the human individual, each member of the human family, deserves unconditional respect, which implies, among other things, its non-instrumentalization. In this sense, already Kant understood that dignity means that human beings "are not merely subjective ends, whose existence, as an effect of our action, has a value for us, but is objective purposes, that is, things whose existence is in itself an end, and such a purpose, that instead there can be no other purpose for which they should serve as means. " And in another fragment of his foundation of the metaphysics of the customs, he held: "That which has a price can be replaced by something equivalent; Instead, what is above all price and therefore does not admit equivalents, that has a dignity. "

This idea was, in a way, embodied in the preamble to the Universal Declaration of Human Rights of 1948: "Freedom, justice, and peace in the world are based on the recognition of the intrinsic dignity and the equal and inalienable rights of all Members of the human family. " At present, and especially in the field of bioethics, all international legal texts presuppose the principle of human dignity. Thus, for example, the Council of Europe Convention on Human Rights and Biomedicine,

only in its preamble refers to human dignity three times, and article 1 begins by emphasizing that "the parties to this Convention will protect the dignity and identity of every being Human... ". In the same vein, recommendation 1046 adopted in 1986 by the Assembly of the Council of Europe on the use of embryos and fetuses for diagnostic, therapeutic, scientific, industrial and commercial purposes-recognized, in its points 5 and 8, that "life is Human being since fertilization. " And in point 10 he held: "The embryo and the human fetus must benefit in all circumstances of respect due to human dignity."

The recognition of the principle of human dignity would have, among others, the following consequences about the issue that concerns us:

A. It is a condition inherent to every human being. So, it makes no sense to claim that there are human beings without dignity. Thus, the preamble of the Convention on Human Rights and Biomedicine of the Council of Europe establishes "the need to respect human beings, not only as individuals but also in their belonging to the human species", recognizing the importance of ensuring their Dignity. And in his article first, he also refers to the protection of the dignity of every human being.

B. The dignity of the human being implies the ethical requirement of its non-instrumentalization and the non-marketing of its parts. Therefore, it must be understood as a fundamental principle the primacy of the human being against any kind of social or economic interest. Concerning the principle of non-instrumentalization of the human being, article 2 of the Convention on Human Rights and Biomedicine states that "the interest and well-being of the human being will prevail against the exclusive interest of society or science".

Today's peculiarity

However, at present, we are faced with a situation that could be described at least as "peculiar". The desire to have biological children has generated that thousands of human individuals, whom no one has consulted, are found in liquid nitrogen tanks, with a very uncertain fate. What, in this situation, would be the solution most consistent with human dignity?

The first thing we must rigorously consider is the ethical and legal legitimacy of the freezing of human embryos. There is no right to the child, as this is not an object. There is only the desire to have biological children, and this desire, like all desires, must have limits. The non-freezing of human beings is one of them. In this sense, the Italian Artificial Reproduction Act expressly prohibits the freezing and experimentation with embryos.

Secondly; Since frozen embryos-regardless of their health status, viability...-are human beings, they deserve a treatment according to their dignity. This implies their respect, which requires their non-manipulation while they are alive. In this way, the indetermination of the viability of life should not be the decisive criterion

for its legal protection. It is also uncertain the life of a cancer patient or a dying old man and does not stop being deserving of respect. The dignity of each human individual cannot be made dependent on the "uncertain" character of his life. Uncertainty belongs to the plane of our knowledge, and what, however, is being debated is the ontological status of human life.

Human cloning: scientific or economic interest?

Luis María Gonzalo

The information that has recently been aired on the supposed birth of the first human clone, given to know by Dr. Brigitte Bousselier and his team of the sect Raelian (which has been the funniest scientific joke, according to Claude Vorilhon, founder of The aforementioned sect), have renewed the debate on human cloning.

Human cloning, i.e. the production of human beings genetically identical to the progenitor, has been universally rejected. In the United Nations, in discussing this issue in November, all countries rejected reproductive human cloning. There was no consensus, however, regarding human therapeutic cloning, that is, the one that seeks to produce cloned human embryos to obtain cells or tissues that can be transplanted to a patient. In this case, thirty-six countries, including the U.S. And Spain, rejected it; But another twenty, led by Germany and France, showed supporters. Indeed, in some countries like the United Kingdom, the Netherlands and Singapore have already allowed it.

What is therapeutic cloning?

