Images do not Speak for Themselves: a sociological study of a liver transplantation team'

As Imagens não Falam por si Mesmas: um estudo sociológico da equipe do transplante hepático

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Resumo

O presente artigo visa entender como uma equipe de transplante hepático se relaciona com a constante tensão entre certeza e incerteza nas práticas médicas associadas à utilização de imagens durante o processo de transplante. Para tanto, utiliza-se a metodologia de abordagem qualitativa, a etnografia e o estudo de caso como procedimentos técnicos. Os dados foram coletados por meio de observação e entrevistas semidiretivas realizadas com a equipe de transplante do Hospital de Clínicas da UFPR. Toda imagem demanda a análise e interpretação, de preferência de um especialista em imagem, capaz de identificar o que esta revela. E é nesse momento que se percebem as insuficiências das imagens e ao mesmo tempo do manifesto pela certeza; da ilusão de uma prática de interpretação sem a presença da subjetividade de quem interpreta. Na análise de imagens médicas o que está em jogo também é o modo de ver o objeto analisado. Muitas vezes o que se vê são fragmentos do que ocorre no corpo, e a interpretação dessa imagem pressupõe informações que não estão visíveis, mas que são capturadas pela experiência e pelo conhecimento adquiridos pelo médico ao longo do tempo e também na sua relação com o paciente. Percebe-se, assim, que mesmo com o desenvolvimento das tecnologias de imagem no campo médico, não se elimina a tensão entre a objetividade e a subjetividade, entre a certeza e a incerteza, entre o saber e o ver.

Palavras-chave: Transplante Hepático; *Habitus*; Imagiologia.

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Abstract

This article aims to understand how a liver transplantation team deals with the constant tension between certainty and uncertainty in medical practices associated with the use of images in the transplantation process. We used the methodology of qualitative approach, ethnography and case study as technical procedures. Data were collected through observation and through semi-directive interviews performed with the transplantation team of Hospital das Clínicas of UFPR. Every image requires analysis and interpretation, preferably by an imaging specialist, who is able to identify what it reveals. And that is when the insufficiencies of the images are perceived, as well as of the manifested certainty; the illusion of a practice of interpretation without the presence of the subjectivity of the interpreter. In the analysis of medical images what is at stake is also the way of seeing the object being analyzed. Often what we see are fragments of what happens in the body, and the interpretation of the image presupposes information that is not visible, but which is captured by the experience and knowledge acquired by the physician over time and in his/her relationship with the patient. It can be seen, therefore, that even with the development of imaging technologies in the medical field, the tension between objectivity and subjectivity, between certainty and uncertainty, between knowing and seeing, is not eliminated.

Keywords: Liver Transplantation; Habitus; Imaging.

Introduction

By means of the history of imaging or imagery, we can understand how the physicians from the Renaissance period experienced the first records of the body made through wood engravings; how the modern physicians were surprised by the radiographic machine, which revolutionized the diagnosis methods; and, more recently, how the contemporary physicians deal with the records made by digital image machines - machines that show what is not visible to the eye (Sicard, 2006).

However, the information generated by means of a machine does not reduce the importance of the physician in the diagnosis process, for the image needs interpretation, a trained eye that is able to translate the objects that are immediately offered to perception, as well as those that escape immediate perception.

In this sense, the present paper aims to understand how the liver transplantation team copes with the constant tension between certainty and uncertainty in the medical practices associated with the utilization of images in the transplantation process.

Methodology

The present paper is the result of research conducted at *Serviço de Transplante Hepático* (STH - Liver Transplantation Service) of the *Hospital das Clínicas* of *Universidade Federal do Paraná*, in the period from April 2007 to March 2009. The research aimed to study the tensions and conflicts that are present in the practices of the transplantation team (surgeons, clinicians and interns, nurses, technicians and nursing assistants, psychologist, nutritionist and social worker). We used the methodology of qualitative approach, ethnography and case study as technical procedures. Data were collected through field diary and semi-directive interviews performed with the transplantation team.

The research received authorization from the Human Subject Research Ethics Committee of HC/UFPR, on April 17, 2007, under number CEP-1388 .053/2007-03.

