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ANALYSIS OF THE ROLE OF FLEXIBLE LARYNGOSCOPY IN TRACHEOSTOMIZED PATIENT FOR DECANNULATION

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Abstract:
Introduction: *Tracheostomyis performed in about 20% of patients who are on mechanical ventilation in the intensive care unit.* ***Objectives of the study:*** *Our main objective is to find that can the regular application of flexible laryngoscopy to patient's predecannulation solve the problem in hospital of having high numbers of hospitalized patients.* ***Methodology of the study:*** *The survey was conducted to determine the role of flexible laryngoscopy in tracheostomized patients for decannulation. Following increased cases of tracheostomized patients at primary and secondary health department. We formulated a questionnaire that was utilized to collect pertinent information for the analysis. After which, the obtained data was subjected to statistical tools to deduce information that might answer the question being studied.* ***Results:*** *The survey shows that most of the chronic patients were old, mostly 50 years and above. Additionally, the analysis revealed that for decannulation, the flexible laryngoscopy procedure is crucial and should be mandatory, especially for the pre decanualation then after decanualtiont for two years. The process enables doctors to identify problems and correct them. Therefore, the mentioned procedure ensures that patients do not stay long in hospitals after treacheaostomy.* ***Conclusion:*** *Thus, the hospital should make the process mandatory to ensure that patients do not remain long in the facility. The strategy will save the hospital money and time since fewer patients will be hospitalized.*

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INTRODUCTION:

Tracheostomyis performed in about 20% of patients who are on mechanical ventilation in the intensive care unit. It is indicated to increase comfort and facilitate weaning, reducing the rate of laryngotracheal complications caused by the long permanence of the orotracheal tube, and a s a safe airway in cases of obstruction of the upper airways. As stated earlier, the hospital discovered that there were a significant number of patients suffering from chronic diseases, especially the tracheostomized patients [1]. The condition results in excessive sending by the hospital to care for the hospitalized patients. Therefore, the management formed a team to determine the importance of the process of flexible laryngoscopy that the procedure should be administered to patients for decannulation. Flexible laryngoscopy is a test performed by doctors to examine the condition of a patients' throat and the voice box. The procedure entails application of a thin tube, which is flexible [2]. The apparatus has a scope that captures images, and it is inserted deep into the throat during testing. This medical examination is performed to check for voice problems, throat tumors or injuries, throat pain, or swallowing problems. In this note, the technique might be utilized to examine a patient after a decannulation [3].

In the recent past, the management of the king abdul aziz medical city jeddah hospital has discovered and primary and secondary health department have an increased number of hospitalized patients. The situation causes the institution to incur losses. To solve the problem, the administration formed a team of doctors to determine, whether utilization of flexible laryngoscopy to patients for decannulation would address the issue [4].

Objectives

Our main objective is to find:

1. Can the regular application of flexible laryngoscopy to patient's predecannulation solve the problem in hospital of having high numbers of hospitalized patients?

RESEARCH METHOD:

The research team decided to utilize quantitative research method. The technique is employed in research and involves the use of mathematical formulas and involves a systematic empirical investigation to collect and analyze data. The process was selected because it is easy to utilize and yields accuracy information, which can be considered to be valid. Additionally, the research design comprised of a questionnaire. A standard form was prepared, which was meant to capture the following patients' information: age, sex, date admitted, the reason for admission, ICU discharge date, and decannulation date. The questionnaire was presented to two groups, that is, the group that was subjected to frequent procedures of laryngoscopy and the other section of patients that were not treated to regular check-ups via flexible laryngoscopy.

A total of 100 patients were considered. 50 were the patients that had regular check-ups before and after decannulation while the other half were not frequently monitored using laryngoscopy technique. The researcher assumed that the selected sample represents the entire population of the hospitalized patients in the hospital. Additionally, only the patients, who had undergone the tracheostomy surgery were considered in the survey. Furthermore, patients meeting the following criteria were excluded from the study: below the age of 18 years, patients who had tracheostomy before the ICU admission, patients in coma, and individuals with a long-term tracheostomy. Notably, the study protocol was approved by the county healthcare service.

RESULTS:

Table 1. Obtained data from patients who were subjected to frequent check-ups

gender	age	Duration in hospital (months)
F	25	1
M	55	3
F	50	2
M	67	4
M	56	3
M	45	2
F	34	1
F	56	2

F	78	3
M	54	2
M	43	1
F	56	2
M	32	3
F	89	4
F	76	2
F	89	2
F	76	2
M	56	1
M	45	1
F	5	3
F	89	2
M	76	3
M	54	2
F	78	1
F	56	2
F	76	3
M	87	4
M	45	3
M	32	1
M	31	0.5
M	36	0.5
F	78	1
F	78	1
F	90	1
M	65	1
M	67	1
M	87	2
F	54	1
F	56	2
F	76	2
F	56	1
M	76	1
F	56	0.5
M	45	1
F	45	2
M	67	1
F	67	1
M	35	1
F	56	0.2
F	76	2

Table 2. Obtained data from patients who were not subjected to frequent check-ups

gender	age	Duration in hospital (months)
M	45	3
F	0	4
F	60	5
F	45	6
F	67	5
M	89	4
M	45	3
M	67	4
F	54	5
M	56	6
F	34	5
F	56	4
M	78	3
F	65	4
F	34	5
F	50	6
M	34	5
M	56	3
M	67	4
M	5	3
F	89	3
M	76	4
M	54	5
F	78	4
F	56	3
F	76	4
M	87	5
M	45	3
M	32	2
M	31	3
M	36	4
F	78	6
F	78	7
F	90	2
M	65	3
M	67	4
M	87	5
F	54	6

F	56	5
F	76	4
F	56	3
M	76	4
F	56	2
M	45	3
F	45	5
M	67	4
F	67	3
M	35	4
F	56	4
F	76	3

DISCUSSION AND COMPARATIVE STUDY:

The management at hospital has discovered that after the treacheaostomy procedure, most patients stay in the stay for a long duration [5]. The situation has resulted in a high number of hospitalized patients, which makes the hospital to incur high expenses. Thus, the survey was done to determine, whether application of flexible laryngoscopy before and after decannulation might solve the problem of patients overstaying in the facility [6].

Thus, the study compared two groups of patient. The first group was the patients that were treated to frequent check-ups using laryngoscopy technique, while the second group comprised patients who were not subjected to routine monitoring. It was found that the average time taken by patients who were monitored was 2 months after the decannulation process. The second group gave an average of 5 months [7]. Therefore, flexible laryngoscopy reduces the time patients take to recover after treacheaostomy and ready for decanualation. Additionally, factors such as age and sex had no significant impact on the duration taken by the patients in the hospital to complete decannulation procedure [8-10].

CONCLUSION:

The survey was successfully conducted. A sample of 100 patients was used in the research, where half of the group was treated to frequent check-ups using laryngoscopy, while the other half were not subjected to the same monitoring. It was found that the section of the patients checked regularly, recovered quickly compared to the second group, which took a longer time to heal. Therefore, the hypothesis set at the start of the experiment was not rejected. It was determined that regular laryngoscopy is crucial for patients after decannulation procedure.

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