Psychosomatic Manifestations of Gastrostomy in Head and Neck Surgery

Francisco Hernández Altemir^{1,2}, Sofía Hernández Montero^{3,4,5},
Susana Hernández Montero⁶, Elena Hernández Montero⁷
and Manuel Moros Peña⁸

¹University of Zaragoza,
²European Association for Cranio-Maxillofacial Surgery and the Head and Neck Surgery,

³Association and the New Head and Neck Spain Association

⁴University Master of Oral Implants and Prostodontic, UAX Madrid,

⁵Zaragoza University,

⁶Zaragoza University (Medicine Oral and Pathology) Endodontic,

⁷ORL Viladecans Hospital and Institute García Ibáñez of Otoneurosurgery, Barcelona

⁸Pediatric and Cartoonist

Spain

1. Introduction

There are several pathologies that can demand the indication and practice of Gastrostomies in patients with pathologies in head and neck areas, from patients with diverse medical aetiology affection to others with pathologies that register in the surgical scope.

We are going to deal with, as the title indicates, those patients that essentially are derived from patients of the scope of surgery, although we will not totally leave the gastrostomies in patients with anatomical and /or functional affections located properly in the territory of oral and craniofacial or whose origin can be far from this, as the case of patients with more or less global and complex syndromes that repels in elementary function of a relationship. Like the ear, the language, the sight, and the oral structures and as in the case that occupies us, the feeding.

The recent incorporation of the face transplants has been able to awake in us a bigger feeling even more than it already did over the isolation and dependency that these patients suffer, besides all what a surgery of this spread entails, valuing the meaning that this can represent to them seeing themselves forced to support the loss of a habit so primitive and natural as it can be eating by ordinary routes, this is going to be on addition to what the transplanted patient is going to support such as isolation, being too long in bed, tracheotomy, tarsorrhaphy, more or less complex monitoring, drainages, droppers through central and peripheral vessels for very prolonged periods of time, urinary catheter, intermaxillary blocks, ... etc. that altogether, is going to decrease his independence, and he will have to depend on other persons and/ or machines, artifices and even robots, all this is going to decrease or reduce their freedom and capacities of expression and self- esteem. Their primitive liberties to move, to communicate and to be made understood, to eat by the

natural routes and to be able to chew, to swallow safely and to savor foods, also to move their hands and members in general, and all of this with a more or functionless face.

Further on, we will incorporate and develop a novel term or maybe two, that have lots to do with what we are explaining in this chapter, organintegration (O), and or better Pseudoorganintegration (PsO), that comes to synthesize in several psychopathological aspects, which first of all means for the patient as a receiver, his family and the society in general and specially for the professionals in medicine, understanding that we are in front of a special almost unique situation by the organization of the act and what it means to the above mentioned to understand in a clear way, the patients as a receiver of a compound tissue, as can be a face, faces multitude of unsuspicious circumstances, perceptions, and situations no matter how much preparation he had previously. We will denominate them in the text as (O) and or (PsO).

2. Psychosomatic manifestations

When we talk about the psychosomatic manifestations in gastrostomized patients, we must understand that it will not only affect the patient, but also families and even the caregivers themselves.

Gastrostomy, has more or less immediate therapeutical purposes in patients with head and neck pathologies, such as giving them food support, there are many other causes that can bind to but we are not going to list them in our Chapter. Other times its mission, is to set as a need to save mainly problems or relieve gastric reflux contents, this can determine one of the most significant risks, the aspiration, leading to pneumatic profiles and its consequences, even lethal.

Made this digression, it is understood then that patients with sensory capacities and / or brain damage in more or less degree, we are going to determine that this issue will pass almost unnoticed, from the point of view of these psychosomatic cases the situation must be transferred to the relatives, who are the ones that will understand their needs, no matter how hard it may seem. The installation of the gastrostomy itself, the care tempore and / or the complications that start almost at the moment of the indication of their implementation, care and control of the standard, periods may become indefinite or even permanent. Here, the prescribing physician should give clear explanations of the gastrostomy, to help the family understand that they are capable of helping the patient and accepting it in an understandable and rational way and not dramatize and telling them at the same time about the therapeutic and lifesaving benefits it may have.