Images do not speak for themselves

The introduction of machines for the production of medical images of the body tends to transform it into an object. The look, now supported and potentiated by the machine, produces a new distance in the doctor-patient relationship: the use of the image, when it reveals with greater accuracy the presence of a serious disease, reduces, to the doctor and to the patient, the possibilities of non-revelation of a diagnosis. In these cases, the doctor, having an interpretation of the image that is deemed correct may, many times, face some suffering which would be avoided in an inaccurate diagnosis. What should be clearly said to the patient when the image shows a tumor?

On the contrary, what should be said when one is not certain of what he/she sees? What should be said to the patient when the image does not show everything? This tension characterizes, to a certain extent, the doctor-patient relationship when it is mediated by images. To avoid this tension, in the case of nuclear resonance or ultrasound images, doctors appeal to the technical discourse, which tends to abandon all the affection, all the subject's affirmation.

This only occurs because the body is viewed in an object dimension, and the image is viewed as the revelation of something of the object, the truth. In this game the patient's truth is left aside. There is a conflict between the body experienced by the patient and the body viewed by medical practice as an object.

Besides, the image not only strengthens the idea of the body as the object of medical practice, but it also enables that medical practice develops itself based on a virtual body, produced by an electromagnetic means, and in this lies the attempt to annul the subjectivity both of the patient and the doctor. Now, in this model, there is no interaction between doctor and patient. The doctor interacts with an image revealed of a body-object that becomes a virtual object, without words, without smell, without feelings.

Monteiro (2001) argues that the information generated from a diagnosis produced with the aid of a

machine seems to have precedence over other types of information, like that provided by the person who is being examined, as the machine-generated information is seen as a more objective measure of abnormality. Also, it can be standardized and it has the facility of data communication. This objectivity was questioned between 1940 and 1950, when many studies indicated that the variability of the observer was an important obstacle to objective interpretation, as a radiologist examining a film might see a lesion that a second radiologist might ignore.

In this sense, the analysis of the images demands specific competences, as "a poor reading accompanied by excessive confidence may lead [the doctor] to ignore a very serious aneurism. There is danger of death when one does not doubt the reading of an image" (Sicard, 2006, p.275).

In any area of knowledge, understanding depends on the notion of limits, as we only perceive forms or organizations that are delimited. To Martins, "the image, as information, depends on precisions and limits that make it become analyzable" (Martins, 2008, p. 153), because "what we cannot delimit, we cannot even perceive" (Ostrower, 1988, p. 174).

Thus, image interpretation is necessarily related to what Rouanet has described as "a pedagogy of the look" (Rouanet, 1988, p. 128). It is not any look that can see everything; it is necessary to have an educated look that dominates the details of the body's anatomy, both the ones that are immediately offered to perception and those which escape immediate perception. To the author, there are two types of normativeness: that of vision and that of the look. "An ethic or a policy of vision: it is necessary to see everything. A discipline of the look: it is necessary to train the eye, to arm it with the necessary technologies, to direct it in a correct way to its object"; after all, "it is necessary to look correctly at what one wants to see".

In other words, what Martins, Ostrower and Rouanet are trying to show is that to interpret images – paintings, photographs or X-ray examinations –, it is necessary to know, in detail, the context, the techniques used to capture the image and the ways in which the object that is being observed can manifest itself.

 $^{\,{}}_2\,$ All the quotations were translated into English for the purposes of this paper.

In addition, Martins states that, behind the photograph, "there is the photographer's perspective, a way of seeing that refers to situations and meanings that are not directly related to the thing that is photographed or to the people who are photographed" (Martins, 2008, p. 63), because, although each image contains a way of seeing, our perception also depends on our own way of seeing.

Thinking in terms of medical images, although the perception of the physician who examines and interprets images is mediated by a technical instrument and by the detailed knowledge of the body's anatomy, it also expresses his/her "way of seeing" the analyzed object. Many times, what is seen are fragments of what occurs in the body, and the interpretation of this image presupposes information that is not visible, but which is captured by the experience and by the knowledge that have been acquired by the physician over time. In the words of Merleau-Ponty, "there is no vision without thought. But thinking is not enough in order to see: vision is a conditioned thought; it is born 'on the occasion' something happens in the body" (Merleau-Ponty, 2004, p. 30).

Thus, it can be perceived that even with the development of image technologies in the medical field, there is still tension between objectivity and subjectivity, between certainty and uncertainty. This happens because the images do not speak for themselves; they demand the perspicacity of a physician who will read the image.

