



Review Article

Rejection of Transplanted Organ in the Legal System of Civil Liability in Iran

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ABSTRACT

Background and Aim: Rejection of transplanted organs refers to a phenomenon where the immune system of the recipient body refuses to accept the transplanted organ. This review is conducted to identify the liability of the health staff in complications of the organ transplantation process and in particular, the role of donor and recipient in the liability arising from it.

Materials and Methods: In the present review, utilizing the keywords of organ transplantation, civil liability, and rejection in databases of Magiran, Google, SID, the related articles are studied and analyzed.

Ethical Considerations: Honesty in the literature and citation analysis and reporting were considered.

Findings: The liability arising from rejection and other complications of transplantation, has usually a contractual figure, and unlike other medical responsibilities, it has a feature that there are two contracts of "transfer of organ between donor and recipient" and "therapy contract" behind it. In cases where transplant rejection is caused by a defect in the transplanted organ and the donor is aware of it, transplant rejection is attributed to the recipient with no goodwill; with violation of "implied term of the transplanted organ health" in the contract between the donor and recipient, his liability is the case. The therapy contract follows the general rule enacted by the new Islamic Penal Code adopted in 2013, and the doctor and other factors that caused transplant rejection, in case of fault, are responsible for compensation for the damages to the transplanted organ recipient.

Conclusion: In principle, donor and devisees of a person who is brain dead, in many cases, are exempt from the liability arising from transplant rejection or other complications, according to the benefaction rule, and in cases where transplant rejection is attributed to the recipient, he/she is exempt from compensation.

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Introduction

Transplant rejection and the way of its prevention have always been focused on by recipients and doctors since the formation of organ transplantation science and the achievement of such success. In parallel with the rapid and increasing developments in medical knowledge, commendable efforts have been made in this area. Performing multiple tests before transplantation, efforts of committed doctors and specialists, critical care for the recipient by nurses, production of immunosuppression drugs, and preventing transplant rejection, as well as following

doctor's orders by the recipient, try to reduce the occurrence of this problem.

Rejection of the transplanted organ or tissue is one of the issues that require special attention of law in the area of civil liability because several causes and factors are involved in a successful transplant operation, and after transplantation of an organ or tissue, the connection between the two organs does not merely mean that the process of transplantation is completed. In this process, several causes and factors can cause rejection of the organ or tissue or provide the background. Since the donor tries to donate or sell the organ, this liability can be

expressed. The donor who knows about the organ fault and gets money for the organ, cannot be absolved from the liability.

In addition, the role of the laboratory in the tests related to transplantation, organ and tissue banks, doctor and transplant team members, those who are directly involved in transferring transplanted organs from one place to another, hospitals, organ transplant nurses, especially intensive care after operation have important roles in preventing the transplant rejection, and other factors that could lead to successful transplantation should be fully considered for compensation for the damages to the organ recipient. In particular, the recipient can be one of those who do not follow doctor's orders and do not use immunosuppressive drugs or use them improperly, so he/she can be the main cause of this phenomenon, and deprives himself of the right to compensation. In some cases, despite following doctor's instructions and full respect for the principles of health, the immune system of the body may reject transplantation; separating such cases may have the liability of one or more factors which needs a careful discussion because in the latter case, no liability can be considered for a person. Given the impossibility of reviewing all factors that caused transplant rejection in an article, and that the doctor is in the main focus of charge in case of transplant rejection, the main focus of the discussion in this paper is on the terms of liability of transplantation doctors and also the liability or non-liability of the donor.

Organ transplantation is a very sensitive issue and in some cases, puts the patient at risk, because the transplanted organ may be defective (1) which can bring liability. Due to the support of the transplanted organ recipients and transplantation doctors and other persons involved in this matter which has humanitarian nature, these should be regulated, to maintain the rights of doctors as well as the recipient.

The focus of the present discussion merely on the rejection does not deny the compensation for other complications resulting from an error in the process of organ transplantation. Given the scope of the debate and that transplant rejection occurs in some cases even complying with other health and medical rules and regulations, most of the discussion focuses on this complication. For example, concerning kidney which is one of the most common organ transplants, it is stated that "Unfortunately, there are many potential complications related to the transplant surgery. The

most common and most threatening complication is in kidney transplant is rejection"(2), therefore, the rules and regulations mentioned are applied to other complications and infections caused by organ transplantation.

Ethical Considerations

Honesty in the literature and citation analysis and reporting were considered.

Materials and Methods

In the present review, in addition to referring to the books of jurisprudence, and legal books, and applying the relevant legal principles for the specialized answer to the issue of liability of compensation for the damages of treatment factors concerning complications of organ transplantation, utilizing keywords of organ transplantation, civil liability, and rejection in databases of Magiran, Google, SID, the related articles were studied and analyzed.