Our experience as Head and Neck Surgeons in patients and families, particularly oncological, derived from major trauma nature and or with malformation in the craniofacial area, etc., this means that during the previous explanation of our surgical procedures, they will make out first the therapeutic approach, which our exercises and / or spotting attitudes are essential and have proven curative intention to proceed immediately to the possibilities of reconstruction. In the case of major trauma and in general, other patients not affected by cancer, there is a component to our advantage and that is that in general, these patients do not fear for their lives, as it happens to the previous, in which the ghost of cancerous disease flies, which is superimposed, usually with mutilating surgery, that will prescribe to them.

It is clear then that once informed of these issues this will help us explain acts more "collateral" as comparatively may be performing a gastrostomy, without major problems in general, considering this act, as less entity, but not something we should underestimate. It is

very common that the patients and their families, which at first are concerned about the risks of the major surgery and the disease itself, they're focusing more on the "less entity, such as the maintenance of tracheotomy, tubes or channels of various kinds and of course, the Gastrostomies, of which they usually inquire whether they still have to carry with it for longer time or when they are going to remove it and they usually claim, will they remove it? ...! etc., and frequently we have to remind them that as we said before, the gastrostomy tube in our case, could be applied by more or less indefinite time. ... And / or forever, but it is not uncommon that they "forget the deal"

We have been able, in this rigorous and human reporting, that patients and their families, do not feel cheated at the postoperatively panorama, along our experience we remember of few patients that needed psychiatric or psychological support or even personal assistance or social platforms, thus acting, and to be more precise not even in our radical surgery, with tracks such as avalanches and tracheotomies, etc., permanent or temporary, did we have intolerant attitudes, depression or even autolytic by our patients.

Therefore, we will insist, from the outset, the prescribing specialist, must show the patient and his environment, in addition to his experience and scientific understanding, sincere feelings of the unquestionable need for radical views, but all without going into ambiguities, that may cause ultimately that the patient and his family, will not responsibly accept our advice and search for other options, which may appear less aggressive, such as treatments, chemotherapy and / or radiotherapy, which despite its potential indications and therapeutic capabilities are frequently used as complementary therapy in surgery in head and neck oncology, where they still occupy therefore a less important role in treatment, in the case pointed out, cancer of the oral and maxillofacial region.

Since the introduction and advancement of what we denominate as radical and functional reconstructive microsurgery where dental implants, epithesis and / or facial transplantation have contributed probably in essential aspects in our times of social demand or even social media, to recover these reconstructive actions and functions, such as chewing and even aesthetics, which makes most of the sceptic patients be more collaborating in the decision of surgery to recapture of these capabilities and this allows also the surgeon, sparing no limits of their resections, which is important to ensure with greater certainty, the total eradication of the tumours, as now they are able to expand " with no limits, previously unthinkable or at least questionable" safety margins during surgery, depending on the location and extent of the tumour.

The existence of social support organizations, however, may have and in fact is very important to help our patients and their environment, providing experience, assets and motivation to avoid intolerance and anxiety towards the artificial means of support before us, with the intent to recover positive feelings for the future, and not entering into attitudes of grief or disability and yes for the search of rational and even exciting arguments for the future.

Frequently family members more than the patients themselves are the ones who need help and it is logical that the informed society should get involved in their support, plain and simple collective sense of humanity or proximity, but also practical, since this help, will impact on the patient, which however should be monitored. Although, those directly affected must understand that they will have to strive to seek support and assistance by themselves and not just because they alluded to society may be inadequate, but simply because most of the times they are not correctly informed about their problems or detract

from their abilities or possibilities, by indifference and negligent attitudes, so it is not uncommon to institutionalize days of claims for the support and help of patients with certain pathologies.

For all this, the collaboration of associations as in this case, sheltering among other gastrostomized and in collaboration with the Hospital Service Units basically, once they are no longer admitted patients or their independence has increased, should be knowing that they will host different patients suffering from different diseases and that within them, will most likely be situations similar to those affected, whom will understand and cope with the difficulties. Before or at the very moment they occur, or are occurring to other patients. Any medical act is subject to complications, one of the most remarkable for instance, in the case of the gastrostomy, which concerns us is the syndrome called "buried bumper" (internal button gastrostomy buried), which must be considered as a major complication of endoscopic gastrostomy and is not very widespread. Like it is caused by a gastric mucosal ischemia, compression of the buffers that maintain and secure the gastrostomy tube. The clinical problem may pass unnoticed to determine from the output of gastric contents into the abdominal wall surface or even pictures of peritonitis. The diagnosis and treatment, are once again, endoscopic procedures or open surgery.

