# RESEARCH

## PATIENTS WITH PRIMARY TOTAL HIP ARTHROPLASTY: FEELINGS EXPERIENCED

PACIENTES COM ARTROPLASTIA TOTAL PRIMÁRIA DO QUADRIL: SENTIMENTOS VIVENCIADOS SENTIMIENTOS DE PACIENTES CON ARTROPI ASTIA TOTAL PRIMARIA DE CADERA

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#### **ABSTRACT**

The objective of this research was to understand the feelings and changes experienced by patients who underwent primary total hip arthroplasty. It is an exploratory study with a qualitative approach. For the selection of the study population, a preliminary survey was conducted in the technical informatics core of all patients who underwent a primary total hip arthroplasty (PTHA) due to osteoarticular fractures of the hip and femoral neck, from January of 2007 to December of 2008; and who have been and /or were followed up at the ambulatory clinic during the same period, totaling 36 patients. Data collection occurred from January of 2009 to June of 2009. The interviews were audio recorded, using a semi-structured guide, and applying the criteria of intentional sampling for the selection of interviewees, suspending it when no more new information was contributed (saturation technique). Thus, it reached 14 respondents. The data were submitted to a content analysis technique proposed by Bardin, resulting in two categories: "fear of losing the leg after surgery, or of having a prosthesis rejection and subsequent falls" and "dependence for care". Regarding the first category, individuals reported their fear of losing physical mobility, locomotion and experiencing subsequent falls; regarding the second category, the concern of becoming incapable was highlighted. The study results demonstrated that such feelings could be alleviated if these patients were better oriented in the pre- and post-operative periods, and if nursing professionals were attentive to the feelings mentioned.

Keywords: Arthroplasty, Replacement, Hip; Fear; Nursing Care; Emotions.

## **RESUMO**

O objetivo desta pesquisa foi compreender os sentimentos e as alterações vivenciadas pelos pacientes submetidos à artroplastia total primária do quadril. Estudo exploratório, com abordagem qualitativa. Para a seleção da população do estudo foi feito levantamento prévio no núcleo técnico de informática de todos os pacientes que foram submetidos à artroplastia total primária do quadril (ATPQ) devido às doenças osteoarticulares do quadril e fraturas do colo do fêmur, no período de janeiro de 2007 a dezembro de 2008; e que estiveram e/ou estavam em acompanhamento no ambulatório nesse período, totalizando 36 pacientes. A coleta dos dados se deu no período de janeiro 2009 a junho 2009. As entrevistas foram audiogravadas, utilizando-se roteiro semiestruturado e aplicando-se o critério de amostra intencional para a escolha dos entrevistados, suspendendo-as quando não mais acrescentaram novas informações (técnica de saturação). Assim, chegou-se a 14 entrevistados. Os dados foram submetidos à técnica de análise de conteúdo proposta por Bardin, resultando em duas categorias: "medo de perder a perna, ter rejeição à prótese e novas quedas" e a "dependência para o cuidado". Em relação à primeira categoria, as pessoas relataram o medo da perda da mobilidade física, locomoção e novas quedas; quanto à segunda categoria, destacaram a preocupação de ficarem incapazes. Os resultados do estudo demonstraram que tais sentimentos poderiam ser amenizados se esses pacientes fossem bem orientados no pré e pós-operatórios e os profissionais de enfermagem estivessem atentos aos sentimentos detectados.

Palavras-chave: Artroplastia de Quadril; Medo; Cuidados de Enfermagem; Emoções.

#### RESUMEN

El objetivo de esta investigación fue entender los sentimientos y cambios manifestados por pacientes sometidos a artroplastia primaria total de cadera. Se trata de un estudio exploratorio con enfoque cualitativo. Para la selección de la población se realizó un relevamiento preliminar en el núcleo técnico de informática de todos los pacientes sometidos a artroplastia total primaria de cadera debido a enfermedades ósteoarticulares de cadera y fracturas y del cuello femoral, 36 pacientes en total atendidos entre enero de 2007 y diciembre de 2008. La recogida de datos se llevó a cabo entre enero y junio de 2009. Las entrevistas se grababan siguiendo un guión semiestructurado y según el criterio de la muestra intencional para la selección de los entrevistados; las entrevistas se suspendían cuando ya no había más información por agregar (técnica de saturación). De esta forma se seleccionaron 14 participantes. Los datos siguieron la técnica de análisis de contenido propuesto por Bardin, resultando en dos categorías: "El temor de perder la pierna, de rechazar la prótesis y de caerse nuevamente" y "depender de otros para que lo atiendan". En cuanto a la primera

