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EDITORIAL ARTICLE
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**ЭТИЧЕСКИЕ ВОЗЗРЕНИЯ НА ВОПРОС ДОНОРСТВА И ТРАНСПЛАНТАЦИИ ОРГАНОВ
В КАТОЛИЧЕСКОМ ВЕРОУЧЕНИИ**

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Резюме. Актуальность. В странах Европы и Америки с преобладанием христиан в популяции отмечается более высокий уровень донорства органов. Хотя вопросы посмертного донорства не упоминаются в Священном Писании, идея бескорыстного посмертного жертвования полностью соответствует христианскому духу. Римская католическая церковь первой признала донорство и трансплантацию органов морально приемлемыми и указала, что поощряет донорство органов. Целью работы стал анализ воззрений, изложенных в официальных документах Римской католической церкви, на вопросы этики в деятельности по донорству и трансплантации органов. Материалы и методы: Проанализированы положения Катехизиса Католической Церкви, посланий Пап Римских, Кодекса канонического права и других этических документов по вопросам приемлемости технологии трансплантации органов и посмертного донорства, принципа презумпции согласия, легитимности констатации смерти мозга, осуждения торговли органами, недопустимости дискриминации при аллокации органов, допустимости трансплантации от живых доноров, донорства от младенцев с анэнцефалией, ксенотрансплантации. Заключение: Представленная работа свидетельствует о том, что католическая позиция по вопросам донорства и трансплантации органов является хорошо и глубоко проработанной, основанной на уважении достоинства человека и его праве выбора, поощрении добровольного акта пожертвования своих органов как дара, простирающегося за границу жизни и смерти.

Ключевые слова: биомедицинская этика; каноническое право; католическая церковь; смерть мозга; презумпция согласия; ксенотрансплантация; аллотрансплантация.

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**ETHICAL VIEWS ON THE ISSUE OF ORGAN DONATION AND TRANSPLANTATION
IN CATHOLIC DOCTRINE**

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Resume. In countries in Europe and America with a predominance of Christians in the population, there is a higher level of organ donation. Although the issue of post mortem donation is not mentioned in the Holy Scriptures, the idea of selfless sacrifice is entirely in keeping with the Christian spirit. The Roman Catholic Church was the first to recognize organ donation and transplantation as morally acceptable and indicated that it encourages organ donation. The purpose of the work was to analyze the views set forth in the official documents of the Roman Catholic Church on the issues of ethics in organ donation and transplantation. Materials and methods. The provisions of the Catechism of the Catholic Church, the Epistles of the Popes of Rome, the Code of Canon Law and other ethical documents on the acceptability of the technology of organ transplantation and postmortem donation, the principle of the presumption of consent, the legitimacy of the declaration of brain death, the condemnation of organ trafficking, the inadmissibility of discrimination in the allocation of organs, the admissibility of transplantation from living donors, donation from infants with anencephaly, xenotransplantation are analyzed. Conclusion. The presented work testifies to the fact that the Catholic position on organ donation and transplantation is well and deeply developed, based on respect for the dignity of a person and his right to choose, the encouragement of the voluntary act of donating one's organs as a gift extending beyond the border of life and death.

Keywords: biomedical ethics; canon law; Catholic Church; brain death; presumption of consent; xenotransplantation; allotransplantation.

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Organ transplantation is the most unique medical specialty. This uniqueness is determined by the fact that in addition to the classical "doctor-patient" paradigm, another person enters the list of subjects during transplantation – a donor, whose organs are used to save the life of another person. The need to take into account the will of this person and preserve his dignity, the increasing need to save people's lives through transplantation, the presence of disputes and ambiguous judgments makes many people seek moral certainty in faith and religion. For 2.3 billion Christians, the teachings of their Church are an important guide to life, death and ethical issues. And, although the issue of organ donation is not mentioned in the Holy Scriptures, the idea of selfless sacrifice for salvation is central to the Christian Faith. *"For God so loved the world that he gave his one and only Son, that whoever believes in him shall not perish but have eternal life"* (John 3:16). Christians believe in eternal life and that nothing that can happen to the body, before or after death, will disrupt the relationship with God. *"And God will wipe away every tear from their eyes, and there will be no more death; There will be no more mourning, nor crying, nor pain, for the former things have passed away"* (Rev. 21:4-5). Jesus Christ sent his apostles with the task of healing sicknesses and illnesses: *"Heal the sick... freely you have received, freely give"* (Matthew 10:8). Studying the views of the Catholic Church on issues of organ donation and transplantation is an important task, both because of the large number of believers (1.3 billion) and the considerable length of time these issues have been studied. Indeed, the concept of transplantation as a possible life-saving option has been present in legend for quite a long time.