All this and other considerations in complications should be permanently controlled and are part of good healthcare. We have considered this brief clinical contribution and "out" of psychosomatic purpose of our chapter, which deals with issues related more with "mood", can help come closer to the reality of everyday life, the invasive procedures, and certainly unnatural ectopic, because of its location and type of use, being functional and psychosomatic artificially separated from a multifunctional organ as it is the oral cavity, in conscious patients even for their family and caregivers.

Earlier we talked about the creation of associations for special patients with more or less extreme cases, that are staying home now, or in centres for a more or less prolonged stay, to serve as an explanation of how the care of them and the similarity with other patients who need parenteral nutrition support (AP) more or less "indefinite", which of course, as our gastrostomized, have risks coming from the devices themselves such as rupture of the bag, pellet and pollution content and more local influence, due to the catheter (migration, breakage, occlusion) and / or reservoir. Common being phlebitis and thrombosis and septic complications, medications and even precipitation of air embolism, in addition to those expressed in some parenchyma and major organs like the liver (cholestasis, gallstones, liver fibrosis), and even lipid deposition in the bone bone, as well as allergic complications to latex.

The relationship with family and staff in similar circumstances can be helpful not only for timely care aspects of the procedure but to learn from other more experienced companions, associated with this problem as well, an exchange of emotions, which may be essential for all those involved in such complex environments, but precisely the contact with each others, can fundamentally relieve them.

Parenteral nutrition and gastro-jejunostomy,nowadays, have a therapeutic undisputed or even essential place, and we refer in this case to the parenteral in children with gastrointestinal failure to fulfil the nutritional requirements that otherwise, would lead from dehydration to malnutrition and electrolyte, this can be seen specially in individual cases of short bowel syndrome, of different aetiologies, acquired or congenital recessionals surgery, intestinal volvulus, intestinal atresia, necrotizing enterocolitis, gastroschisis, etc. You can

also see, as in diseases such as Hirschsprung disease and idiopathic intestinal pseudoobstruction where intestinal motility disorders is prevalent, the ectopic techniques we are referring to are unquestionably therapeutic, in sensitive patients such as children and their parents, usually forced to get in an illness environment, incomprehensive to a small, innocent, helpless and so dear being. Very similar to the gastrostomized and the reason why we used it as an example

Psychosomatic manifestations of patients, families and caregivers, etc., may have aspects in common and similar to other patients and their environment, but we should never forget that we must be vigilant and smart, to perceive and solve when possible, the particularities of each case (there are no diseases there are patients, there are no families there are relatives and to be more concrete we should say there aren't medicines but doctors), since success will depend on our therapeutic and partnership with associations (which seems the most ideal) and take advantage of their knowledge and initiatives, they are versatile and collegial, with long and recognized applied experiences and therefore undoubtedly useful for similar cases and the recognition of different and varied individuals, identifying needs, such as hiring psychologists to psychiatrists and even specialized personnel specifically trained, who will cover all the aspects they are recommended for each patient, by the specialists. And as we said, with the main support of the family, along with medical personnel and in this way help the Association, if necessary.

They are highly recommended to identify needs, assessing whether the hospitalization is going to be of long-term treatments, to combat the syndrome that could derive from it, taking in consideration the patient's separation from his beloved ones and their environment, including the social and labour difficulties he will have and those of their families who are taking care of him. Without knowing the exact duration of the ostomy and its possible complications such as the breaking-off of the family unit, disorder of the artificial tract acceptance, travel from their place of residence, reviews, anxieties about the duration of ectopic feeding, disordered eating habits and other open-ended problems, that would make the list endless, it is important that the patient should not bear the weight and the consequences of his illness alone. Even in the best cases when the disease is overcome but the need for a feeding route is still necessary, where we try to minimize the risks it is equally important to keep alert and ready to supply immediate and permanent relief even when everything is going well.

To avoid as far as possible, a greater number of Gastrostomies in patients with oral and maxillofacial pathologies and in general in head and neck or elsewhere area, specially in the case of temporary cases in adults, children, and infants, we have designed our "ectopic digestive tubes" a nouvelle procedure still not very popular which we will briefly describe, but it can help reduce the effects of conventional Gastrostomies in patients with a variety of general pathologies and oral and maxillofacial pathologies often require extraordinary measures for to ensure enteral feeding and aspiration. We report a new method for inserting what we call "ectopic enteral tubes" (EET).