categoría, las personas manifestaron temor de perder la movilidad física, la locomoción, y de volver a caerse. En la segunda categoría evidenciaron la preocupación de quedar minusválidos. Los resultados del estudio mostraron que tales sentimientos podrían ser mitigados si los pacientes recibiesen información en el pre y pos operatorio y si los profesionales de enfermería estuviesen atentos a los sentimientos de dichos pacientes. **Palabras clave:** Artroplastia de Reemplazo de Cadera; Miedo; Atención de Enfermería; Emociones.

#### INTRODUCTION

A total hip arthroplasty is a surgical procedure for reconstruction of the adult hip, and is indicated for some primary and secondary degenerative joint disease of the hip (osteoarthrosis), femoral neck pseudoarthrosis, rheumatoid arthritis, and also for those cases that do not respond adequately to conservative treatment in some diseases.<sup>1</sup> Among the chronic degenerative diseases, there are osteoarticular diseases such as arthrosis, a chronic degenerative disease characterized by cartilage deterioration and new bone formation on surfaces and joint margins.<sup>2</sup> Osteoarticular hip disease, also cited as osteonecrosis, is defined as a progressive disease, leading to necrosis of bone by loss of the circulation, caused by several etiologies. Each year, 20,000 new cases of osteonecrosis are diagnosed in the United States, and currently 18% of all total hip replacements are performed for this diagnosis.3 According to the Hospital Information System of the Unified Health System (SIH/SUS), from August of 2010 to July of 2011, there were approximately 14,434 hospitalizations for surgical procedures of primary total hip arthroplasty (PTHA) in Brazil, cemented and uncemented/hybrid, totaling an expenditure of R\$53,706,491.50. In the state of São Paulo, 4,339 hospitalizations were performed, at a cost of R\$16,163,735.97; and in the city of Marilia, there were 101 hospitalizations totaling the amount of R\$512,423.16.4

When people undergo surgical procedures requiring hospitalization, in addition to the disruption in their activities of daily living, this may be preceded by negative feelings about the loss of their independence, to the depersonalization that is sometimes experienced in the hospital, and also the feeling of fear and anxiety that can be experienced. It is irrelevant which surgical procedure the patient will undergo, the fear of the unknown and fear of dying is always increased, resulting in painful and threatening aspects throughout this stage.<sup>5</sup>

Research shows that individuals, when hospitalized, report that they would like to be treated with affection, friendship, love, dedication and respect.<sup>6</sup> Another aspect is related to the moment that precedes the surgery, when the patients also live the fear related to the uncertainty of prognosis and risk, requiring an individualized approach from the health teams. A multidisciplinary approach is relevant at this moment, beginning in the preoperative period, focusing on psychological intervention, in order to reduce anxiety.<sup>7</sup>

In the preoperative period of major surgery, patients described different feelings and perceptions, including the fear of

death, anguish, anxiety, and lack of knowledge.<sup>8</sup> Added to this, as an aggrivating factor, is the hospital ambience, impersonal treatment, lack of identification of professionals, risk of reduced mobility, insecurity, tension, and the fact that they feel frightened and endangered by the surgical procedure.<sup>9</sup> In addition to this, when people are ill, they experience feelings such as anger, anxiety, depression, irritability, fear, and others. The improvement of these feelings, however, can occur when individuals perceive that their activities and their independence can be restored with time.<sup>10</sup>

The importance of effective communication in the preand post-operative phases is crucial, since people are vulnerable, anxious, afraid, insecure and preoccupied about the procedure. Thus, information about the surgery, the time of duration, extensiveness, type of anesthesia and experience of pain become extremely important at this time. Preoperative instructions and communication between patients and the multidisciplinary team constitute a relevant therapeutic action that is essential for care. It is effective in reducing anxiety, provides more safety and the involvement of the patient before surgery, and can be decisive in the recovery process and which is as important as performing the technical procedures.