Findings

1. Definition of rejection and types

Rejection means disposal, exclusion, abrogation, annulment, revocation, surrender, and is the opposite of acceptance (3). The phenomenon of "rejection" is the immunology response during which, the transplanted organ shows antigenic activity, which results in the formation of antigens from the transplanted organ recipient aiming to eliminate the alien tissue, i.e. the transplanted organ (4). Some authors call this phenomenon "transplant rejection" which is created as a result of the recognition of the transplanted tissue by the host as the foreign tissue (5).

Although transplant rejection is the most important problem in kidney transplants, and despite ongoing huge advances in the field of organ transplantation, there are still different definitions of transplant rejection among authors and researchers. In addition to transplant rejection, other known factors threaten the transplanted kidney and bear in mind that the lack of transplant efficacy does not mean its immunological rejection (6).

To avoid transplant rejection, medical books referred to the selection of proper tissues and using anti-transplant rejection drugs that affect the immune response (7); transplant rejection occurs due to negligence in these cases, and even in some cases, without the occurrence of fault or negligence.

"Transplant rejection" is classified into three categories based on clinical and pathological characteristics. Each transplant rejection is mediated by a specific type of immune response:

1. HyperAcute Rejection: that occurs within few minutes after transplantation;
2. Acute Rejection: that occurs within a few days or weeks after transplantation, and is the main cause of early failure of transplantation;
3. Chronic Rejection: occurs in the long run within a few months or years after transplantation (8), however, in some transplants, transplanted cells may launch the response against the host. This response could harm the host and cause Graft Versus Host Disease (9).

As the above definitions show, although transplant rejection occurs by the immune system, in many cases, it can occur due to the failure of a doctor or medical professionals or the patients receiving transplanted organs or caused by other factors. And in some cases, the immune system rejects the transplant without any failure.

2. The basis of liability in the rejection of transplanted organ

The question that arises is whether the liability arising from the rejection of transplanted organs has a contractual or non-contractual figure? Concerning the status after transplant rejection, if the parties express conditions and rules since the liability is contractual, can non-contractual liability be used? This is effective in the detection of liability provisions and error-proof.

About job faults such as doctor's commitment except for exceptional cases such as the case in which the injured becomes unconscious due to collision, and a passer takes him to the hospital, do not destroy the relationship between the damaged and professionals, based on explicit or implicit contract, and the balance and order the two sides considered, the lawyers know them free about law or contract (10). About the liability resulting from transplant rejection that can be related to the contract between the doctor and patient, or the donor and recipient, some issues are arising that will be discussed in the following.

2.1. Non-contractual liability in transplant rejection

As is evident, distinguishing the basis of liability is of great importance, because in contractual liability, proving the unfaithfulness of the defendant is

enough. But in the compulsory guarantee, it should normally be proved that the authority has committed failure. According to the opinion of some legal writers, the most important effect of the essential distinction between compulsory and contractual liabilities, is the lack of possibility of unpredictable damages claim in contractual liability and the opportunity to claim it in coercive damages (11).

About organ transplants and transplant rejection that are considered as the most important complications after the transplantation, and can lead to pleading by the injured party who is the transplanted organ recipient or his devisees, it seems that its contractual basis has a bolder face, and the liability resulting from rejection must be usually considered contractual. However, as said, it does not prevent compulsory liability.

2.2. Contractual liability arising from transplant rejection

The particular characteristic that arises in the civil liability arising from the rejection of transplanted organs compared to other medical and related liabilities in this area, is the fact that there are two contracts in this process, and liability can be connected to each of the two contracts. The first is the contract between the donor and recipient of the transplant organ or tissue, and the other is the therapy contract signed with the doctor and other relevant factors. Such contracts (second contract) are mainly called "therapy contracts" each one of which is investigated separately.

2.2.1. Liability related to organ donation contract

An organ donation contract is a legal relationship between donor and recipient of the transplanted organ based on the transfer of organ from the donor to the recipient. In the case of living persons, the donor, who wants to grant an organ, transfers the organ by signing a contract and creating a legal relationship with the recipient, and the transplantation is done as a result of such a contract, whether the nature of the legal relationship mentioned is subject to Article 10 of the Civil Code or the certain contract (12). If there is a failure in the transplanted organ resulting in rejection of the transplanted organ, in the absence of awareness of the donor of such a failure, no liability can be considered for him. Today, in the science of organ transplantation, transplanted organ health is approved according to multiple tests before transplantation, and then transplantation will be

conducted, but it was not always such that the transplanted was certainly and healthy. Perhaps such failure was hidden from the vision of tests, or the transplantation has been done based on trial and error with negligence in experiments or the process of transplantation.