Conventional enteral tubes are inserted into the digestive tract using "ectopic" insertion routes. Currently, the most common routes available are the per cranial or sub mental routes, as well as wounds and trajectories that are present or created expressly for this purpose in the craniofacial area. We report the clinical case of a patient with comminuted fractures of the temporal and left suprazygomatic region, where the EET was inserted.

This new method obviates the need for more aggressive techniques, such as surgical or percutaneous gastrostomy, and the use of natural facial orifices when not practicable or not

indicated while maintaining a viable route for enteral feeding and aspiration. Ectopic entral tubes (EET) is a useful addition to our therapeutic arsenal.

In the world of the face transplanted patients, some of those who are in need of gastrostomy, although our experience is very limited, we wanted them to be as outstanding example to gain a deeper understanding of the global uncertainties that psychosomatic patients, their families and even in some degree medical and professional authors themselves can have, (without taking in consideration the main problem of the potential immune rejection of the transplant itself) through what we call, Organintegration or Pseudoorganintegration, is a term which we will detail in the next chapter, we believe that the patients with head and neck cancer, reconstructed or not, are receivers by default (virtual) and others by the contributions of a new face (real), and this determines probably reactive processes that might be compared to the real transplant patients (effective).

The virtual, the real and the effective, must adapt to new self-perceptions and of others which they're going to affect. You may say that comparing the two situations may not be the best comparison or the more akin to a "simple gastrostomy, but, we dare to qualify what looks like a simple gastrostomy, in some patients with somatic and complex psychological condition, that make the subject with the installed probe match up in personal characteristics of comparative significance with others of the surgical patient's body more ability to relate, this is the face, "mirror of the soul."

The act of feeding by gastrostomy should keep a protocol that is as close as possible to that applicable to a ceremony, relatively speaking, which may correspond to the protocol of a conventional food. Established schedules without stiffness, preparation of the environment (even if most of the time they eat prepared food), meticulous hygiene, availability by the family, etc., in the preparation of the act, with samples of true love and affection for the patient and his environment.

Occupational therapy with training intent mainly, if they were indicated or were possible, for the specific circumstances of the gastrostomized patient can provide even more than those of pure entertainment and therefore may make them feel more useful and therefore more integrated into society.

Dramatically and hopefully understandable by readers, after these sketches psychosomatic disorders in patients with various head and neck pathologies, especially aimed to gastrostomized of this territory, with some notes to other diseases.

I want to take you now as announced, to the world of transplantation of organs and tissues, especially the face, it will be of exceptional because through them, we sense, thoughts and surgical approach, which come from far and by direct contact with them, there are very interesting questions, we want to present, through the new terms, which we denominated above Organintegration and / or better Pseudoorganintegration, with the claim to help understand what that means any changes, psychosomatic structures and conventional functional human being

3. Organintegration or better to say Pseudoorganintegration

We understand by Organintegration or better to say Pseudoorganintegration all phenomena that can happen between the biological transplanted material and the receiver to local an general level, in aspects that range from the immunohistological to psychosomatic and from the beginning we have made things clear, in the present time the referred concept is utopian and incomparable from all points of view, with the one of oseeorientation by some of the pointed reasons and others that can occur, which forces us to specify that the biological transplants at the present time, cannot be considered truly integrated in the receiver,. In transplanted cases with coincident genetic codes and immunological between transplanted and donor, we can be truly speaking, by the moment, of true Organintegration.

Few years have passed since the first face transplant and it seems to us to have been able to perceive, from what the implied professionals transmit, mass media and mainly the observation of some of the few patients who contact generally with the society over some of the capacities achieved from a practical point of view and of social relation, sensorial, functional and even emotional and it is in this sense in where we mainly want to make some observations or considerations.

The direct access to a face transplanted person is for the moment within the exceptional and I would say even "mysterious" for obvious reasons.

Therefore, the material for our considerations, to which we made reference before, we have to understand it from a pure distant observational and with no doubt very subjective, philosophical and even metaphysical point of view, for someone interested in transplants, in this case of face (Without leaving perhaps to point similar details, for external transplants or more peripheral transplants with functional interests and psycho aesthetics, of the central or internal ones, and specially, vitals) as it can be our case, even long before few realized facial surgeries till this moment took place. Where we spoke of our possible contributions of three-dimensional blocks of craniofacial structures for its possible use, in case it happened finally it would be a fact, the subject of the face transplants.