The official visit

To reduce the uncertainties in the transplantation process, the team of the Liver Transplantation Service meets on Wednesdays mornings in a meeting room located in the 7th floor of the *Hospital das Clínicas* that resembles a small auditorium. This meeting is called "official visit" by the transplantation team. It is a moment when the team's surgeons get together with clinical and pediatric hepatologists, and they also have the voluntary collaboration of one doctor from another hospital, a specialist in image analysis. The service's psychologist is also invited, together with the social worker, the nutritionist, the

service's head nurse, as well as the students from the 6^{th} year of the medicine course.

During the presentation of one of the cases, the intern mentions the difficulty in evaluating the Magnetic Resonance and the Tomography due to the fact that the patient could not hold his breath and this negatively affected the performance of the exam. The nodules were not visible in the resonance, an exam that should be clearer. Although the exam of the image is detailed, it does not allow a 100% certain diagnosis: there are doubts in relation to the size of the hepatocarcinoma and if it is a tumor or not.

Guilherme (I3³) points at the hepatocarcinoma in the presented image and, at that very instant, André – a radiologist from another Hospital who helps the transplantation team with image analysis-corrects him, as it is not a hepatocarcinoma, but the portal vein. Laughs are heard in the meeting room. Guilherme apologizes and says:

Dr. André, you arrived right on time to correct me, I'm sorry! (Field diary, 8/22/2007)

This shows the difficulty in visualizing details in the images and the importance of the support that the experienced radiologist gives to the team. The interpretation depends on the doctor's knowledge and experience. This is the moment when the notion of certainty constructed only based on images is most threatened. André's intervention reveals that the levels of certainty are not in the images, but in the observer's interpretation capacity. This experience reveals that it is not possible to eliminate uncertainty, nor the tensions that constitute subjectivity.

As an illustration, in another circumstance, Guilherme (I₃) approaches the case of a patient with an inaccurate diagnosis. The previous exam had not indicated the presence of a hepatocarcinoma. In a new evaluation, the team identified one hepatocarcinoma, without the need to request a new invasive exam. Michel, the head of the transplantation team, exclaims:

The professionals think they are the best, but they haven't done a good job! How could they not see the hepatocarcinoma? How can we trust them? (Field diary - 08/08/2007).

³ I3 = An intern who is in the third year of internship.

This is another example that shows the observer's importance in the capacity to interpret and reveals that the levels of certainty are not only in the images, but should include interpretation. Furthermore, it exemplifies that the observation of the image not always has such an objective correspondence, reducible to the perception schemes that are internalized during medical education.

It was not the image that improved the prognosis, Taieb (1989) argues, but the treatment that it enabled to establish and the way of performing it. The equipment gives us more accurate anatomical information, authorizing diverse procedures without the need to open the patient's body.

In the knowledge process the doctors acquire the professional *habitus*. In Bourdieu's perspective, the *habitus* maintains with the field a relationship of mutual request; they are different, but also differentiating; "they are principles that generate distinct and distinctive practices" (Bourdieu, 1996, p. 21). The *habitus* portrays a univocal set of choices of people, goods and practices. The notion of *habitus* has the function of escaping from the objectivism of the action, understood as a mechanical reaction without an agent, and also escaping from subjectivism, which portrays the action as a deliberate continuation of a conscious intention.

Bourdieu's intention is "to escape from the subject's philosophy by taking the agent into account and also to escape from the structure's philosophy, but without forgetting the effects that it exercises on and through the agent" (Bourdieu and Wacquant, 2005, p. 181). Bourdieu tends to remain distant from the extremes. On the one hand, he tries to understand the subject, without giving so much emphasis only to psychological aspects; on the other hand, he tries not to concentrate the analysis only on structure, but on the effects that it produces on the subject. To him, there are insufficiencies in the two formulations: not only a psychological subject, nor only an objectified subject, derived from the structured society. In short, to Bourdieu, subjectivity derives neither from an isolated subjectivism, nor from an isolated objectivism; it derives from both.

In Bourdieu's words, to exist in a field means "to differ, to be different"; however, it only becomes a perceptible, significant, "socially pertinent" diffe-

rence if it is perceived by someone who is capable of establishing this difference (Bourdieu, 1996, p. 23).

This field of social positions presents itself in a space of dispositions or *habitus*. To each class of positions corresponds one class of *habitus* produced by the social conditionings associated with the corresponding condition.

This *habitus* favors a medical practice that has been increasingly dependent on diagnostic imaging methods to the detriment of other forms of clinical investigation, like anamnesis or the physical examination.