About this legal relationship, it can be said that organ donation guarantees the implied term of transplanted organ health. Law does not support the donor who knows about his previous disease or his unhealthy organ, and yet, tries to sign a contract with the recipient and get money for that organ, while he does not inform the recipient and also the doctor about the biography and the history of his disease. Such defects and generally unhealthy transplanted organs increase the risk of rejection of the transplanted organ, and in some cases, it is the main cause of rejection. This makes the person, who is aware of the fact, responsible for compensating damage to the recipient; even in cases where there is no fault in testing and other processes, the fact is not revealed and transplantation is done, if the doctor and the recipient are not informed by the donor, the liability of the damage resulted from the transplant rejection and other side effects including infections caused can be on him.

In such cases, the rejection resulting from the defects in the transplanted organ, a single sentence cannot be issued, and it should be issued based on the circumstances. The above conditions must be considered about whether the donor is responsible or not. For the liability of the doctor or other factors involved, their liability or lack of liability will be determined by proving their fault or lack of fault. Perhaps, in addition to the donor, other factors that may cause transplant rejection may be considered responsible for the fault, therefore, for the donor, such cases must be noted as circumstances:

- The donor is aware of the transplanted organ defect but he tries to donate the organ.
- The donor does not anything about the organ defect and tried to donate with this assumption. In this regard, in case of rejection, the role of other factors must be considered.
- Receiving money or receiving no money or little money in return for organ donation, in the proof of the bad intention of the donor or concealing defects, in some cases can be considered to blame the donor.

In the liability resulting from the transplant rejection, special attention must be paid to the benefaction rule. In jurisprudence, benefaction has

been invoked on several occasions to disclaim. For example, in the discussion on the devisor's guarantee in the children's property (13), the liability of the honest in the trust contract (14), the guarantee arising from the release of the captured (15, 16), seizure of the property of the orphan to maintain and reform his affairs (17), this rule is used for non-guarantee. In most cases invoked on this rule, "but benefaction is mere, no ground (of complaint) can there be against such as do right" is used to eliminate the guarantee of the person in the jurisprudence. Using the adjective mere shows the main intention of the person in benefaction and goodness, so he will be exempt from liability.

According to the verse "no ground (of complaint) can there be against such as do right", making the benefactor a response is the way, and "what is the reward of benefaction other than benefaction" says that the benefactor should not receive malefaction (18). In the legal sense, benefaction means doing good work and a benefactor is a person who commits a conciliatory act and serves another person avoiding financial or spiritual loss or gaining benefit for him. Benefactors have no civil liability, even in the case of loss of property that is necessary for benefaction (19).

In the new Islamic Penal Code that provides guarantee provisions, some cases have been approved by the legislator based on this rule. Article 509 of the Islamic Penal Code approved in 2013 provides that: "When someone on the streets or public places commits an action in the interest of passers-by respecting legal regulations and safety tips, causing a crime or damage, he is not responsible".

Based on the above article, if one commits an action for the public interest, which is considered as a benefaction by the civil law, the person who does the action (respecting legal regulations and safety tips) is not responsible even if causing a crime or damage. Article 510 of the Islamic Penal Code focuses more explicitly on the benefaction rule, and provides that: "If a person shows a behavior with good motives to help others to protect their property, lives, and honor, he is not responsible even if causing a crime or damage in case of respecting legal regulations and safety tips." Such provisions which are derived from the principles of Islamic law are confirmed by foundations of wisdom and legal logic.

Organ donation can be mentioned as one of the best examples of benefaction rule actions for the lack of liability of the donor of a transplanted organ. From

the legal perspective, the donor who donates with humanitarian and altruistic intent, cannot be considered responsible for damages resulting from the defect in the transplanted organ.

In cases where transplant rejection is attributable to the donor for any reason, and he knows about the disease existing in him or the transplanted organ, and that it will cause transplant rejection or exacerbates it, making him responsible does not prevent the doctors' and medical professionals' liability. In case of negligence, they will be held accountable against the organ recipient.

The question that arises here is that when transplantation occurs from the brain death to a living person, according to the fact that vast majority of transplanted organs are supplied by the bodies of brain dead patients, and there is no need for the permission of great heirs of the deceased if there is a blood disorder, addiction problems and other complications in the body that cause rejection, is there any liability conceivable for them? Or benefaction rule prevents such responsibilities?

In examining the liability of the heirs of brain-dead patients, particular attention must be paid to the benefaction rule. This rule, principally and often, prevents the recognition of a liability for the heirs of an organ donor, because the heirs of the organ donor do not expect the reward; this action has no meaning but benefaction, and recognition of their liability or obliging them for compensation, is contrary to the logic and rules of law. This rule is applied in the act of organ donation even by living persons, in cases where it is done without receiving anything, and it should be considered as a basic rule towards the organ donor in the discussion of civil liability resulting from organ donation. Such a rule is reflected very bold in organ transplants, and in some cases, it can prevent liability.