In the "Golden Legend" of James of Voragine, dated 1257, which is not an officially recognized document by the Church, but widespread in Europe in the Middle Ages, it is written that Felix, the eighth pope after St. Gregory, built a church in Rome in memory of Saints Cosmas and Damian. *"And there was a man who fervently served these martyrs with a large ulcer on his leg. While he was sleeping, the holy martyrs Cosmas and Damian appeared to their pious servant. They carried tools and ointment with them. One of them asked - where will we get flesh to fill his defect? Another replied - here, there is an Ethiopian who died today and was recently buried in St. Peter's cemetery, let's take his flesh and fill the wound. The man woke up and saw that his leg no longer hurt, but his healthy hip seemed foreign to him. When they opened the coffin of that Moor, he found that he had a sick leg instead of his former healthy one."* This plot was widely known in Europe long before the appearance of any consistent prerequisites for real clinical transplantation.

The Roman Catholic Church was the first to recognize organ donation and transplantation as morally ac-

ceptable and indicated that it encourages organ donation. The specific issues of organ donation and transplantation should be considered.



Figure 1. Saints Cosmas and Damian heal Justin. St. Fra Angelico. 1445. Oil and tempera on the board. Kunsthaus, Zurich

Acceptability of organ transplantation and post-mortem donation technology

In 1956, Pope Pius XII declared: *"man can dispose of his body at will and dedicate it to useful, morally blameless and even noble purposes, among which is the desire to help the sick and suffering... This decision should not be condemned, but positively justified."* In August 2000, Pope John Paul II attended the International Congress on Transplantation in Rome, where he stated that *"transplantation is a great advance in science"* and stated that *"the Catholic Church will promote the fact that there is a need for organ donors and that Christians should accept this as a "challenge to their generosity and brotherly love", as long as ethical principles are respected"* and further *"We must instill in the hearts of people, especially in the hearts of young people, a genuine and deep understanding of the need brotherly love, a love that can find expression in the decision to become an organ donor."* In 2008, Pope Benedict XVI, addressing the participants of the same congress, will say: *"Organ donation is a unique testimony of mercy. Nowadays, often marked by different with all the manifestations of egoism, it is increasingly important to understand how necessary it is to accept the logic of the value of a correct understanding of life. In it lies the responsibility of love and mercy to make one's own life a gift to others, if only one truly strives for true self-sacrifice. As the Lord Jesus taught, only by giving your life can you keep it."* Even before his election to the Papal throne, Cardinal Joseph Ratzinger emphasized that he had an organ donor card and showed it to journalists. In October 2014, Pope Francis also called the act of organ donation *"a testimony of love for one's neighbor."*

These teachings are implemented in the Catechism of the Catholic Church (CCC). CCC, indicates in paragraph 2296 *"Organ transplants are in conformity with the moral law if the physical and psychological dangers and risks to the donor are proportionate to the good sought for the recipient. Organ donation after death is a noble and meritorious act and is to be encouraged as an expression of generous solidarity. It is not morally acceptable if the donor or his proxy has not given explicit consent. Moreover, it is not morally admissible to bring about the disabling mutilation or death of a human being, even in order to delay the death of other persons."* and further in paragraph 2301 *"The selfless gift of organs after death is legal and can be commendable."*

An important ethical normative document for Catholic health care was the "New Statute of Medical Workers" (Nuova carta degli operatori sanitari), issued by the Pontifical Council for the Pastoral Care of Health in 2016. This document, in particular, proclaims the following. *"The progress and spread of transplantology today makes it possible to treat and cure many patients who until recently could only expect death or, at best, a painful and limited existence. Organ donation and transplantation are important manifestations of service to life and solidarity that bind people together, and are a special form of witness to charity. For these reasons, they have a moral value that legitimizes their medical practice. Medical intervention in transplantation is inseparable from the act of human donation. In organ donation, the donor generously and freely agrees to their removal. In the case of preserving organs from a living person, consent must be given personally by a person capable of expressing it. Particular attention should be paid to persons in particularly vulnerable situations. In the case of postmortem donation, consent must be expressed in some way during the donor's lifetime and thereafter by someone who can legally represent him. The possibility allowed by the biomedical process to plan after death one's calling to love should encourage people to sacrifice a part of their body, an offering that will only work after death. This is an act of great love, the kind of love that gives its life for others. Having been included in this structure of love, the medical act of transplantation itself and even a simple blood transfusion cannot be separated from the act of sacrifice of the donor, from the love that gives life. Here the health worker becomes a mediator of something especially important, a self-sacrifice made by one person even after death so that another can live... We are faced with the task of loving our neighbor in a new way; in evangelical terms, to love to the end (John 13:1), at least within certain limits that cannot be exceeded, limits established by human nature itself."*

