137 - PAINFUL PERCEPTION AND FACTORS OF RISK RELATED TO THE PAIN OF POST-THORACOTOMIES

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INTRODUCTION
The painful perception due to operative procedures can be showed as moderate or intense in 40% to 60% of the cases1, it is characterized as an experience multidimensional, being diversified in the quality and in the sensorial intensity, being affected by variables affective-emotional2. We will highlight in this study the interference of factors related with the acute pain due to the thoracotomies, that although they are accomplished at the patients' thorax, the type and the place of the surgical incision involves different muscular structures and bones3, which together with the time of surgery and anesthesia type are considered as factors of surgical risk interfering directly in the diagnostic of the patients4.

In the study on the influence of the sex in the post-thoracotomies pain it was observed that the women have different painful complaint in relation to men5. Another analyzed factor is the influence of the thoracic drains in the painful answer that came in the submitted patients of heart surgery as an intense pain6. The location of the drains in the space intercostal provokes friction in this responsible space for a more intense pain when compared to the pain due to the sternal drain7.

When the pain is evaluated and it is told by the patient, it means that the painful process is installed, being necessary then the identification of risk factors for pain post-thoracotomy, being possible this attitude through the use of specific instruments.

The attendance to the patients in relation to the conducts and procedures starting from the information of the pain due to the surgical procedures can influence positively in the dynamic of the performance of the team. This way, coming from the presupposition that the painful perception due to thoracotomies suffers influence of factors pre, trans and post-operative, the purpose of this study was to identify the intensity of the pain referred by the patients and the professionals' opinion about the factors of pain risk post-thoracotomy.

METHODOLOGY
It is a cross sectional study with quantitative approach. The study, that was approved for UFRN Ethics Committee for assisting to the research precepts in humans, was accomplished in two Hospitals of Natal/RN that assist patients submitted to thoracotomy, being these hospitals linked to public health system for accomplishment this surgical procedure.

The data were collected starting from physiotherapeutic evaluation of patients submitted to thoracotomy and of the pain evaluation by the application of the numeric pain scale, that consists a interval from 0 to 10, in which “0” means pain absence and “10” the worst imaginable pain. To identify the professionals’ opinion with relationship to the pain risk factors post-thoracotomy was used it a adapted protocol which ranges from “0” to “10” points for the professionals.

In the post-operative moment in that the patients complained about pain they were evaluated through the numeric pain scale and the patients complains were referred from “0” to “10” points, being then the pain notified by the researcher.

In the second stage the pain risk factors to post-thoracotomy of interest for this study (time of surgery, type of surgical incision, thoracic drain, anesthesia type, age and sex) were correlated with the referred pain by 40 patients submitted to thoracotomy. In the third stage these factors were presented the professionals' team that are responsible for the patient's care in the post-operative (5 surgeons, 1 doctor intensives, 2 physiotherapists and 5 male nurses), with selection criterion to be responsible for the submitted patients the thoracotomies - in this phase and they have more than 5 years of experience with these patient. The pain risk factors to post-thoracotomy were showed to the professionals and they were requested to express the intensity of the pain from “0” to “10”. The data were organized, tabulated and submitted to the statistical treatment using Kruskal-Wallis Test8.

RESULTS
The found results were analyzed starting from six risk factors to current pain in the thoracotomy postoperative, being these: time of surgery (up to 3 hours and more than 3 hours), type of surgical incision (poster-lateral and sternotomy), drain thoracic (lateral and mediastinal), anesthesia type (general and general associated with epidural), age (adult and elderly) and gender (male and female) with the intensity painful due to the thoracotomy. The referring data varied in according to the Table 1.

TABLE 1 - Pain risk factors and intensity referred by the patients and by the professionals' opinion.

<table>
<thead>
<tr>
<th>Pain Risk Factors</th>
<th>Intensity of the Pain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time of Surgery</td>
<td>3.8</td>
</tr>
<tr>
<td>1.1 up to 3 hours</td>
<td>6.4</td>
</tr>
<tr>
<td>1.2 more than 3 hours</td>
<td>6.9</td>
</tr>
<tr>
<td>Type of Thoracic Drain</td>
<td>4.8</td>
</tr>
<tr>
<td>3.1 Lateral</td>
<td>4.3</td>
</tr>
<tr>
<td>3.2 Mediastinal</td>
<td>3.5</td>
</tr>
<tr>
<td>Type of Anesthesia</td>
<td>5.6</td>
</tr>
<tr>
<td>4.1 General</td>
<td>6.4</td>
</tr>
<tr>
<td>4.2 general and peridural</td>
<td>6.5</td>
</tr>
<tr>
<td>Age</td>
<td>6.2</td>
</tr>
<tr>
<td>5.1 Adult</td>
<td>5.5</td>
</tr>
<tr>
<td>5.2 Elderly</td>
<td>6.5</td>
</tr>
<tr>
<td>Gender</td>
<td>6.8</td>
</tr>
<tr>
<td>6.1 Male</td>
<td>5.5</td>
</tr>
<tr>
<td>6.2 Female</td>
<td>5.6</td>
</tr>
</tbody>
</table>

It was researched in this study 40 patient, 24 male and 16 female that complained about postoperative pain, of the which 20 were submitted to poster-lateral thoracotomy (PLT) and 20 to Sternotomy (EST). The painful perception referred by patients submitted to PLT and EST was evaluated by the pain numeric scale. The professionals judged the pain about to the risk factors post-
It was observed when comparing the surgical time of up to 3 hours with time of more than 3 hours that the pain due to the thoracotomies according to the professionals presented statistical significance (p-valor=0.00), however when comparing the patients' pain this statistical significance it was not evidenced (p-valor=0.20).