This interest, has allowed us to perhaps appreciate some details that I would like to share with you, with a casuistry so peculiar, for being subjective, distant, dark, scarce, and with no doubt, more likely, little trustworthy from a statistical point of view, and therefore scientific. It is for this reason that our work will necessarily be treated and interpreted by the reader, wisely and even with benevolence, knowing that we have analytical intentions not with critical interest and yes with constructive ones, as it couldn't be in any other way, taking in consideration the exceptional effort of patients (donor and receiver), relatives, professionals and of the society in general, and their representatives, standing before an almost religious fact, highly artisan and surrounded by needs and exceptional scientific means.

The methodological aspect, is going to be as we already pointed earlier, distant subjective and distantly observed, since the means, can be blinded with the particularity of the procedure and not being able to discerniate the scientific spectacle, of the human, the reason why the value of our contributions, must be open critics, without direct experience (it is frequent that some anxious scientists in front of almost unique and uncommon phenomena, dare to give opinions over what they believe to perceive).

At the present time we believe that it is very difficult that a transplanted person of any peripheral organ will be able to transmit his emotions towards that organ and vice versa, feeling sensations that can be considered as similar of those that he had with the "original" organ. It is like the non-existence of the circuit of independence between the transplanted organ and the brain, or we dare to say, between the organ and/ or the transplanted tissue and the soul to make him his in all senses.

I don't want to go further without making notice that the face donor, contributes giving the receiver, through his surgical mediator, a peripheral, more or less complex and always afunctional and morphobilogical cover (pure inert bioorganic material is transplanted, and I call it that way, because in the case of the face and members, they are not organs, in the

strict sense of the word, that is used in slang of parenchyma transplants, where they have immediate functional capacities, once connected to the corresponding circulatory system, even being disconnected of the conventional nervous system, not thus, perhaps, of the organic neurotransmitters that can pass on their functions and metabolic influences, through circulatory fluid and perhaps even, of the own atmosphere that surrounds them to the transplanted organ).

It is important to recognize as soon as possible, that the peripheral structure receiver, is the one who is going to give the transplanted material, if it has been done with the best anatomomorphophysiological reconstruction possible, his more primitive functional capacities, very far from the primeval surgery. And I mean primitive functional capacities, because we still have to see, to what point, he recovers functional aspects that reflect more or less clear states of encourage, emotionality, amazement, joy (the eyes of the transplanted person can maybe able to express his sensations and feelings till the transplanted covertures can be animated and vice versa) sadness even a mimic and coherent sensibility with the emotional and psychological situations of the transplanted person.

Without being sceptic, what is transplanted is very difficult to no longer be a "mask", if it is in the face or an organic prosthesis. These aspects, without doubt, obviously should be deeply commented previously to the receivers so that they won't get a disappointment afterwards which in the future can lead to rejections, not of immunological type but others not less important and very difficult to control, like those that we catalogue like coexistence rejections or emotional dependency between the transplanted material and the receiver, that will be for a life time in the best of cases.

This way the rehabilitation staff and the patient's atmosphere, should try maybe with "tricks" so as the receiver will interiorize as soon as possible the organic and functional sensations coming from the transplant that for an indefinite time will be an inherited biological material, for which a sort of bypass should be made of the most noble sensations of the patient, so that the transplanted person can feel them not from the sensorial and perceptive atmosphere, we refer to sensations like petting, affection, etc for an "organ" maybe little or non-receiving at all unfeeling and really disconnected, or not, in a neuroanatomic sense, but probably neurohormonal and even sensorial disconnected in a central level (fig 1). So, the nearness to a face transplanted person in an affective or educational way should be probably more beneficial for the transplanted person and for the individual. Accompanied by the facial approach accompanied with the hand shake or giving him a deep and polite hug in the precise moment. Knowing from the beginning probably the transplanted person will have. Activated his sensation of out of the area of the self transplanted, we will evaluate with care the peripheral sensations or any other type that can arise between human beings and the transplanted person others than the ones already mentioned. The way they should look and talk to them in a natural, educated, sincere, sensible, respectful and affable way, without any kind of difference, this is how we will do it with a beloved or admired person for different

This aspect that we consider fundamental is similar for example when we approach a lady to give her two kisses in a social act, that probably has delicate make- up, prudence will force you to bring your cheeks up to her delicately for obvious reasons and to avoid damaging her make- up. And the habit is to shake her hand she has offered you so that she really feels the affection of the salutation, not through the facial area, which is as we know the area for this social greeting.