The principle of presumed consent

The presumption of consent is an ethical and legal norm that allows tissue and organs to be removed postmortem for transplantation if there is no objection from relatives. Despite the fact that the acceptability of this principle caused debates and disputes in society, the Church did not make any statements regarding the presumption of consent of unambiguous statements or an officially designated position. Address by Pope John Paul II to the participants of 18th International Congress on Transplantation: *"Only when ... moral certainty exists, and informed consent has been obtained by the donor or his legal representatives, is there a moral right to begin the technical procedures necessary for organ removal."* CCC in st. 2296 also states, *"Organ transplantation is morally unacceptable unless the donor or his legal representatives consent with full knowledge of what is happening."* This is probably why in a number of countries where the presumption of consent is legalized, the actual practice is still accompanied by asking for consent from the relatives of the posthumous donor. However, in an interview, Cardinal Joseph Ratzinger answered the following on the issue of the acceptability of the principle of presumption of consent: *"From my position, I do not allow myself to comment on the laws of any states. I don't judge laws. I just want to say that donating your organs for transplantation voluntarily, in full awareness and full knowledge, means a deep expression of a true deep act of love for your neighbor... These are legal aspects on which I have no right to make statements... I will not judge the laws, except to say that organ donation is an expression of brotherly love."* Thus, the Catholic Church has not made any official statement that the concept of presumption of consent is unacceptable. Moreover, some authors have emphasized the need to introduce the principle of a presumption of consent as ethically justifiable - based on arguments based on the common good and the fact that transplantation after death will not cause any harm to the patient, they suggest that there should be consent. but a proposal for a presumption of permission to preserve an organ (Boyle and O'Rourke, 1986). The "New Charter..." on this issue states the following: *"A corpse is no longer, in the proper sense of the word, a subject of law, because it is deprived of personality, which alone can be a subject of law. Therefore, directing it towards profitable, morally impeccable and even high goals is a decision that is not condemned, but positively justified. However, this requires the consent of the deceased, given before death, or the absence of objections on the part of persons entitled to it."*

Legitimacy of brain death declaration

On the issue of the acceptability of the declaration of brain death and the legitimacy of this concept for determining the moment of death of a person, Pope Pius XII spoke as follows: *"As for the examination of the facts [of the declaration of death] in specific cases, the answer cannot be deduced from any religious or moral principle, and in this aspect it does not fall within the competence of the Church. Considerations of a general nature lead us to believe that human life continues so long as vital functions other than the simple life of the organs are manifested spontaneously or even by artificial processes. The physician, especially the anesthesiologist, must give a clear and precise definition of death and the moment of death of a patient who dies in an unconscious state. Here the usual concept of the complete and final separation of the soul from the body may be accepted; but in practice it is necessary to take into account the inaccuracy of the terms "body" and "department."* Despite the existing controversy surrounding the acceptability of the concept of brain death, the current position was announced by Pope John Paul II in 2000. *"It can be said that the criterion adopted in later times for establishing the fact of death, namely the complete and irreversible cessation of all brain activity, if strictly applied, does not seem to contradict the essential elements of sound anthropology. Thus, medical professionals professionally responsible for ascertaining death can use these criteria in each individual case as a guide, the basis for achieving that degree of confidence in ethical judgments that moral teaching calls "moral certainty."* Moreover, by not allowing active euthanasia, the CCC points out the moral acceptability of refusing excessive therapeutic persistence - paragraph 2278 *"The cessation of expensive, dangerous, extraordinary or disproportionate to the expected result of medical procedures may be legal. This is a rejection of "therapeutic persistence." There is no intention here to bring death, there is only an acknowledgment of the impossibility of preventing it. Decisions must be made by the patient himself, if he has the ability and opportunity to do so, or by those who have the legal right to decide; At the same time, it is always necessary to respect the reasonable will of the patient and his legitimate interests."* A few years later, in 1985, the Pontifical Academy of Sciences proposed its own definition, which it confirmed two years later: *"A person dies when he has irreversibly lost all ability to integrate and coordinate the physical and mental functions of the body."* More It seems clear that the establishment of complete and irreversible loss of all brain functions is the true medical criterion of death and that this criterion can be established in two cases. Either by establishing cessation of circulation and respiration, or by directly demonstrating the irreversible loss of all brain functions (brain death). On this issue, the "New Charter..." gives quite