Thus, the body represented in an image is an impoverished object in contrast with the richness of the body of experience. The body of experience brings the complaint; the history lived by the patient is outside the field framed by the image that is the object of the interpretation. Rasia (1996), working with cancer patients in an ethnography, witnessed a conversation between the patient and the doctor. The doctor palpated the patient and identified a tumor on one of the sides of the abdomen. The patient insisted with the doctor that there was another tumor on the other side. The doctor palpates the patient again, but does not find a tumor on the side indicated by the patient. The doctor and the patient jointly decide to perform a total abdominal ultrasound. The image revealed the presence of tumor both on the right and on the left sides of the patient's abdomen.

What can be understood from this datum is that the patient's knowledge about his own body points a way to the doctor that is different from the one he would have taken if he had taken into account only his palpation, ignoring the experience lived by the patient.

In this sense, it is believed that the image technologies try to give medicine a character of exact science; however, it is impossible to consider or be limited to objective descriptions, quantifications or distance diagnoses, as "...one person's pain is not the other's, and the sign 'that is seen' is not always connected with the symptom 'that counts' [...] However, sometimes, the patient's account leads to the diagnosis faster than imaging" (Sicard, 2006, p. 275). Therefore, when the medicine of the visible replaces that of dialog, listening weakens.

On the contrary, in the example of the diagnosis that did not identify the hepatocarcinoma, the team analyzed the image more carefully, as the patient presented symptoms that generated doubts in relation to the exam's report.

The tensions between knowing and seeing in the analysis also emerge in another case discussed in a meeting. The transplantation team presents images of a patient aged four. The team compares what the medical knowledge signals with what the image presents, together with the symptoms reported by the patient, but does not come to any conclusion. Then, it is suggested that two other image specialists analyze the exam. There are many suspicions, but the confirmation by the exam is not objective - it does not provide certainty.

Likewise, in another case, André presents the image of one pediatrics patient aged ten. The images were made in an attempt to locate the problem, as the transplantation had been performed some time before and the exams of the hepatic function reveal that it is under control. However, the patient presents some worrying symptoms. The team suspects of thrombus, but André states that there is no thrombus; apparently, there is a fistula. Apparently because there is no certainty in the images. The radiologist bases his diagnosis on the images' characteristics, suggesting fistula in a non-visible place (Field diary, 09/12/2007).

To be able to point at what is not visible in the image, André uses his experience as a radiologist, and that is why he can read in the image signs that indicate the absence of thrombus, although he suspects some circulatory irregularity. The interpretation of this image, through differentiation in relation to the images that reveal the presence of thrombus, enables André to raise the hypothesis of fistula. In other words, he sees what is not visible.

The principle of difference is much used as a diagnostic resource. When the degree of certainty is not absolute, the professional resorts to the comparison with similar cases.

The terms "suggests", "seems" and "apparently" are used very frequently by André in the analysis of the images, to such an extent that I asked Arlete – doctor, clinical chief – if these terms are part of a

protocol of the team. Arlete answered as follows:

No, no. Sometimes, André will say that the image is classic, and sometimes it does not have all the aspects for you to say "this is liver cancer for sure". [...] Classic would be the one with all the characteristics of a tumor. (Arlete, doctor, 09/10/2007).

The imaging tests, like other laboratory tests, are used as a support to treatments, but not always do they provide the certainty expected by the transplantation team - it is a *habitus* marked by the tension between knowing and seeing. This is shown by the dialog between Michel, head of the transplantation team, and José Mário (I₃).

Michel asks many questions to José Mário (I₃) about one of the results of a patient's exams:

How does the patient present so many alterations from one test to the other? What is your attitude in relation to this? How did this occur?

We don't know - answered José Mário (I3)

With this result I don't know how the patient is still alive! - exclaims Michel (Field diary, 05/30/07).

The certainties marked by technique, by the criteria elaborated in scientific research, tend to produce a distance between the transplantation team and the patient, as the medical look is directed only at the hepatocarcinoma, for example.

In another meeting, the transplantation team discusses the case of a patient with hepatocarcinoma who has already undergone ethanol sclerotherapy four times, reducing the tumor to 1.5 cm. The discussion approaches the points that this patient can achieve if he has a hepatocarcinoma of 2 cm or more.