2.2.2. *Liability associated with therapy contract*

There is a contractual relationship between the doctor and patient, and the sustainability of this relationship depends on the maintenance of the integrity of the mentioned contract between the doctor and the patient. As long as the integrity is maintained, the dispute between patient and doctor is likely, as all bilateral contracts have such characters and traits (20).

Some legal experts have suggested knowing the therapy contract as a part of formal contracts so that to avoid conflicts between the patient and medical team, respecting the rights of patients and medical staff and easiness of request or obligation to fulfill

the commitments agreed in the therapy contract, the legislator provides special procedures as being written, formal and regulated by the legal competent authority to compile this contract. This suggestion seems desirable and fruitful on medical research, organ transplants, surrogacy, etc., but it will be problematic in the case of other types of contracts, and its implementation seems unlikely (21).

Regarding this relationship, there should a proportionality between the medical practice and the likely results, and the doctor is required to establish a balance between the risks of disease and the risks of therapy. If the disease does not threaten the patient's health, then there is reason to jeopardize the patient with a therapy that hurts or kills him. Conversely, if there is an interest and benefit to the patient in that therapy, the doctor will have the right to tenure his body and life (22).

As the factors of transplant rejection were mentioned briefly in the introduction, these factors can be multiple, and analysis of each of them requires a separate article (23). Given the importance of organ transplant and its rejection as an important issue in transplantation, in the following, we analyze the liability according to the views taken in medical law before the adoption of the new Islamic Penal Code in 2013 and the impact of this law on medical and organ transplant rights.

Numerous errors of the doctor could cause transplant rejection and thereby, causing loss or damage to transplanted organ recipients. For example, one of the doctor's faults that can be pointed out in organ transplant is that he has failed to choose the "best donor", in a way that he is not a good donor according to medical rules. The main obstacle to a successful transplant is finding a suitable donor and the body's ability to identify and reject the stranger transplant tissue.

Consensus statements and practical-ethical guides recommended with donations from living donors have considered several practical components essential to ensure the health of living donors. In the informed consent, the donor must be fully and accurately informed about the risks and benefits of donation for himself and the recipient, and also about other therapy options that are given to the recipient (24). As noted, "unfortunately, there are many potential complications about the transplant surgery. The most common and threatening complication of kidney transplant is rejection" (2). If the doctor has an obligation towards a disease, in case of leaving it and causing physical damage or

injury, he will have civil liability, the liability (civil liability arising from the omission of the act) is based on fault. Also, in this case, getting permission and innocence does not affect establishing negative liability, because duty leave is considered a fault, and establishing negative liability is construed only in case of lack of fault of the doctor and get the presumption of innocence (25). However, due to the Islamic Penal Code adopted in 2013, getting a presumption of innocence cannot be considered as the criterion of the doctor's liability which will be later discussed in detail.

Article 319 of the Islamic Penal Code adopted in 1996 had decreed that "a doctor, even qualified and specialist, is responsible, whenever he causes loss of life or deformity or financial damage, in the therapies he does personally or he orders, although with the permission of the patient or the guardian".

This article is based on the opinion of twelve Shiite Muslim jurists, as Article 321 of the same code ("a veterinarian, even qualified and specialist, is responsible if he causes damage in an animal care, even with the permission of its owner), apparently "mere liability" of the doctor or veterinarian is accepted and it is not based on fault. While unlike the basis of these two articles, Article 320 decreed that: "the circumcisor is responsible if causing crime or damage by cutting more than the amount necessary, even if he was skilled." The theory of fault (cutting more than the amount necessary) has been accepted. This imbalance is observed in terms of the basis of liability in the law (26).

In this regard, lawyers believed that the interests of the patient require that the damage claim is based on this article because it exempts the doctor from the proof of fault. In fact, in this area, the legislator converted "the commitment to care and implementation of competency" into "restraint from harm" so that the doctor is responsible for all the damages and harms he brings directly or by others (27).

Under the former law, legal writers believed that the provisions of Article 319 of the Penal Code correspond with a theory of jurisprudence that the doctor is considered responsible in any case which comes by his practice, it seems that the article is so emphatic that if the doctor approves his innocence, he is responsible yet. The symmetry of this claim is that the effect of proficiency and expertise of the doctor has been ignored, although, a skilled doctor may have an error, these are exceptional affairs, and formulation of the law must be conducted based on the more often cases. About the qualified and expert

doctor, the principle is that his action must not be associated with the fault (28).