detailed ethical instructions: *"The Christian faith, and not only it, affirms the constancy of the spiritual principle of man even after death. The death of a person is an event that cannot be directly identified by any scientific or empirical method. But human experience teaches us that the death of an individual inevitably gives rise to biological signs that we have learned to recognize in ever deeper and more detailed ways. Thus, the so-called criteria for ascertaining death, which medicine uses today, should be understood not as a scientific and technical perception of the exact moment of a person's death, but as a safe method offered by science for detecting biological signs of a person's death that has already occurred. From a medical and biological point of view, death consists of a complete loss of integration of that single complex that exists in the human body. Medical observation and interpretation of this decay is not the responsibility of morality, but of science. Medicine must determine, to the extent possible, the clinical signs of death. Once this determination has been achieved, it will be in its light that issues and moral conflicts can be resolved arising in connection with new technologies and new therapeutic options. It is well known that for some time various scientific bases for declaring death have shifted the emphasis of traditional cardiorespiratory signs to the so-called neurological criterion, i.e. the discovery, in accordance with parameters well defined and shared by the international scientific community, of a complete and irreversible cessation of all brain activity (brain, cerebellum and brain stem) as a sign of the body's loss of the ability to integrate the individual as such. Faced with today's parameters for pronouncing death, whether we are talking about encephalic signs or more traditional cardiorespiratory signs, the Church does not make scientific choices, but is limited to the evangelical responsibility of comparing the data offered by medical science with a unified concept of man according to the Christian perspective. highlighting similarities and possible contradictions that may jeopardize respect for human dignity. If the scientific evidence gives grounds to assert that the criterion of complete brain death and the relative signs indicate with certainty the irreversible loss of the unity of the organism, then it can be said that the neurological criterion, if applied scrupulously, does not contradict the essential elements of the correct anthropological concept. Consequently, the medical professional with professional responsibility for such assessment can rely on them to achieve in each particular case that degree of certainty of ethical judgments that moral doctrine qualifies as moral certainty, the certainty necessary and sufficient to be able to act ethically right. way. Only with this certainty will it be morally legitimate to activate the necessary technical procedures to retrieve organs to be transplanted, subject to the informed consent of the donor or his legal representatives. In such a field as this there cannot be*

the slightest suspicion of arbitrariness, and where certainty has not yet been achieved, the precautionary principle must prevail. For this reason, it is useful to intensify interdisciplinary research and reflection so that public opinion itself is confronted with the most transparent truth about the anthropological, social, ethical and legal consequences of the practice of transplantation. Particular attention should be paid to the removal of organs in childhood due to the need to apply specific parameters to the child to ascertain death, as well as due to the delicate psychological position of the parents who are called upon to consent to the removal. The need for organs in children cannot in any way justify the lack of correct verification of clinical signs to determine death in children."

Condemnation of organ trafficking

The Church has always condemned any possibility of organ sell or trafficking. Pope Benedict XVI wrote in 2008: *"Any cases of buying and selling organs or adopting utilitarian and discriminatory criteria collide with the meaning of a gift, which makes them invalid and qualifies them as illegal moral acts. Transplant abuse and organ trafficking, which often affects innocent people such as children, must be strongly and unanimously rejected by the scientific and medical community. They must be strongly condemned as a disgusting act. ... Quite often, organ transplantation occurs as a completely gratuitous gesture on the part of a family member who has been legally declared dead. In these cases, informed consent is a prerequisite for freedom, so the transplant can be characterized as a gift and not considered as coercion or an offensive act."*