If you leave a nodule of 1.5 cm for one year there's no problem, but one of 2.0 cm may evolve quickly. So, the rule is based on imaging tests; the patient only receives points to be listed after the tumor reaches 2 cm - states Michael, doctor, head of the transplantation team.

We need to wait for a test that shows the hepatocarcinoma with 2 cm to list the patient. It's no use listing him before - states Arlete, doctor of the team (Field diary, 9/26/2007).

On the following day, this patient went to the STH to talk to the team. He arrived at the door that gives access to the Service and asked the team about the result of the tests. Standing at the door, he heard what Guilherme (I₃) had to say.

We've discussed your case. You have a nodule of 1.5 cm that does not meet the criteria for emergency transplantation. So, we recommend that no ethanol sclerotherapy is performed to wait for the tumor to grow up to 2 cm. Then, transplantation will be made, which is the treatment that is indicated in your case - explains Guilherme (I₃).

But why, then, when the tumor was 2 cm, did you perform an ethanol sclerotherapy? - asks the patient.

When you came to us, you'd already done ethanol sclerotherapy. We have already instructed your doctor not to do any more ethanol sclerotherapies. But don't worry, your lesion is small and it won't cause you trouble. And to put you on the top of the list, it's necessary to wait for the lesion to grow up to 2 cm - explains Arlete, a doctor of the team that joins the conversation.

But you were the ones who asked for the second ethanol sclerotherapy! - states the patient.

You must understand that epidemiology is an agency that is independent of STH. So, it wasn't us who made the request. As soon as we can, we'll list you. You don't need to hurry, you are all right, you haven't decompensated! - ponders Arlete.

But I'm not in a hurry! - exclaims the patient. - The transplantation is one more alternative (Field diary, 09/27/2007)

After the dialog, Arlete seems to leave the patient talking to himself - a surprising attitude, because up to that moment, she had always seemed very helpful and concerned about the patients - at the same time that she answers attentively all questions. She quickly changes her posture, turns her back on him and walks through the corridor. The patient, embarrassed, continues to argue about his case. Guilherme (I₃) and João (I₄), who were sitting at the table of the meeting room with their backs to the door, do not look directly at him and answer the comments while they fill in documents. I become embarrassed, as at this moment the patient speaks

looking at me, searching for an interlocutor, because he seemed to be talking to the walls or to himself. To the team, it seemed that the matter had been closed with Arlete's words.

It can be inferred that what closed the conversation was the certainty that the image, which reveals a tumor of only 1.5 cm, is not enough for the patient to be placed on the top of the list of people waiting for transplantation. This reveals the transplantation team's belief in the objective criteria stipulated by the National Transplantation System of the Ministry of Health, which coordinates the list of patients who are waiting for a liver. Criteria that translate a concrete, instrumental, objectified reasoning, based on an efficient resolution of problems.

In the "meeting" between doctor and patient, the absolute discourse of medicine emerges, promoted by the clinic. This discourse takes us to the reflection made by Latour (2000) about science and the two faces of Janus. The left side of Janus' face accepts the facts without discussion and represents the resolved parts of science - finished science. The right side of the face discards the useless facts, looks for weak points and represents the unresolved parts of science - science under construction. The correlation between the look and the language, between what is visible and what is enunciable, puts us before the so-called "simultaneous discourse of science" - in the same way that there is difference, there is complementariness -, relativizing the discourse. A discourse that generates controversies between the certainty of science and the questionings about science. And it seems that it is in this way that medical discourse is constituted, until in a certain moment of history, the left face prevails and speaks, the discourse becomes absolute, and the "black box" of medicine is consolidated: a simplifying knowledge, historically controversial, which contains the truth and is directed at itself. In the example above, the dialog between the transplantation team and the patient ceases to exist and the final version of the facts is that of medical science, period.

The last example also takes us to Cicourel's (2002) interpretation of the communication between doctor and patient. To this author, doctor and patient are in distinct semantic fields. If, on one side, the doctor just sees the patient as a debilitated and ill

body, on the other side, the patient feels and experiences the illness intensely. The doctor attempts to code the patient's information, which is, to some extent, ambiguous, and translates it into abstract categories that tend to facilitate the efficient resolution of the problem. To this, he uses acquired scientific knowledge, and also his therapeutic experience. Each time the doctor relates hypotheses referring to the patient's past or current problems, many symptoms are ignored, others are misunderstood and others, reinterpreted so as to frame these data on the basis of his previous and emerging knowledge and intellectual schemes. Thus, the doctor tries to neutralize the tension between knowing and seeing based on the belief that he cannot take into account the mysteries, the magic, the emotions, the feelings that are part of the patient's subjectivity, because if he does, he may lose the capacity to objectify and produce certainties about the disease.