Some consider therapeutic cloning as a preferable alternative to the use of embryonic stem cells (CME), which are usually obtained from surplus embryos of in vitro fertilization. The reason for this preference is that CME produces an immune reaction in the host, although initially it was expected that they would not be rejected (although the rejection reaction is less intense than when an adult organ is transplanted). On the other hand, IF CME obtained from cloned embryos are used, such rejection is not given, since the genetic constitution is identical to that of the recipient.

The clone embryos are obtained employing the so-called nuclear transference: a previously prepared oocyte, the nucleus is extracted and replaced by the nucleus of a cell of the **FUTURE CME** receptor.

Are cloning experiences recent?

Although in recent years is when the media has released (especially since Wilmut and his team published the birth of the clone Dolly in 1997), it is an investigation that has already more than half a century of history.

Indeed, Briggs and King began in 1943 this type of experimentation in Philadelphia, and in 1952 obtained the first clone frogs. For this purpose, they used nuclei

obtained from a frog blastocyst. In mammals, it was Willadsen the first to get cloned lambs in 1986. The difference of this cloning concerning that of Wilmut, which was also in lambs, is that it got it with an adult cell nucleus, which was a notable scientific novelty: it showed that the nucleus of adult cells can be remodeled in such a way that many silent genes can be re-expressed in the external conditions (such as those presented in the cytoplasm of oocyte) are adequate. It would also be possible to clone adult individuals, news received with joy by groups of lesbians who saw the possibility of having daughters identical to them and without the intervention of male.

Successes and failures in cloning

Exposed the technique of cloning in the so simplified way we do it, can lead to a false idea about its possibilities. On the one hand, it is a method that requires quite sophisticated means and techniques and, on the other, even the teams with means and experience have to make multiple attempts to achieve a case.

For example, Wilmut got the Dolly Corder after 434 trials. Taken this to the case of man, it is seen that to obtain a clonal human embryo it would be necessary to sacrifice many embryos.

Difficulties in human cloning

One we have just explained: the technical difficulty, of which you have ample experience in animals. Another difficulty is that, for now, in the attempts that have been made to obtain human clones, it has not been achieved that the embryo reached the blastocyst stage (which is necessary to obtain CME). Thus, a team of the victorious Cell Technology, in Worcester (Massachusetts), has reported that the human clones that produced exceeded the morula phase, but died when they reached blastocysts.

Above these scientific-technical difficulties, there are the bioethical implications. Both reproductive cloning and therapeutics mean sacrificing many human lives to satisfy the whims of some or the attempt to heal a sick person. Perhaps such ethical implications are of little importance to materialists, But he's got it, and big.

Scientific implications-Chrematistics

When investigating the genesis and development of the discussion on human cloning and CME, it is quite clear that, along with the scientific interest of the subject, there are other interests among which are the economic ones. It is enough to see that among the most interested in obtaining the approval of human therapeutic cloning are several biotechnology companies.

But together with the Chrematistic interest, there is no denying that there is also scientific interest since the clone embryos can provide good service for the

advancement of our knowledge in the development of the early stages of human life. Thus, Wilmut and his team from the Roslin Institute have requested the appropriate permits to initiate these experiences.

Embryonic and adult stem cells

The discovery of stem cells (stem cells) is relatively recent. It began to suspect its existence from the work of Till and McCulloch (1961), in those who demonstrated that in the bone marrow there are clone precursors that give rise to multilineal hematopoietic colonies in the spleen and that some of their cells are capable of forming new splenic colonies. At present, it is known that all tissues, including the nervous one, possess undifferentiated cells that can give rise not only to the cells of the tissue where they reside but also to other different ones. For example, those of the bone marrow not only form the different blood cells, but also different ones, including neurons. I mean, they're multipotent.

Compared stem cells from an adult with embryonic stem cells, it is seen that the latter have greater capacity mitotic and give rise to cells of more diverse types. At first glance, they have advantages over adult stem cells, but in reality, they are rather disadvantages.

The greater splitting capacity of the CME has the disadvantage that it is difficult to control, so it can produce real tumors, and its pluripotential makes it more difficult to differentiate into cells of the tissue that you want to regenerate. With the adult's stem cells, However, having less proliferative capacity, there is almost no risk of giving rise to tumor formations and, on the other hand, implanted in the tissue that is to be regenerated, its multipotentiality is more easily oriented to the Generation of cells in that tissue. A third data that also makes the non-clonal CME preferable is that, as they come from the same individual to which they have to be transplanted, they do not present any problem of rejection.

If this is the state of the potential of stem cells for therapeutic purposes, it is understood that it is more logical to orient research on adult stem cells and not to insist on experiences with embryonic stem cells obtained from Cloned embryos, in some cases, or without cloning, in others.