Non-discrimination

The Church does not allow discrimination in the distribution (allocation) of donor organs. There is no doubt that justice is needed in this matter, but how can we understand justice when, with any strategy, some patients will still receive an organ, while others will die without receiving it? The most formal concept of justice requires that "equals" receive equal opportunities to receive an organ. But what is the principle of this equation? Are patients equal with respect to waiting time, urgency of care, opportunity to benefit from transplantation, potential to contribute to society, innocence of medical conditions, ability to pay, or some complex variable involving several of these? In the US allocation scheme, only two variables have traditionally been factored into the equity equation: wait time and urgency of care. As noted above, the authors relied primarily on discrepancies in waiting times as evidence of inequalities in organ allocation. But is wait time really the most significant variable when measuring fairness? It is difficult to see how this could be if it has nothing to do with any of the traditional substantive principles of justice

(based on need or contribution, for example), except perhaps the merit-based principle, although it is strange to think that someone may "earn" the gift of an organ simply by waiting longer than others. Waiting time appears to have moral significance only indirectly, that is, to what extent it is an indicator of medical necessity (assuming that organ disease progressed in those who waited longer). Consistent with this view, UNOS has recently deprioritized wait times because they are a poor predictor of medical need compared to medical research. One reason for this is that different doctors waitlist patients at different stages of their illness; Another reason is that organ diseases progress at different rates in different patients depending on many variables, including age and lifestyle habits.

Consideration of a candidate's ability to contribute to society was excluded on the grounds that it would be controversial and biased. From a Catholic health care perspective, such a practice would also clearly conflict with the commitment to *"singling out for service and protection those people whose social conditions place them on the margins of our society."* The potential benefit of organ transplantation has also been excluded as an equity criterion, although it is included in the calculation of medical utility. A well-known serious problem is the ethical justification of liver transplantation for people who abused alcohol and thus caused the development of liver cirrhosis. In addition to utilitarian arguments, principles-based arguments have been advanced by both sides of the debate. Some argue that deontological concerns about justice will favor those who bear responsibility for their own illness (without necessarily attributing blame or punishment) because they have the opportunity to avoid the medical problem, while those who do not bears responsibility for the failure of his organs, there was no such possibility. Others, on the contrary, argue that *"the physician's commitment to all patients in need should be based on an awareness of his own vulnerability to illness and compassion for the sick."* This latter position appears to be more consistent with ethical obligations as outlined above.

Is it fair in principle to give preference to a person with a hereditary disease over someone who is at least partially responsible for it? Health conditions (eg due to substance abuse) may be a subject of discussion. However, no matter how the theoretical debate is resolved, implementation of such a policy is likely to be unfeasible. Moreover, in order to respect the legal and ethical requirements of equality, we must consistently adhere to this principle of preference throughout our health care system. Sexual promiscuity, poor diet, lack of exercise, smoking, speeding and even skiing are all common and well-known health risks. The second group of people that some propose to exclude or discriminate against in the organ allocation system are

prisoners. Many people find it disgusting that a murderer or rapist could receive an organ transplant before or instead of an innocent child. A recent survey of 1,000 members of the general public found that among individuals belonging to several groups, including alcoholics, prisoners were considered least worthy of organ transplantation. Perhaps reflecting public opinion, some ethicists also wonder whether criminals, or at least those who have committed violent crimes, have lost their status as full members of society by violating the social contract through their criminal acts, and whether this could prevent them from receiving organs. But while arguments can be made against transplanting prisoners, the Church has rightly taken the position that the penitentiary system must administer justice and the medical system must provide medical care to individuals. It is wrong for the medical system to impose what is essentially a death sentence that the court has deemed inappropriate. Moreover, it is unclear whether the prison system would be ethically justified in including the denial of medically necessary treatment as part of the administration of retributive justice. Given the statements in the Ethical and Religious Directives that Catholic health care should protect *"those people whose social conditions place them on the margins of our society and make them especially vulnerable to discrimination,"* excerpts from the Sacred Scriptures that equate our relationship to prisoners with our relationship to Christ (Matthew 25:39-40) and Pope John Paul II's position on the death penalty (reluctance to use death as a punishment) make it unlikely that Catholic Moral theology will ultimately support the practice of removing prisoners from organ transplant waiting lists.

The criteria that the Church adheres to are: urgency, the possibility of successful transplantation taking into account the patient's condition, and the priority of the waiting list for a donor organ. The choice eliminates any possibility of discrimination, for any reason, social or racial. Transplantation is performed for those who need it.