In the new Islamic Penal Code adopted in 2013, it seems that the legislator knows the doctor responsible for the physical loss or injury in the primary assumption. This means that "the principle of the liability is of the doctor unless proof of his innocence", therefore, a transplanted organ recipient may claim compensation for damages based on Article 495 of this law, and be exempt from proving the fault of the doctor, and the doctor is proven to be innocence. Article 158 of the Islamic Penal Code adopted in 2013 provides that: "In addition to the cases mentioned in previous articles, the commission of an action that is considered a crime according to the law, is not permitted to be punished in the following cases: ... C) Any type of legal medical surgery or operation that is performed with the consent of the person or parents or guardians or legal agents and respecting technical and scientific standards and governmental regulations, consent is not necessary in urgent cases".

It seems that this paragraph of the article is not different from paragraph 2 of article 59 of the Islamic Penal Code adopted in 1991. The mentioned article provided that "The following actions are considered to be a crime: ... 2) Any type of legal medical surgery or operation that is performed with the consent of the person or parents or guardians or legal agents and respecting technical and scientific standards and governmental regulations, consent is not necessary in urgent cases".

Medical surgery or operation by qualifying the above-mentioned terms is of justified factors of crime:

1. The legitimacy of surgery or operation;
2. Acquiring consent of beneficiaries;
3. Conformity with technical and scientific standards (29).

The issue of informed consent is important and controversial in all aspects of medicine (30), although, before the surgery, all the doctors give a "consent form" to the patients which is a common practice in the medical community, the fact is that signing the consent form does not merely meet the legislator's opinion (31). Such consent must be obtained freely and consciously from the patient.

The risk and the possible complications should be expressed with complete honesty, and one hundred percent success should not be promised for anything

even if they seem too simple. Some believe that the expression of complications of surgery will cause loss of a patient, so they promise one hundred percent success. Not knowing that this would probably raise the expectations for the patient and, if not treated successfully, the consequent complaints will be expected (20).

The doctor must tell everything about the possible complications of therapy before transplantation, announcing the possibility of transplanted organ rejection which is one of the main complications created after transplantation, does not absolve the doctor in the case of fault. He will be responsible for negligence and lack of skill and lack of compliance with technical and governmental standards.

As is clear, rejecting mere liability or without fault of the doctor, the new Islamic Penal Code adopted in 2013, has considered the basis of the fault. Article 495 of the Act provides that: "in the treatments, if a doctor causes physical loss or injury, he is responsible for the blood money, unless his action in complied with the medical regulations and technical standards, or he has been considered innocence before surgery, and no fault is committed by him Note 1: In the absence of negligence or fault of the doctor in the science and practice, there is no liability for him, even if innocence has not been obtained for him".

In Note 1 of this article, the legislator says: even if the doctor has not obtained innocence, in the absence of negligence or fault in the science and practice, it causes a lack of liability. Note 2, Article 496 states: "In the amputation or injuries happened in medical treatments, it is acted following Article 495 of this law".

An error noted, "No matter the crime and error and loss are as a result of the implementation of the provisions of the contract between doctor and patient, or damages arising from the breach of a legal duty".³² However, the assumption of guilt by the doctor, he will be responsible for the compensation, even if he has obtained innocence from the patient or his family; so, the criterion of liability is the fault occurred by the doctor, and there is a causation relationship between that and the loss imposed on the patient. Obtaining innocence by a doctor before the surgery has the advantage that the burden of proof of fault that the article puts on the shoulders of the doctor for freedom from responsibility, will be conveyed to the patient, this means that if the doctor is received innocence from the patient, the patient must prove the doctor's fault.

The basis adopted by the new Islamic Penalty Code has not accepted the view of some professors of medical law before the adoption of this law, the professors who believed that in the current law, the medical liability is mainly based on the creation of risk or liability without fault.³³ In contrast, some authors believed that in medical issues, the principle should lay on the fault of the person, and in the recognition of fault, the concept of customary reference ability must resort. Therefore, its limited and specified exceptions are known subject to the theory of risk, such as blood transfusion, artificial limbs, etc (21). The question that comes to mind is that according to the authors, especially the second view, which believed in fault, and cases such as artificial limbs where natural members are also subject to the above statement, does the law have the same attitude to these views of medical law in respect of liability arising from the organ transplants; and in addition to accepting the fault, can we expect exceptions such as the above-said cases in the current system of medical law? Of course, the author can be criticized by using the "etc." when expressing the exceptions, which is not desirable when expressing the exception in the law, the exceptions of a problem must be mentioned more openly with examples.

It seems that according to the new approach of the Penal Code, the liability resulting from the transplanted organ rejection is subject to the general rule enacted in the new Islamic Penal Code, and making it an exception is not acceptable aside from the above views in the current system of medical law, and according to the existing rules; in particular, in note 2, Article 496 of the new code, about the amputation that is associated with organ transplantation, it is said to act following Article 495 of this law which is the same presumed fault; therefore, in terms of transplant rejection, it should be believed that in organ transplant, doctors and other factors who cause rejection, in the case of fault, are responsible for the compensation for the recipient's damages. Hence, we should refer to the principle of the theory of fault in medical liability which is included in the new code about the doctor, and now, "the doctor's fault assumption" is a middle way compared to the theory of fault and liability without fault.