The justification for studying this theme arose from the professional practice area in orthopedics and trauma, which allowed the observation and identification of problems experienced, mainly related to the limitations imposed by the surgical procedure and the questions in the pre- and post-operative periods, such as: daily activities, physical activity, locomotion, infections, fear of surgery, personal hygiene, and restriction to bed.

## **OBJECTIVE**

To understand the feelings and changes experienced by patients undergoing primary total hip arthroplasty, treated at the university hospital of the Faculty of Medicine of Marília (Famema).

## MATERIAL AND METHODS

This is an exploratory study with a qualitative approach, conducted in the city of Marilia, São Paulo, Brazil, at the Orthopedics and Trauma Specialty Clinic, Faculty of Medicine of Marilia, Famema. For selection of the study population, a previous survey was performed in the technical core of informatics, of all

patients who were submitted to PTHA for osteoarticular diseases of the hip and femoral neck fractures, in the period of January of 2007 to December 31, 2008; and that are and/or were being followed at the clinic in this study period, totaling 45 patients.

Of these 45, only 36 participated in the study; five patients died, one refused to participate in this study, one patient was transfered for treatment at another center, one patient was not located due to change in home address, and one interview was discarded, because the patient had a stroke, becoming aphasic. Thirty-six patients were therefore included – 20 males and 16 females. Data collection occurred in the period of January to June of 2009.

The data collection instrument was a semi-structured guide, with open- and closed-ended questions, whose guiding questions referred to the factors experienced after hospital discharge, addressing home care (dressing, hygiene, locomotion, medication, physical activity), to recovery, and the interference of surgery in the dynamics of personal, family, and social life, as well as changes and feelings that surgery triggered. Those who agreed to participate were brought to a private room, distant from noises, where the terms of free and informed consent was read, where the details of the research were explained, and that it would occur as a semi-structured interview, which would be recorded in an MP3 format. For the selection of subjects, the criterion of intentional sample inclusion were used, suspending the interviews when they did not add new information (saturation technique). <sup>14</sup> Thus, the sample size reached 14 respondents.

The transcript of the interviews and the analysis of the materials were performed by the researcher, and the data were submitted to the content analysis technique proposed by Bardin, according the following steps: pre-analysis, material exploration, treatment of results/inferences and interpretation.<sup>15</sup> For coding of respondents, the letter "I" was used, which indicates interview, followed by the numeral that represents the sequence of interviews, then by the number that identified a grouped category, followed by sex as represented by the letter "F" for female or "M" male, and lastly the age.

This research consists of partial data from the master's thesis entitled, "Living conditions of patients with primary total hip arthroplasty (PTHA): feelings and changes experienced". The study was approved by the Ethics Committee on Research Involving Human Subjects of the *Faculdade de Medicina de Marília*, São Paulo, in accordance with Resolution 196/96, with a protocol number 431/2008, on 25/08/2008.

## **RESULTS AND DISCUSSION**

The results presented emerged from the interviews of this research based on the units of meaning, leading to the construction of two categories: "fear of losing the leg after surgery, or of having a prosthesis rejection and subsequent falls" and "dependent of the construction of two categories and subsequent falls and "dependent of the construction of two categories and subsequent falls and "dependent of the construction of two categories are categories and subsequent falls" and "dependent of the construction of two categories are categories and categories are categories.

dence for care". In sequence, these results were treated through analysis of the material that showed significance; and to finalize the procedures proposed by the methodological framework, two themes were identified and will be discussed below.

#### EXPERIENCING THE FEAR

Many factors affect the emotional aspect of individuals undergoing a surgical procedure, including the emotions caused by the disease, the surgical procedure itself, the possibility of physical limitation, dependence, anxiety about leaving family members, and other feelings. This study identified the "fear" at various moments; pre-, intra- and post-operative. This feeling was identified in the reports of patients when manifested as the fear of losing the leg after surgery, rejection, or experiencing subsequent falls.

"Because my fear was to stay at the hospital, Friday, Saturday and Sunday [...]. I was too afraid of losing my leg [...].afraid of not walking again [...]. I wanted to go without knowing anything, fear of things that I would have to hear" (I3.1 F 54).

In the respondent reports, the fear of losing the leg is related to being sentenced to a wheelchair or the use of crutches to be able to move, the mutilation of the leg and dependence on others, which would be a fact and a routine in their lives. Thus, the loss of autonomy would be present, compromising the freedom of choice due to the limits imposed by the procedure, which would require new coping strategies for life, culminating in numerous new adaptations.