Admissibility of transplantation from living donors

Until 1950, when there was no real practice of transplantation from a living person to another, this issue was considered purely theoretically (Cunningham, 1944). Many theologians did not approve of this topic. They argued that the principle of totality and integrity can justify deliberately causing harm only if this is done to preserve one's own health or life. Actual organ transplantation from living donors began to be performed in the early 1950s. Ethics and moral experts have paid closer attention to this issue. Gerald Kelly wrote: "It may be surprising to physicians that theologians should have any difficulty with regard to personal injury and other procedures that are performed with the consent of the subject but are intended to help

others. Guided by a kind of instinctive judgment, we believe that giving a part of our body to help a sick person is not only morally justified, but in some cases even heroic" (1956, 246). Kelly suggested that the principle of brotherly love justified transplantation provided that harm to the donor was limited. Maintaining functional integrity plays a key role in resolving ethical issues associated with inter-living transplantation. There is always a risk for the donor, the development of the disease is possible. However, it is considered justifiable in light of the fact that donors are giving for the greater good. Currently, the evolution of the views of Catholic theologians on transplantation from related donors led to the following consensus.

A living donor transplant will be considered ethically acceptable if the following criteria are met:

1. For the recipient, surgery is an urgent measure to save life.
2. The functional integrity of the donor organ will not be compromised, even if its anatomical integrity changes.
3. The risk that the donor takes as a sign of mercy corresponds to the benefit for the recipient.
4. Consents of both donor and recipient are free and based on complete information.

Donation from infants with anencephaly

Newborns with anencephaly have underdevelopment of the higher brain, namely the cortex, while maintaining the functionality of the brain stem. Identifying the lack of ability to perform higher functions of the cerebral cortex presents certain difficulties and differs from establishing the fact of a person's death. The existing research clearly indicates that the development of the cerebral cortex is not the defining stage between prehuman and human development. Consequently, the lack of development of the higher brain is not equivalent to death (Furton, 2002). The US Presidential Commission on Ethical Issues in Medicine and Biomedical and Behavioral Research (PCEMR) determined (1981):

"Firstly, ... it is unknown which areas of the brain are responsible for cognition and consciousness; What little is known points to significant connections between the brainstem, subcortical structures, and the neocortex. Thus, the "higher brain" may well exist only as a metaphorical concept, and not in reality. Secondly, even in cases where areas or certain aspects of consciousness can be detected, their cessation often cannot be assessed with the confidence that would be required to apply the statutory definition. Thus, although the anencephalic infant may not develop in such a way as to fully realize the potential usually associated with "personality," there is no scientific basis for considering anencephalic infants to be dead" (Sytsma, 1996).

Therefore, children with anencephaly are usually considered alive until there is complete loss of brain

activity. An anencephalic infant is an extremely debilitated human being who, although not expected to live long, is not officially declared dead. Because of this, he cannot be used as an organ donor, just like any other person, regardless of the degree of his weakening, until complete brain death is documented.

Xenotransplantation

Recent years and months have been accompanied by repeated attempts to use animal organs for human transplantation (xenotransplantation). Modern means and techniques make it possible to eliminate the reaction of xenograft rejection and infection (xenosisis), which creates the need for an ethical and moral assessment of this potentially important type of care. The ethical issues of xenotransplantation were analyzed by the Pontifical Academy of Life in 2001 (Pontifical Academy of Life, 2001; Sgreccia, Calipari, and Lavitrano, 2001). The Academy identified three types of ethical questions about the acceptability of xenotransplantation: 1) the acceptability of human intervention in the order of creation; 2) the ethical expediency of using animals for the benefit of humans; 3) the objective and subjective impact that material of animal origin can have on the personality of the xeno-recipient.

Pope John Paul II put it this way: *"Man is the image of God in part because of the mandate received from his Creator to subjugate and dominate the earth. In fulfilling this mandate, man, every man, reflects the very action of the Creator of the Universe."* The meaning of human life is not to arbitrarily "dominate" other creatures. A living creation must serve the true and integral good of humanity (everyone and every person). Some documents of the Second Vatican Council have already confirmed this truth. The Lumen Gentium states: *"Therefore, by virtue of their competence in worldly disciplines and their activities inwardly sublime by grace, they (the laity) should work diligently to ensure that the benefits created by human labor, technical skill and civic culture, could serve for the benefit of all people in accordance with the plan of the Creator and the light of His Word. May these goods be more properly distributed among all men, and may they in their own way contribute to the general progress of human and Christian freedom."* The Decree of the Second Vatican Council on the apostolate of the laity states: *"This natural virtue of them (of the realities constituting the temporal order) receives additional dignity from their relation to the human person for whose benefit they were created."* The Academy argues that animals, as living beings, have a special value that humans should respect. At the same time, according to faith, God created animals and other non-human beings to serve man. Xenotransplantation provides a person with an additional opportunity for a creative response responsibility in the wise use of the power provided by God. It is important to note that