Adopting this basis (theory of fault) will have a positive impact on the progress of medical science, and will increase the doctor's courage to perform dangerous and important operations, especially the impact on the science of organ transplantation,

which has a short history in the field of modern medicine, every day, through multiple and new transplants with the discoveries in the field. In stagnation and progress which are two opposite points, there is a huge difference between the transplant team which knows it is liable for transplantation in the absence of fault, and the team that is liable only in the presence of a fault. The failure of medical science in this regard can exempt the doctor from responsibility in some cases.

If the medical practice that leads to death is a result of carelessness, negligence, lack of skill, and lack of compliance with governmental regulations, it will be subject to note 3 of article 295 of the Islamic Penal Code adopted in 1991, which provided that: "If a murder or injury occurs as a result of carelessness or negligence or lack of skill and lack of compliance with governmental regulations, in a way that nothing would have happened in case of adherence to the regulations, the murder or injury will be quasi-intentional." It is worth mentioning that the Islamic Penal Code adopted on July 30, 1991, was repealed according to Article 728 of the new Islamic Penal Code, and Article 616 of the Islamic Penal Code of sanctions and deterrent penalties provides that: "If the manslaughter happens by negligence or carelessness or committing something, where the committed, has no skill at it or because of non-compliance with the regulations, the sentence is imprisonment for one to three years and also paying blood money if demanded by the victim's family." Article 291 of the Penal Code adopted in 2013 is based on the fact that "crime in quasi-intentional in the following cases: C) When the crime happens due to the committed faults, provided that the crime or its corresponding is not subject to the definition of intentional crimes" (29).

The new law also notes the concept of error and its manifestations. Article 145 of the Islamic Penal Code adopted in 2013 provides: "Realization of unintentional offenses is subject to proof of the committed fault.... Note: fault includes carelessness and negligence. Carelessness, negligence, lack of skill and lack of compliance with governmental regulations and the like, may be instances of carelessness or negligence".

Primarily in legal and medical texts, examples of medical errors are discussed in four classes of carelessness, negligence, lack of skill, and lack of compliance with governmental regulations. For example, in the distinction between carelessness and negligence, it is said that "carelessness is a

positive action and what should not be done, i.e. it is forbidden by the legislator, while as a legal term, negligence is as the omission of an action, which happens by nonchalance and oblivion, and it is an action that must be done, but is it not, i.e. the legislator orders to do it" (30).

Despite the awareness and attention to the issues of patient safety, in developing countries, very little research has been conducted to prove and show the extent and severity of medical errors³⁴; the medical team that performs organ transplants can play a very effective role in good transplantation in compliance with the medical and technical standards. In addition to the fact that the legal action between donor and recipient should be considered when facing the problem of rejection of transplanted organ³⁵, medical students and residents as future doctors are not exempt from the problem of medical errors³⁶, if the doctor does not fault the process of transplanted organ rejection, attributing the rejection of transplanted organ to the immune system of the recipient body or the transplanted organ, cuts the causation relationship that could lead to the doctor's liability and exempts him from the liability for compensation. The surgeon who tries to transplant an organ must comply with all scientific and technical standards with the required precision and skill during surgery. Given the very important role of a surgeon in transplant surgery, he must lead this important action as an expert and committed doctor using necessary actions.

In the phase after transplant rejection where the error in detection of transplant rejection is one of the most common faults of the doctor of the patient receiving the transplanted organ can lead to liability, an error occurs after this complication.

The efforts of the doctor to cure the patient starts with the diagnosis of disease, and this stage of treatment is the most important and accurate process (22).

The transplanted kidney is prone to complications such as acute tubular necrosis, acute and chronic rejection, infection, urethral obstruction, vascular obstruction, fluid accumulation around the kidney, and vesicoureteral reflux, among them, "kidney transplant rejection" is the most important complication, and it will be reversible in case of proper diagnosis and treatment (37). In case of patient's reference before or after the transplant operation, the doctor must have a detailed examination of him and receive a complete history of his disease and other characteristics from the patient himself or his relatives. The authors of

medical rights and ethics have noted the fact that “If we look at the errors arising from doctors in detail, we will realize that most of these errors arise from their haste in examination and lack of taking a careful history of the patient” (20).

