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NOTE PREVIEW ARTICLE

THE SAFE USE OF ELETROSURGERY O USO SEGURO DE ELETROCIRURGIA EL USO SEGURO DE ELETROCIRURGIA

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ABSTRACT

Objective: to identify the necessary requirements for the construction of a checklist for safety in electrosurgery. **Method:** this is a quantitative, descriptive study for technological production, to be developed in two stages. The first one will identify the necessary requirements, through an integrative review, to support the nursing process (nursing care) in a patient undergoing surgical procedures with the use of electrosurgery. A checklist of support to the Nursing process will be developed in the second stage, based on the requirements identified and elected in the previous stage. **Expected results:** it is intended to provide a checklist that serves as a tool for the safe use of the electric scalpel, as well as to contribute to the improvement of the quality of Nursing care and also to reduce the number of injuries caused by the misuse of this technology. **Descriptors:** Electrosurgery; Nursing; Cheers; Nursing care; Perioperative Nursing; Electrodes.

RESUMO

Objetivo: identificar os requisitos necessários para a construção de um *checklist* voltado para a segurança em eletrocirurgia. **Método:** trata-se de um estudo quantitativo, descritivo, para a produção tecnológica, a ser desenvolvida em duas etapas. Identificar-se-ão, na primeira, os requisitos necessários, por meio de revisão integrativa, para o apoio ao processo de Enfermagem (cuidados de Enfermagem) em paciente submetidos a procedimentos cirúrgicos com o uso de eletrocirurgia. Desenvolver-se-á, na segunda etapa, um *checklist* de apoio ao processo de Enfermagem a partir dos requisitos identificados e eleitos na etapa anterior. **Resultados esperados:** pretende-se disponibilizar um *checklist* que sirva de ferramenta para o uso seguro do bisturi elétrico, assim como contribuir para a melhoria da qualidade da assistência de Enfermagem e, ainda, diminuir o número de injúrias causadas pelo mau uso desta tecnologia. **Descritores:** Eletrocirurgia; Enfermagem; Saúde; Cuidados de Enfermagem; Enfermagem Perioperatória; Eletrodos.

RESUMEN

Objetivo: identificar los requisitos necesarios para la construcción de un *checklist* orientado a la seguridad en electrocirugía. **Método:** se trata de un estudio cuantitativo, descriptivo, para la producción tecnológica, que se desarrollará en dos etapas. Se identificará, en la primera, los requisitos necesarios, por medio de revisión integrativa, para el apoyo al proceso de Enfermería (cuidados de Enfermería) en paciente sometidos a procedimientos quirúrgicos con el uso de electrocirugía. Se desarrollará, en la segunda etapa, un *checklist* de apoyo al proceso de Enfermería a partir de los requisitos identificados y elegidos en la etapa anterior. **Resultados esperados:** se pretende disponer un *checklist* que sirva de herramienta para el uso seguro del bisturí eléctrico, así como contribuir a la mejora de la calidad de la asistencia de Enfermería y, además, disminuir el número de injurias causadas por el mal uso de esta tecnología. **Descriptores:** Electrocirugía; Enfermería; Salud; Cuidados de enfermería; Enfermería perioperatoria; Electrodo.

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INTRODUCTION

The surgical center is considered to be one of the most complex units of a hospital because of its specialty and the constant presence of stress and risk to health due to the accomplishment of the anesthetic and surgical procedures.¹⁻² It is added, moreover, that the use of technology in the provision of health care is not a new process, but, it enables improvements in the quality of care increasing the diagnostic and therapeutic efficacy.³

However, through the incorporation of new technological resources and the speed of change, great challenges are faced by professionals in the development of health activities. It should be noted that technological innovations were widely implemented in surgical procedures, such as minimally invasive surgery and the manufacture of new devices, such as the electric scalpel, used in perioperative care.⁴

It is known that electrosurgery is a routine practice during surgical procedures; however, even with the advancement of technology, adverse events such as burns, surgical smoke and electric current interference problems in the operative field can be observed. the patient in the perioperative period, as well as health professionals, due to the exposure to this technological resource.^{1,4-6}

In addition to these, other risk factors are related to exposure to electrical current, such as: the existence of an oxygen rich environment, lack of communication between members of the surgery team and the knowledge deficit of the professionals about the operation of this technological resource.⁴

It is understood that nursing care in the perioperative period is an indispensable practice to promote patient safety and well-being, especially in the intraoperative period. It is verified, therefore, that Nursing plays a significant role in the actions of good practices in the surgical center.⁴

This includes actions to promote good practices, the correct use of electrosurgery and the implementation of measures to avoid risks and accidents related to the use of such electronic equipment. It is thus provided by the realization of a Nursing care plan, the use of electrosurgery safely in the surgical procedure and it favors an approach to the client's needs in an individualized way.^{4,7}

Thus, this study aims to contribute to strategies that ensure effective care about the safe use of electrosurgery, favoring an improvement in the assistance provided in the

health services regarding the safety measures to be taken in the perioperative period.

OBJECTIVE

- Identify the necessary requirements for the construction of a checklist for safety in electrosurgery.

METHOD

This is a quantitative, descriptive study that aims to contemplate the construction of an instrument in a checklist format about electrosurgery.

There is a quantitative research, as essence, characteristics sustained in the line of empirical and positivist thought. It is understood that scientific knowledge, based on empiricism, is related to facts distanced from what is not essential for its description. In the positivism, in the search for scientific knowledge, data is an observable and objective phenomenon that represents the reality of society motivated by technological development.⁸

The objective of this project is to improve the service to the users of the health service and to assist the professionals, especially the Nursing team, in the provision of the assistance in the transoperative period, in a dynamic and safe way, with the check of items proposed in the instrument for care in the use of electrosurgery.

In the first stage, the necessary requirements will be identified through an integrative review to support the nursing process in patients submitted to surgical procedures with the use of electrosurgery. A checklist of support to the Nursing process will be developed in the second stage, based on the requirements identified and elected in the previous stage. In addition, the construction of the instrument will be guided by the protocol of safe surgery contemplated in the National Program for Patient Safety.⁹

It will be possible to identify, through the collection of data, from an integrative review, the measures that provide the safe use of electrosurgery in the perioperative care already described in the literature and evaluated as positive for the support to the Nursing process. This data will be subsequently listed, in the form of requirements, for the development of a checklist with the best conduits for the care of patients submitted to electrosurgery.

The search for scientific productions in the SciELO, LILACS, MEDLINE, PubMed and CINAHL databases will be used to make the information on the use of electrosurgery via

the following descriptors: Electrosurgery, Nursing Care and Perioperative Nursing, separated by the Boolean operator AND, from January 2008 to December 2018.

It is intended, therefore, to broaden the scope of the research, minimizing possible biases in this stage of the review. For the collection of data of the articles included in this stage, the following items will be listed: identification of the original article; methodological characteristics of the study; identification and characterization of the procedures and care performed; descriptions of the causes of injuries and previous care for success in the use of electrosurgery.

The data obtained through the integrative review will be grouped by submitting them to the evaluation of the best evidenced behaviors about this technology, in relation to the actions of prevention and protection of injuries in the perioperative, which will serve as bases to support the construction of the checklist on the safe use of electrosurgery.

RESULTS

It is intended to provide a checklist that serves as a tool for the safe use of the electric scalpel.

It is hoped, therefore, to contribute to the improvement of the quality of Nursing care and also to reduce the number of injuries caused by the misuse of this technology.

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