The patient, in turn, uses a specific semantic field to translate the beliefs that he uses in his diseases. This system of beliefs can be understood as a set of schemes or a mental model utilized to understand his daily experiences and the complex information to which the patient is submitted when he interacts with modes of communication that are highly formalized and objectified – a medical interview, for example.

For the patient who has a hepatocarcinoma, the transplantation alternative is the solution to his problem: extract the liver that does not work and exchange it for a healthy liver. In the conversation with the transplantation team, what he is looking for is information to understand what is happening in his body. After all, cancer in the liver, independently of the size of the tumor, is a significant datum to the patient; he needs to interpret, reinterpret what he feels, as he is the one who experiences and feels the disease as a singular experience.

The doctor, in turn, constitutes his *habitus* based on an education that is centered on the belief that the mysteries, the magic, the emotions and feelings that are part of the patient's life can only be partially taken into account, because otherwise they compromise the medicine's capacity to objectify and produce certainties about the disease. Thus, despite all these mysteries that constitute the patient's

concrete existence, the doctor must identify and objectify the disease in the body.

In the discourse of the transplantation team, the concern about the doctor-patient relationship is present, in the sense of listening to what they have to say:

Here I think that we struggle to preserve this [the doctor-patient relationship]. But generally speaking, I see that today the patients miss having a doctor who listens to them, who speaks, who let them speak, so... I think that at the same time that we do state-of-the-art medicine, here at the transplantation service, we try to keep some of the attention, of the affection with the patients... sometimes, the visit at the patient's bed is fast but we say three or four phrases with affection, attention... I think this is important (Arlete, clinical chief, 9/10/2007).

The fact that the transplantation team admits that it takes into account what the patient feels and thinks does not guarantee that the patient is effectively being taken into account with regard to his anxieties. Although the doctor highlighted this relationship as being important, the testimony reveals that the greatest concern is that of talking, lulling the patient - it is not that of listening. In the doctor-patient contact, the aim is not necessarily listening to the patient, but ensuring that his trust in the treatment increases. The affectionate words can be interpreted as strategies to obtain adherence to the treatment, thus establishing the power relation, according to the formulations of Cicourel (2002). It is possible to raise the hypothesis that treatment adherence happens through one of the following conditions: subjectivation of the disease or compliance with the doctor's order. Non-adherence, understood as patient's rebellion, only reveals non-compliance with the prescriptions and with the imposition of medicine over the patient's will.

In the case mentioned above, the patient who questions the ethanol sclerotherapy asks about the team's opinion and demands attention and listening. It is in this moment that the doctor interrupts the dialog, turns her back on the patient and closes the matter, evading responsibility for the adopted conduct, and transferring it to a level that is too abstract to the patient: epidemiology.

It is also possible to raise the question that the conversation with the patient is nothing more than a monologue disguised as a dialog, in the sense that every medical discourse is mediated by objective information about the patient that is registered in the patient's record and by the objective criteria of listing for transplantation. In this way, to Clavreul, the dialog is just an encounter between the doctor and his own discourse, as, to the doctor, the patient does not know what he says, "because what he says of his symptoms only acquires meaning in the medical discourse, and from this point of view what his body says is safer than what his voice says" (Clavreul, 1983, p. 158). The physical signs revealed by the imaging tests are more objective, more concrete, despite the margin of uncertainty that they carry, than the symptoms reported by the patient, which are subjective and, therefore, suspicious.

According to Clavreul, in the medical institution, doctor and patient are devoid of their subjectivity; the doctor is responsible for representing the institution. The disease is the object constituted by the very medical discourse, and the human being is solely the ground in which the disease installs itself. Therefore, the only subject of the medical discourse is the one who enunciates it: the doctor. It is on this point that the doctor-patient relationship is founded, on the exclusion of the subjective positions of one and the other. Both are submitted to medical reason (Clavreul, 1983).