The insertion of the thoracic drain can be lateral or mediastinal and when comparing the pain among these two locations, the professionals referred that the pain of the lateral drain was superior to the mediastinal, with statistical significance (p-valor=0.00), already about the patients’ opinions with lateral drain or mediastinal one it was not evidenced statistical significance as the painful intensity.

According with the anesthetic type, the patients were divided in two groups, the first one that received general anestheisa and the second one that received associated general anestheisa and epidural. Statistical significance was observed when compared the painful intensity among these two procedures for the professionals' judgment (p-valor=0.01), although it was not observed statistical significance (p-valor=0.97) among the patients.

About age, elderly individuals referred more pain, however when comparing the pain between elderly and adults statistical significance it was not observed (p-valor=0.55), the same results were found by the professionals (p-valor=0.24).

The average of the painful intensity referred in the pain numeric scale by the female patients it was higher than male ones, but when this value was compared it was not observed statistical significance (p-valor=0.58). However about gender the professionals referred that male pain is higher than female, however when this value was submitted to the statistical analysis it was not observed statistical significance (p-valor=0.14).

DISCUSSION

Some studies point out that the location and the type of incision surgeon 11 have influence direct in the painful intensity perception 12, being these aspects evaluated when comparing the intensity of the pain due to surgical procedures accomplished in the thoracotomy 11,12. Researches have demonstrated that the gender and the surgical approach influenced in the patients' painful intensity in the postoperative of thoracotomies 13. In the comparative research of the pain intensity among the patients submitted to the thoracotomy and thorascopy for lung biopsy, they didn't demonstrate difference statistical 14. The influence of the age, gender and surgeon type in the painful intensity 15 were studied to evaluate the effectiveness of the bupivacain and of the lidocaína in patients submitted to TPL, and it was not observed any statistical difference among these variables.

The location of the thoracic drains was analyzed in some studies that revealed the discomfort degree and of the pain referred by the patients submitted to Sternotomy and it was observed that the pain was more intense in the patients with drain intercostals than in the patients with drain subxifóide. In another study accomplished post-surgery thoracic it was observed that the painful intensity this directly related with the permanence of thoracic drains, being the strong pain in the first 48 to 72 horas 16. In the present study it was observed that to possess a thoracic drain, with location in the area intercostals or in the subxifóide, there was not statistical significance with relationship their pain.

The patients and professionals opinions were observed in a study 17 about painful procedures accomplished in the postoperative of heart surgery. It was obtained this study 17 information concerning the magnitude, location and quality of the pain, and it was noticed that the professionals underestimated the patient pain. However in this study when they discuss about the pain due to TPL and of the STN the professionals judged that the pain due to three pain risk factors were statistically significant, while this difference it was found in the patients opinions.

There are several the factors involved in the inadequate control of the pain, including omission and lack of the patient's information, lack of medical prescription and inadequate administration of analgesic, difficulty in the evaluation, the knowledge lack on pain, the existences of attitudes no suitable and inadequate practices difficult the professionals of health of implementing effective methods 12.

CONCLUSION

It was observed in this study when comparing the intensity of the pain that there was different values in each factor of pain risk among the patients and among the professionals there was difference statistics with the surgical time from up to 3 hours and more than 3 hours, the location of the drain thoracic intercostals and subxifóide, and the type of anesthetic, general or general associated with peridural. However about the pain referred by the patients after comparing among the risk factors it was not observed difference statistics.

The pain evaluation post-thoracotomy by the professionals that attended patients submitted to the thoracotomy is important to the accomplishment of an effective conduct to minimize the postoperative pain, improving thus the procedures physiotherapeutic.

REFERENCES

12. Xavier TT, Torres GV, Rocha VM. Aspectos qualitativo e quantitativo da dor de pacientes submetidos a toracotomia...
Este estudo teve como objetivo identificar a intensidade do dor referida pelos pacientes e a opinião dos profissionais quanto aos fatores de risco de dor pos-toracotomia. Trata-se de uma pesquisa com delineamento transversal e abordagem quantitativa. A pesquisa foi realizada com 40 pacientes que haviam sido submetidos a toracotomia, e os profissionais que acompanharam os pacientes. Os pacientes foram divididos em grupos de acordo com diferentes fatores de risco, como tempo de cirurgia, tipo de incisão, drenos torácicos, tipo de anestesia, idade e sexo. Os resultados mostraram que a opinião dos profissionais quanto ao tempo de cirurgia, a localização dos drenos torácicos e o tipo de anestesia apresentaram diferenças estatísticas. A avaliação do долор do paciente, bem como a opinião dos profissionais sobre esses fatores, influenciaram na escolha de uma conducta eficaz para minimizar o dolor do paciente.

PALAVRAS-CHAVES: dolor torácico, factores de riesgo, dolor post-toracotomía.