The treatment of orthopedic diseases usually affect a person's appearance due to the use of artifacts for limb immobilization, compromising mobility or the walking ability of individuals, affecting their daily activities in different degrees and complexity. As previously reported, the fear, primarily of losing a leg, being eternally dependent on other people in terms of mobility and locomotion, permeates the phase from the acceptance of surgery to recovery.

The fear of rejection in the postoperative period also emerged, during the analysis of the results in this category, as is noted in the following account:

"At first I was afraid of surgery, of rejection, I do not know what this is like, to lose the surgery. I was afraid, I could have rejection, to have a problem, nonacceptance, to be left in a wheelchair, the fear was the wheelchair [...] "(I 7.1M 53).

Fear of rejection of the prosthesis reported by patients in this study is related to the risk of infection that may arise after the PTHA, a complex surgical complication leading to delay in recovery, leaving sequelae and causing dependence on others for their care for long periods, or definitively. Infection in hip arthroplasty is considered catastrophic, as it may require further surgery, which is related to an increased mortality rate. It should also be noted that these infections are difficult to treat and may be associated with factors such as diabetes, use of immunosuppressive drugs, and periods of prolonged hospitalizations. Following is the story of difficulties experienced by a patient who had a post-operative infection, which required several surgeries in an attempt to control, the infection This fact generated changes in her living conditions, deterioration in her dependence for care, restriction in walking, several hospitalizations, emotional changes, and interference in her quality of life.

The first surgery was infected, infection in the prosthesis. I had to go back in the hospital, do the second surgery and clean it up. Then I picked up another bacterium; had to have a third and fourth surgery. In the fifth surgery a spacer was placed. Today I only stay in the wheelchair, I get nervous, because I want to work and cannot. I want to put my foot on the ground, that's all I wanted, but I cannot even put my foot on the ground (I 11.2.F. 7).

There are several contributing factors to acquiring an infection, including a deficiency in postoperative care, related to inadequate skill in bandaging the incision site, medication administration at incorrect times, lack of hygiene, and others, all connected directly to the nursing care.

Another feeling present refers to the "fear of subsequent falls" and is related to those people who underwent surgery for fracture of the femoral neck bones, as noted in the following reports:

"I had the surgery because I fell down at night. I was in the bathroom, I got up and fell in the room, it was four o'clock in the morning, I think that it was the slipper, I was crawling, but I'm afraid of falling again. And now, I do nothing, I walk holding on to things. I'm afraid of falling again "(I 12. 1. F. 76).

"I was in the bathroom. There was some water on the floor, I stepped, then slipped and fell. I would like to have guidance to avoid falling, if I had not fallen, and what do I need to do now to go to places by myself? Lose the fear? I'm very afraid of falling again. If I fall again? I'm afraid I will have another fracture". (I 9.1.F 66).

Falls are a serious health problem for the elderly and may be related to several factors, including gait speed, depression, func-

tional limitation on their daily activities, poor housing conditions, among others. These aspects intensify this fear, therefore, preventive measures of care and care interventions must be taken to improve the quality of life of such persons and their functionality. Most often the elderly, when they fall, can present with serious problems, from minor abrasions to major injuries to the body or even femoral fractures, requiring hospitalization and surgery. The feeling of fear and anxiety about falling again in the activities of daily living, such as climbing and descending stairs, bathing, stooping to pick up objects on the floor, standing up or lying down, is highly associated with impaired functional capacity to walk before the fracture and the number of complications and impairments of activities of daily living after the fracture.

As a fall is a very common accident among the elderly, it is noticed that some factors in the home may increase these risks, such as those cited in the reports: wet and slippery floors, inappropriate shoes, poor lighting, lack of handrails on stairs and in bathrooms, etc. Nurses are responsible for providing basic guidelines of care for prevention of such risks, especially at home, and in this way they prevent injuries in this population, reducing the rate of new accidents and the fear of recurrent falls among those who have experienced these situations.