Catholic theology does not prohibit the use of animals as a source of organs or tissues for human transplantation, either on a religious or ritual basis. The issue of acceptability of animal organs becomes relevant only after it has been established that the integrity of the individual has not been affected by xenotransplantation and that all general ethical requirements of transplantation have been met. This issue takes on cultural and psychological dimensions at the societal level. Preserving the personal identity of the recipient patient becomes the main goal of ethical restrictions in xenotransplantation. First, Pope Pius XII (Address to the Italian Association of Cornea Donors, Clinical Ophthalmologists and Legal Medicine, May 14, 1956) and then John Paul II (Address to the Eighteenth International Congress of the Society of Transplantation, August 29, 2000, No. 7) approved this method, provided that *"the transplanted organ does not affect the psychological or genetic identity of the person who receives it"* and *"that there is a proven biological possibility of performing such a transplantation successfully without exposing the recipient to undue risk."* The use of organs from artificially modified animals for xenotransplantation entails the need to consider issues related to transgenesis and its ethical implications. The term "transgenic animal" describes a creature whose genetic structure is changed by the introduction of a new gene (or genes). The term "knockout" refers to animals in which the corresponding endogenous gene(s) are no longer expressed. Such animals will have unique characteristics that are passed on to their offspring. The Academy sets certain standards for the care of artificially created animals in order to comply with ethical principles. Guaranteeing the welfare of genetically modified animals is necessary to assess transgene expression and possible changes in the anatomy, physiology and/or behavior of the animal. The effects on offspring and possible environmental consequences must be taken into account, limiting the level of stress, pain, suffering and anxiety that animals may experience. Transgenic animals must be kept under strict control and not released into the environment. The number of animals used in experiments should be kept to a minimum, and removal of organs and/or tissues should be carried out in a single surgical operation. Every animal experimental protocol must be assessed by a competent ethics committee. The "New Charter..." on the issue of xenotransplantation states the following: *"There is a discussion about the possibility, still completely experimental, of solving the problem of finding organs for transplantation in humans using xenografts, i.e. transplantation of organs and tissues from animals. Xenotransplantation is legal and has a twofold condition: the transplanted organ does not affect the personality and integrity of the person who receives it; that there is a proven biological possibility of successfully performing such a transplan-*

tation without exposing the recipient to excessive risks. In addition, it is necessary to treat the animals involved in these procedures with respect, observing certain criteria, such as: avoiding unnecessary suffering, complying with the criteria of true necessity and reasonableness, and avoiding uncontrolled genetic modifications that can significantly change the biodiversity and balance of species in the animal world."

List of organs subject to transplantation

Although no statements have been made at the level of Church Teaching on the acceptability of transplantation of certain organs, the authors of the "New Charter..." indicate "Not all organs can be donated. From an ethical point of view, the brain and gonads should be excluded from transplantation, since they are associated with a person's personal and reproductive identity, respectively. These are organs that are specifically related to the uniqueness of a person, which medicine should protect."

The general concept of organ donation for transplantation in the Catholic faith is confirmed by specific activities. While not proclaiming a moral obligation to donate organs, Catholicism recognizes not only the

duty to be just, but also the duty to be merciful. Charity is "the greatest social commandment" (CCC para. 1889), and organ donation is one way of realizing the virtue of charity. Consistent with this view, the Ethical and Religious Guidelines for Catholic Health Care Services in the United States state that "Catholic health care institutions should encourage and provide means for those wishing to make arrangements for the donation of their organs and tissues in an ethically lawful manner." purposes so that they can be used for donation and research after death."

Conclusion

Thus, the Catholic position on issues of organ donation and transplantation is well and deeply developed, based on respect for human dignity and his right to choose, encouraging the voluntary act of donating one's organs as a gift that extends beyond the boundaries of life and death. This position helps to reduce social disagreements regarding organ and tissue transplantation and also strengthens the moral and ethical positions of supporters of the widespread use of transplantation in order to preserve human life

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