RESERCH

CHARACTERIZATION OF PEOPLE IN CARDIAC SURGERIES: A DESCRIPTIVE STUDY

.refs: cuid. fundam. online 2013. abr./jun. 5(2):3677-83

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ABSTRACT
Objective: To characterize patients undergoing cardiac surgery at a referral hospital in northern of Ceará. Method: This is a quantitative and descriptive study using documentary analysis carried out by 176 medical records in accordance with the ethical aspects of Resolution 196/96. Results: We identified predominantly men, married, living in distant cities of the health service and a greater tendency for people over 40 years old. The hospital stay was low, contributing to the reduction of risks related to hospitalization, also reducing the cost of these services, for influencing turnover and availability of beds. Discussion: This study shows high turnover and effectiveness of the service, allowing also envision that the primary surgery is coronary artery bypass surgery in men with the duration of hospitalization in about four days. Conclusion: We found that despite the risks of a cardiovascular surgery in the studied hospital, the patients recover with a great success.

Descriptors: Cardiopathy, Heart surgery, Profile.

RESUMO
Objetivo: Caracterizar os pacientes submetidos à cirurgia cardíaca em hospital de referência da região norte do Ceará. Método: Pesquisa quantitativa, descritiva, de análise documental realizado pela análise de 176 prontuários de acordo com os aspectos éticos da resolução 196/96. Resultados: Identificou-se predominância de pacientes masculinos, casados, residentes em municípios distantes do serviço de saúde com predomínio da faixa etária acima de 40 anos. A permanência hospitalar foi baixa e por isso, percebe-se redução de riscos relacionados à internação e também dos custos com estes serviços, os quais influenciam para a aumento da rotatividade e disponibilização de leitos. Discussão: Foi evidenciada grande rotatividade e efetividade do serviço, possibilitando também vislumbrar que a principal cirurgia realizada é a revascularização do miocárdio em homens com a duração de internação em torno de quatro dias. Conclusão: Apesar dos riscos de uma cirurgia cardiovascular no hospital estudado, os pacientes recuperam-se com grande sucesso.

Descritores: Cardiopatias, Cirurgia cardíaca, Perfil.

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INTRODUCTION

Cardiac surgery targets the heart, a vital organ that is related to the feelings of life and death. Thus, this procedure is in the context of the patient's life as a generator of great anxiety.

This type of surgery helps to improve the quality of life of patients with coronary disease, thus, nursing care should have offered a broad perspective, therefore, permeates all periods: preoperatively and postoperatively.

In this sense, the nursing care in the Coronary Care Unit (CCU), involves the continuous evaluation of the patient's general condition, identifying disturbances in hemodynamic parameters, preventing complications, providing a care plan and emergency treatment, in addition to emotional support and good communication among team members and with patients and families.

During the evaluation of nursing care in patients with heart insufficiency, an investigation was conducted sensibly through nursing consultation through a sensitive scup, and we found that 100% of the people had a lack of knowledge about the disease that affected.¹

Thus nursing care begins preoperatively with physical and psychological evaluations to serve as future parameter. Investigates the patient's knowledge about the surgery and guide the need for informed consent, supports and assists the patient in coping with stress, seeking to maintain a safe operative period of admission to the rehabilitation phase where the patient and family are able to take the treatment.²

This study emerged from the experience of researchers in caring for people with cardiovascular disease in a coronary care unit. To perform nursing care, in this context, it has become necessary to characterize the clinical and epidemiological profile of patients involved as well as permanence and evolution of these. It is important for bringing the characterization of patients undergoing cardiac surgery including information regarding the permanence and cardiopulmonary bypass to allow planning of nursing care from the information obtained. This study aims to characterize patients undergoing cardiac surgery in a referral hospital in northern Ceará; identify the types of surgeries performed, length of stay in the coronary care unit and hospital care of these patients, assess the cardiopulmonary bypass time and know the evolution the same in the postoperative period.