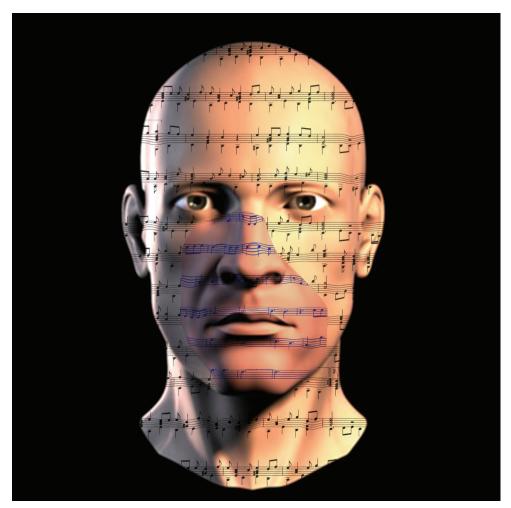


Fig. 1. Musical face
In the transplanted area the music is different from the rest of the face

We should say also that it is not even similar, what a patient can feel when he is submitted to a rehabilitation implantological treatment in the intra-oral structures of the stomatology area with what a transplanted patient of biological material of face or more peripheral areas could feel. In these cases, the implanted teeth have fundamentally functional and aesthetic reasons, but not as demanding and even vital as the one asked for to a face transplanted person which is the individual we are talking about in this chapter.

The concept of integration or Osseo integration of the dental implants, is also a clear example of the organic acceptance, functional and emotional of a biological transplanted person, that we repeat for the first time in organintegration medicine atmospheres, for the moment it is artificial, till it is not necessary to use immunosuppressive for life to try and really integrate it and not in a timeless way.

Definitely, a transplanted organ is not an integrated organ in a biological sense, and we can maybe say, that it will be difficult then to consider it as one in a functional and even physiological point of view.

The human being is the guardian of his physical integrity, and even though nobody wants to have the necessity of an organ transplant, it is not wrong to say that even governments and social organizations should insist in human behaviour in companies,... etc and the obligation and responsibility that each one of us should have with his physical integration, and even psychical, and not to transmit the sensation that nothing happens, that in case of cutting a finger a hand or an arm, you put it in ice and you can saw it once again, it is not that easy, (neither in the case of transplants).

People should be taught how to work and minimize dangers, it is as if our children wouldn't take care not to catch their fingers with the door, etc... something like this, should be done with drivers, workers, ect, and explain to them that their principal obligation when they do risk activities, begins by avoiding injuries and not pretending that politicians are the ones who should take care of us fundamentally. The direct responsible are we ourselves and for that, we have to act in life with all our senses, trying to avoid imprudence that nowadays is more than known to common human beings.

Society has to understand that the best way to avoid transplanting an organ, tissues, is to avoid once again, alcohol, tobacco, drugs and all its consequences, traffic and occupational accidents, all types of aggressions, contagious diseases ...etc, to be more concrete, take care of our physical and psychical health. That compromise is an obligation not only of the governments and society in general but as we just said of each one of us.

4. Conclusions

I am going to finish by saying that when I see an external organ transplanted person, face, members...etc. I first see its aesthetic aspect in global, to look for immediately for fundamental aspects emotional expressiveness and functional, especially in the face. In the peripheric members, we have to priorize, once more, first the aesthetic aspect and immediately next the funcionality, without delaying ourselves looking for more subtle expressive aspects, for example manual ones, that we of course will not discard.

We can't think, in case somebody still doesn't have it clear, that an organ or a tissue transplanted, nowadays, can't be considered an organ integrated structure in a physiological sense, and not only the purely parenchyma (kidneys, liver, lungs, heart, etc) but also the peripherals (face, arms, legs ...ect) as they are constantly submitted to rejection from the receiver, by histoimmunological phenomena and not few times by negative self-criticism supported by the pressure and even well intentioned critics from the patient's social atmosphere.

Note: **Organointegración** and **Pseudoroganointegración** as The Royal Spanish Language Academy, appear new terms, after consulted hundreds of Spanish and Hispanic American Dictionary included the Academic Dictionary (Department of "Spanish daily" Royal Spanish Academy, Wednesday November 3, 2010).

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