Due to the advancement of medical science, there are symptoms for the rejection of any organ or transplanted tissue, where negligence and nonchalance in considering these symptoms, and failure to diagnose the rejection cause damage to the recipient. For example, kidney transplant rejection symptoms include decreased urine output or interrupted flow of urine for 24 hours, edema which is swelling or accumulation of excess fluid in the tissues under the skin, pain, and tenderness in the area of transplantation, more than 37.8 ° C fever, malaise, increased blood pressure, weight gain, increased blood urea and creatinine levels, stiffness and redness in the area of transplantation (38).

If the surgeon or doctor of transplantation proves that their transplant rejection occurred despite compliance with all health, and technical standards and governmental regulation without his fault, rejection is an agent that is not related to him, he will be exempt from liability. In this case, according to the basis of the legislator, transplanted organ recipients must only prove the loss and rejection is harmless in most cases, it is caused by a fault or it happens without any fault in the process of transplantation. The legislator knows a doctor liable who committed the fault and supports the doctor who treats without any fault.

Conclusions

- The liability resulting from transplanted organ rejection, and in a more general view, the liability resulting from an organ transplant, is primarily contractual, and unlike other medical liabilities, in many cases, it two contracts of “the transfer between donors and recipients” and “therapy contract” in the background, and the liability resulting from rejection can be connected to any of them according to the case. The action of donating an organ from the donator to the recipient guarantees the "implied term of transplanted organ health", depending on the awareness of the donator of the failure of the transplanted organ, and not telling that to the doctor, and even his awareness of the existence of a disease in the donor or donated organ, and its effect on the transplantation, is trespassing the contract and provides liability for the donator without goodwill according to the non-

compliance with an implied term of the transplanted organ health existing in the contract of organ transplant.

- In organ transplantation, the doctors are liable for damage compensation in case of fault, hence, we should refer to the principle of the theory of fault in medical liability which is included in the new code about the doctor, and now, "the doctor's fault assumption" is a middle way compared to the theory of fault and liability without fault. As a result, the commitment of the transplant team to the success of organ transplantation and facing no rejection, according to the fact that rejection may happen by the body immune system at any time even in case of compliance with all health regulations and technical standards, as in many medical commitments, the commitment must be to the efforts of doctors and the transplant team in using all the efforts and medical science in the field of transplantation and later cares.
- The recipient who does not follow doctor's orders and does not use immunosuppressive drugs on time, which has an important role in the prevention of organ rejection, and causes rejection, are deprived of the right to compensation according to the rule of action proportional to the effect.
- In addition to the juridical and legal principles, according to articles 509 and 510 of the new Islamic Penal Code adopted in 2013, the benefaction rule is one of the most important rules that prevents the liability resulting from transplanted organ rejection and other complications of transplanted organ defect. This rule supports the donor with goodwill and his heirs who tried to donate the organs with humanitarian intention and to rehabilitate the organ transplant recipients and protects them against the liability resulting from a defect in the transplanted organ. Therefore, to help to solve the problem of damage compensation in a better and more accurate way, and to determine the liability of the factors involved, the following recommendations are presented:
 - Forming specialized committees of organ transplant to diagnose the doctor's fault and its effect on the process of organ transplant according to the importance and expertise of this knowledge, and if necessary, forming special committees to transplant a specific organ such as kidney, liver, heart, and bone marrow.

- Supporting patients who are facing transplant rejection or other complications resulting from transplantation, in terms of providing financial costs and prioritizing re-transplantation due to the necessity of transplantation in many cases preferably with insurance support.
- Expressing the complications of the desired organ transplantation in the range of medical practice and following the understanding of patients in therapy contracts signed between recipient patients and doctors.
- Using organs and tissues of tissue banks licensed by the Ministry of Health, due to the importance of transmission of viruses and diseases by transplantation and its impact on rejection and other complications of organ transplantation.

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Conflict of Interest Statement

The author declares that they have no conflicts of interest.