METHODOLOGY

This is a quantitative, descriptive and documentary analysis. The study site was a referral hospital in Cardiology, located in Sobral, northern municipality of Ceará located 240 km from the state capital. The choice of this location was due to the ease of access and for being the workplace of one of the researchers. The study was conducted with all medical records of patients who underwent heart surgery in 2007 for a total of 176, this being also the sample.

Data collection occurred from June to August 2008 through access to records at the Department of Medical Files of the hospital, filled up a form with identification data, operative time, and length of stay in the coronary care unit and hospital and development during the postoperative period.

Data were stored in Excel 2007, analyzed and displayed in the form of figures, to better understand the results and discussed in the light of relevant literature.

This study followed the ethical and legal principles of research with humans and had the approval of the Committee of Ethics in Research of the State University Valley Acará - UVA with
RESULTS AND DISCUSSION

Initially identified the epidemiological profile of patients for better understanding of the context in which this patient are entered.

The sample characterization can be better visualized by table 1.


<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>98</td>
<td>56</td>
</tr>
<tr>
<td>Female</td>
<td>78</td>
<td>44</td>
</tr>
<tr>
<td>2. Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>115</td>
<td>65</td>
</tr>
<tr>
<td>Single</td>
<td>39</td>
<td>22</td>
</tr>
<tr>
<td>Widower</td>
<td>07</td>
<td>04</td>
</tr>
<tr>
<td>Non informed</td>
<td>15</td>
<td>09</td>
</tr>
<tr>
<td>3. Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children and teenagers</td>
<td>10</td>
<td>05</td>
</tr>
<tr>
<td>Adults</td>
<td>76</td>
<td>55</td>
</tr>
<tr>
<td>Elders</td>
<td>79</td>
<td>40</td>
</tr>
<tr>
<td>4. Origin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sobral</td>
<td>43</td>
<td>24</td>
</tr>
<tr>
<td>Surrounding municipalities</td>
<td>133</td>
<td>76</td>
</tr>
<tr>
<td>Total</td>
<td>176</td>
<td>100</td>
</tr>
</tbody>
</table>

There was a predominance of patients with stable relationships or married and residents of surrounding municipalities Sobral.

With regard to the types of surgeries performed, is displayed in Table 2.

Table 2: Distribution of cardiovascular surgery in Sobral, according to the type in Sobral, 2007.

<table>
<thead>
<tr>
<th>Type of surgery</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Myocardial revascularization</td>
<td>87</td>
<td>49</td>
</tr>
<tr>
<td>Exchange of mitral valve</td>
<td>31</td>
<td>18</td>
</tr>
<tr>
<td>Aortic valve replacement</td>
<td>31</td>
<td>18</td>
</tr>
<tr>
<td>Double valve exchange</td>
<td>06</td>
<td>03</td>
</tr>
<tr>
<td>Congenital heart defects</td>
<td>02</td>
<td>01</td>
</tr>
<tr>
<td>Other</td>
<td>66</td>
<td>03</td>
</tr>
<tr>
<td>Total</td>
<td>176</td>
<td>100</td>
</tr>
</tbody>
</table>

The relationship between type of surgery and age group was as follows: children and adolescents conducted: correction of patent ductus arteriosus (PDA); correction Intraventricular Communication (MIC) and exchanges of heart valves and, among older adults, more surgery was prevalent coronary artery bypass grafting (CABG) with 36% (62) of cases.

Another factor studied that is paramount to the success of surgery is related to the surgical procedure. See Figure 1.

Figure 1. Distribution of Patients Undergoing Cardiac Surgery, Regarding the Time of Surgery. Heart Hospital of Sobral. Jan - Dec 2007.

The minimum time of surgery were pericardectomy and Correction of PCA, which are simpler surgeries and surgeries of time were the double valve replacement and MRI more complex, requiring more time, so the time Extra Corporeal Circulation (CEC) also increased, becoming more vulnerable to complications. Thus we study the CPB time in which patients were submitted and identified that CPB time was more common 60 to 90 minutes, which was low.¹
Characterization of people...
study was elderly and the safety of the procedure, it is essential for patients and families rely on this treatment option.