In the same way, in the previous example, when the patient indirectly questions the conduct of the transplantation team, what occurs is a rupture in this mutual agreement of exclusion of the subjective positions. Medical reason is put in check. The medical *habitus* is tensioned, tested by the patient's attitude and word. And what is the team's reaction? To avoid damage to the necessary objectivity in the doctor-patient relationship, the team considers the matter closed.

Image and Subjectivity

Like the patients, the team sees the world through the filter of their representations, of their mental imagery - conceptions created and fed in the process of medical education and socialization. In this process, the medical *habitus* is consolidated, ways of acting that are transmitted generation after generation of doctors. This *habitus* can be identified in the doctor's posture concerning the patient in the consultations, in the requests for exams, in the complaints regarding compliance to prescriptions or in the praises when these are followed to the letter, and also, mainly, when the medical discourse defends a liver transplantation, for example, as the only solution to the patient. A discourse that many times overvalues the objective results of transplantation, excluding the subjective aspects of the process: the patient.

In this sense, it is impossible to discuss the tensions between knowing and seeing that are present in the transplantation team without considering the patients' tensions, because the individuals are developed in and by the relationships with other human beings.

In Clavreul's approach (1983), the doctor-patient relationship is constituted by the exclusion of the subjective positions of both of them. Nevertheless, the author admits that it is not possible to eliminate all the subjectivity from the process; it is always emerging because it is on the borders, on the margin of the objectivation process, threatening the team's comfort zone.

On the patient's side, the subjectivity that is on the borders may make feelings like shyness, fear and anguish emerge, feelings that make him refuse tests, treatments and medicines. On the doctor's side, these feelings may negatively affect the objectivity that is necessary in the diagnosis and in the decisionmaking in relation to therapeutic imperatives.

And, in this sense, subjectivity is constituted in these objective conditions and emerges, therefore, in this context of relations between tension and harmony.

In the example of the previous section, when the patient indirectly questions the team's conduct, in fact he shakes the certainty of the team itself, he questions the *habitus*, he invades the comfort zone.

The employment of these technologies offers better objective conditions of diagnosis and treatment; however, it presents a high subjective cost to the teams that use them, as these procedures

demand deep knowledge for the interpretation, skill to handle these techniques and the doctor's involvement with his act and with the care dedicated to the patient. To Camargo Júnior, although the doctor is in the objective pole of this confrontation, he is not immune to the tensions between knowing and seeing, because his reasoning is subject to the judgment of his experience. And, like his patients, the doctor sees the world through a filter of representations; a mental imagery protected by the shield of scientific rationality. Some of these conceptions are created and fed in the teaching-learning process. Some are consolidated and pass from generations to generations of professionals; beliefs are also solidified even without any empirical basis. "For example, complementary tests that generate an image or a number are more promptly accepted by doctors as the expression of 'truth', even if there is no scientific reason for this" (Camargo Júnior, 2003, p. 90).

The tensions that emerge in the use of medical technologies, mainly when we are dealing with images, are marked by the promise of the certainty that the image can offer and the capacity to support a 100% reliable interpretation. These tensions reverberate on the doctor's subjectivity and on that of the other members of the team of STH-HC.

Conclusion

Organ transplantation has benefitted from the progresses achieved by medical science and technology. The transplantation team, mainly doctors, can use images that allow to visualize in detail the liver's anatomy with no need to "open the patient to see". However, the team reports that there is no absolute certainty, as many images only "suggest" certain aspects of the organs: liver, pancreas, spleen, etc.

Every image demands analysis and interpretation, preferably by an image specialist who is capable of identifying what it reveals. And it is in this moment that the insufficiencies of the images are perceived, as well as the insufficiency of the manifesto for certainty and of the illusion of an interpretation practice without the presence of the subjectivity of the person who performs the interpretation.

In the analysis of medical images what is at stake is also the way of seeing the analyzed object. Many times what is seen are fragments of what occurs in the body, and the interpretation of this image presupposes information that is not visible, but which is captured by the experience and by the knowledge acquired by the doctor over time and also in his relationship with the patient.

Thus, it can be noticed that, even with the development of image technologies in the medical field, it is not possible to eliminate the tension between objectivity and subjectivity, between certainty and uncertainty, between knowing and seeing. The uncertainty that is present in the procedures, in the limits of medical intervention, shows that subjectivity has not been totally replaced by objectivity. Therefore, it is not possible to talk about a tamed subjectivity. Fear and anguish, feelings that are on the borders of this process, reemerge, threatening all types of certainty and, thus, of objectivity.

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