References

1. Riaz Hana M. Medical faults in general and special acts at the law. Eskandaria: Darolfekr Aljameii; 2013. p. 468. [Arabic]
2. Abbasi M, Rezaee R, Dehghani G. Concept and situation of the right to health in Iran legal system. *Iranian Journal of Medical Law*. 2014 Oct 10;8(30):183-99.
3. Abbasi M, Petoft A. Citizenship rights, from Principles to social Platform. Tehran: Legal Publishers. 2017:85.
4. Habibi H. Brain death and organs transplant at jurisprudence and law. Qum: Boostane Ketab; 2002. p. 74. [Persian]
5. Petoft A. Neurolaw: A brief introduction. *Iranian journal of neurology*. 2015 Jan 5;14(1):53.
6. Ochando J, Fayad ZA, Madsen JC, Netea MG, Mulder WJ. Trained immunity in organ transplantation. *American Journal of Transplantation*. 2020 Jan;20(1):10-8.
7. Abassi M, Petoft A. Fundamentals of Neurolaw. Tehran: Medical Ethics and Law Research Center, Shahid Beheshti University of Medical Sciences. 2019.
8. Safavi A. Basic medical textbook. Tehran: Samaat publications; 2011. p. 1433. [Persian]
9. Vojgani M. Immunology. 9th ed. Tehran: Jahad Danesghgahi publications; 2011. p. 443. [Persian]
10. Katoozian N. Unconventional obligations. 11th ed. Tehran: Jahad Danesghgahi publications; 2013. Vol. 2 p. 384. [Persian]
11. Ghorbanpoor AM. Contractual liability (nature & bases). Tehran: Majd publications; 2013. p. 135. [Persian]
12. Asgari A. Jurisprudential and legal status of trafficking in human organs. *Adab Al-Kufa*. 2021(48).
13. Helli AHBY. Tazkartolfoghaham. Qom: Boostaneketab; 2010. p. 514. [Arabic]
14. Helli F. Izaholfavaed fi sharhalmoshkelatolghavaed. Qom: Esmaeelian Association; 2009. Vol. 2 p. 120. [Arabic]
15. Petoft A. The Validation Requirments of Neurscientific Evidences before Courts. *Iranian Journal of Medical Law*. 2021 Apr 10;15(56):431-43.
16. Petoft A, Abasi M. Citizenship Rights: from the Government Protection to Monitoring on it. Tehran: Justice Publication. 2017:59-65.
17. Tabrizi MF. Hedaytoltaaleb ela asrarolmakaseb. Tabriz: Etelaat publications; 1955. Vol. 2 p. 332. [Arabic]
18. Bojnoordi SM. Ghavedolfeghhia. 3rd ed. Tehran: Orooj Association; 1980. p. 33. [Persian]
19. Darabpoor M. Torts. Tehran: Majd publications; 2008. p. 271-274. [Persian]
20. Abbasi M. Medical ethics & patent expectations. Tehran: Sina Association; 2008. p. 136. [Persian]
21. Forsberg EM, Hanssen AB, Nielsen HM, Olesen I. Patent ethics: The misalignment of views between the patent system and the wider society. *Science and engineering ethics*. 2018 Oct;24(5):1551-76.
22. Amoozegar M. Fault doctor delinquency and criminal prosecution. Tehran: Majd Publications; 2007. p. 128. [Persian]
23. Khafee S. Reviews the civil liability arising from the rejection of transplanted organ. MA Dissertation. Rasht Iran: GU; 2014. p. 245. [Persian]
24. Bryt L. Doctor & moral considerations. Tehran: Tomorrow publications; 2014. Vol. 2 p. 16. [Persian]
25. Abbasloo B. Civil liability (comparative approach). Tehran: Mizan Publications; 2012. p. 136. [Persian]
26. Kayitana E. doctors' civil liabilities arising from negligent prenatal genetic counseling: a rwandan perspective. *African Journal Of Law And Human Rights*. 2019 Jun 29;3(1).
27. Katoozian N. Contracts general regulations. 7th ed. Tehran: Enteshar publications; 2014. Vol. 4 p. 168. [Persian]
28. Elahimanesh MR. Criminal law and medical faults. 2nd ed. Tehran: Majd Publications; 2011. p. 41. [Persian]
29. Petoft A, Abbasi M. Current limits of neurolaw: A brief overview. *Médecine & Droit*. 2020 Apr 1;2020(161):29-34.

30. Abbasi M. Medical for lawyers. Tehran: Hydari publications; 2011. p. 56. [Persian]
31. Abbasi M. Consent to the treatment. Tehran: Hoghooghi publications; 2005. p. 53. [Persian]
32. Abbasi M. Medical delinquency liability. Tehran: Hoghooghi publications; 2004. p. 18. [Persian]
33. Abbasi M. Medical liability. 2nd ed. Tehran: Hoghooghi publications; 2011. p. 56-126. [Persian]
34. Mohammad Alizadeh A, Davari F, Mansouri M, Mohammadnia M. Analysis of medical errors: a case study. *Med Ethics J* 2017; 10(38): 59-68. [Persian]
35. Rostami chelkasari E, asadinejad S, khafi S. Effect of rejection of transplanted organ on body part transference legal action. *Med Law J* 2016; 9(33): 117-149. [Persian]
36. Ahmadipour H, Mortazavi N. Study of interns and residents viewpoint to medical error disclosure. *Med Ethics J* 2016; 9(31): 11-27. [Persian]
37. Petoft A, Vjeh M. The evolution of government intervention in the economy from the perspective of public law, welfare to post regulatory governments. *The quarterly journal of public law research*. 2015;17(47):190-8.
38. Abbasi M, Nooroozadeh R. Nursing care in the dialyze and kidney transplants. Tehran: Hydari publications; 2011. p. 179. [Persian]