As for congenital heart disease, there was an expected increase in its prevalence. This fact we believe may be linked to increasing attempts to abortion and the indiscriminate use of medications that compromise the heart still training in intrauterine life. The corrections of congenital heart disease, this research predominated in children and adolescents.

With respect to time in extra corporeal circulation (ECC) is important to emphasize that prepares the heart to be operated, leaving it inert, and shall perform all the functions of the heart, however, it can cause harmful effects to the body because alters the physiology of the same.³ Complications increase in frequency and severity in proportion to the duration of infusion. Thus, the surgeries to be performed without unnecessary loss of time and with efficiency and safety.

The complexity of the surgery, associated with CPB, as well as the risk factors of patients may be associated with increased length of stay in the CCU.

The average length of stay was 48 hours, with 48 hours in the coronary care unit patient is well recovered, hemodynamically stable, with eliminations present, normal bleeding, that time is already being removed catheters and drains as indicated, and is already provided transfer to ward continuing treatment aimed at rehabilitation.

Most patients (72%) remained in perfect time with 48h thus having no complications or complications that prolong this time, and who had been treated in a timely manner, those who stayed 72 hours had some complications where the stay was prolonged by 24 more hours to be subjected to appropriate therapy, and patients who stayed more than 72 hours, of these 06 (26%) died, 13 (57%) developed discharge and 4 (17%) were transferred to hospital.

In studies conducted³ was identified that the average ICU in cardiac surgery patients was 2.33 days and the average ward was five days with an average of seven days of hospitalization.

Prevailed on patients who were admitted four days which shows that despite having undergone a major surgery with cardiopulmonary bypass and underwent mechanical ventilation, thus confirmed the hospitalization period identified in other studies that showed an average of 4 , 16 ± 3.76 days.⁴

Another point worth noting is that an average stay of four days, which helps to reduce the risk of nosocomial infection, costs of health services, as well as allows the turnover of beds leading to meeting new patients. This is a factor of satisfaction for patients, their families and health professionals who feel their work rewarded, because studies⁶ show that increasing the length of stay of a patient in an intensive care unit are complications such as chronic obstructive pulmonary disease chronic smoking, lung congestion, prolonged mechanical ventilation weaning, diabetes, infections, kidney failure, stroke and hemodynamic instability.

In this sense, it is necessary to consider the changes that occur in long-term life of these patients, trying to identify their main needs and developing strategies to improve their quality of life postoperatively.

Despite showing the variation time of surgery was considerably low, also be inserted in the research major surgery with cardiopulmonary bypass.

Another finding was the significantly relevant patient outcomes, because there was a predominance of evolving with discharge,
demonstrating the efficiency of all the staff who are involved in the process of surgery and the active participation of the patient and family in the care process.

Importantly, all patients who develop hospital receiving a document where they are described: the surgical report, scheduling return scheduled for 30, 60, 180 and 360 days, with available phones and e-mail contact for any questions you may have.

The death cases occurred predominantly in patients with 07 cases of RM, the others were the surgeries TVAO with 03 cases, TVM 02 patients with 01 patients and pericardectomy. Studies4 indicate that the postoperative hospital mortality was 11.7% without the use of cardiopulmonary bypass and 38% with the use of cardiopulmonary bypass, this is also an important cause of infections (35.2%), stroke (1.7%) and congestive heart failure (6.4%).

It was observed that the number of deaths compared with other studies was similar or lower than expected and cardiogenic shock a major cause of mortality in patients undergoing cardiac surgery. Targeted interventions are needed to identify early this event in order to reduce mortality from this cause.

**CONCLUSION**

Cardiovascular diseases despite all the advances are still the leading cause of mortality in Brazil.

The increase of these numbers can be attributed to several factors, including poor feeding, consumption of sodium, potassium intake, lack of control with weight, alcohol intake, adoption of unhealthy lifestyles such as smoking, physical inactivity, and lack of monitoring to manage are directly associated with important risk factors.

REFERENCES

Characterization of people...