According to these scenarios, implementations of programs are necessary in primary care, along with prevention guidelines for individuals who have already suffered falls and fear falling again, which can lead these elderly to have even greater complications at an advanced age. There is also the need for public policies and campaigns for the health of the elderly, by performing health professional training with family participation, having the reduction of these occurrences as the goal.<sup>21</sup>

#### **DEPENDENCE FOR CARE**

The concept of dependence is understood as "the inability of the person to function satisfactorily without assistance of another or equipment to enable him to adapt", leading to the connotation of helplessness and impotence.<sup>22</sup> Patients undergoing total hip replacement surgery, in the postoperative period, have deficits related to self-care for hygiene and daily living activities, thus demanding nursing care interventions due to impaired physical mobility, because they are confined to bed during this period.<sup>23</sup>

Not only in the postoperative period, but after discharge, the dependence for care continues to reveal itself as another category that appears in the report of patients undergoing PTHA. This dependence involves, in addition to basic hygiene care, difficulty with movement, need for assistance of another to walk, poor access to medication and its administration. There is a serious concern of becoming incapable of perform routine and necessary activities that, before the surgery and

under normal conditions of life, were performed without the need of interference of others.

My daughter, she was there everyday, she works; in the morning she was coming to see how I was, brining coffee, lunch in an insulated lunch box at the head of my bed; later she was back to see me, left everything close just to move my body. That was tough, hard! I needed it, I had no hope. In terms of urination, I had a bottle near the bed, to make the other necessities I took a medication to hold the intestine, and was 20 days without a bowel movement. That part was hard, I was terrified, staying home alone [...] (I 14.2 M 65).

It can be noticed that people who lived alone and had to go through the process of convalescence after surgery at home reported feeling of insecurity related to care, loneliness, frailty in case of needing help or getting sick without having immediate assistance from someone around. In this case, the suppression of physiological needs was used, and even not taking medications, due to the physical limitation of movement. It is clear that guidance and organization of health services, integrating hospital networks with primary care, could avoid such situations.

It is believed, therefore, that a orientation plan is required for caring in an intensive way and, more, that the hospital could be linked to the education of some caregiver with physical and emotional conditions to perform the function to be learned. Also, in regard to the dependence for care, it was identified that experiencing the surgical experience makes the need for autonomy implicit:

To depend on others, this was the most pain I suffered, that was my pain, to depend on others, the shame, that was the pain that I suffered, I cried for having a woman [nurse] who bathed me, I felt shame. The greatest pain of the operation was to depend on others to clean and take care of us, the only thing that complicated this for me was that. But I did not want to depend on others, the help me in bed. [...] (I 8.2 M 63).

Anguish can be seen in the statements of those who, for a period, found themselves dependent on others for their basic hygiene care, bed bath, the inconvenience of being taken care of by nursing professionals of the opposite sex, all of which generated feelings of weakness, vulnerability and shame. Adding to this, they found themselves constrained to bed, experiencing a disability imposed by the procedure, not having the option of going to the bathroom, compromising their autonomy and independence in relationship to care.

The hip arthroplasty surgery generates an impact on activities of daily life of people. Therefore, it requires training, orien-

tation and monitoring before and after surgery, influencing the level of knowledge of these patients for performing activities of daily living, improving the autonomy and independence for care, to experience fewer problems after hospital discharge.<sup>24,25</sup>

From the moment in which people become dependent, they require the availability of someone to take care of them. Most often, they are people of their own family, which still generates discomfort and embarrassment for those who experience this problem.

#### CONCLUSION

Data from this study support the conclusion that the preand post-surgical instructions are fundamental for persons undergoing PTHA, without which the recovery is compromised. The need for health professionals more attentive to the feelings expressed by patients during this time is clear, valuing the emotional aspects, especially in relation to fear and dependence for care. The relevance of the study to the clinical practice of nursing is therefore noted, with a more specific view toward training, instruction and monitoring of patients, from the preoperative to the postoperative period, because during these steps, individuals are filled with doubts, fear, insecurity and anxiety. It is hoped that, with this research, orthopedic nursing care can be humanized, safe, contribute to the care and teaching-learning process in the training of health professionals, related to persons undergoing PTHA surgery. Also, the development of a proposal for articulated multidisciplinary work with the plan of care in different levels of care is needed, improving thereby the quality of guidance for patients.

Based on the data presented, even though the study has as a limitation the fact of being qualitative and having been done in a single location, making it impossible to generalize the findings, the need to consider the people undergoing PTHA surgery in their totality was demonstrated, with special attention to the emotional and social aspects, in order to reduce their stress and provide more autonomy for their care and recovery.

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