

PREVENTING INCIDENTS IN MINOR SURGERY WITH BASIC LIFE SUPPORT AND ADVANCED LIFE SUPPORT IN CARDIOLOGY

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Abstract: In recent decades, with the increase in the complexity of surgeries and comorbidities in the population, there has been an increase in the risk of complications in minor and outpatient surgeries. To address this, a set of Basic Life Support (BLS) guidelines have been proposed that take into account the patient's health status, level of sedation, and magnitude of the procedure. In "minor" surgeries, the use of BLS, deep sedation and advanced cardiology life support is recommended to ensure patient safety.

INTRODUCTION

With the increase in the complexity of surgeries and the increase in comorbidities in the population, an increase in the risks of clinical complications in minor surgical procedures and outpatient surgeries has been observed over the last few decades. To address this issue, a set of essential guidelines within the scope of Basic Life Support (BLS) was proposed. These guidelines take into account the patient's health status, the level of sedation required and the magnitude of the surgical procedure, aiming to determine the appropriate type of cardiovascular support to be applied in each situation.

In relation to patients undergoing surgeries classified as "minor", it is recommended to implement Basic Life Support (BLS) measures, associated with the forms and needs of deep sedation. Furthermore, it is crucial to have advanced cardiology life support available to ensure the patient's safety and stability during the procedure.

GOAL

Explore the Basic Life Support approach in minor and outpatient surgeries.

METHODOLOGY

The present work consists of a qualitative literature review that sought to address results found in research on surgical and emergency issues, whether in a comprehensive, orderly or systematic way. To carry out the work, the following steps were followed:

1. Selection of corresponding themes;
2. Selection of samples found and used;
3. Analysis of the characteristics of the original research;
4. Analysis of the results obtained;
5. Carrying out the review.

The databases of scientific literature and the techniques used to carry out the review were Google Scholar, Scientific Electronic Library Online (SciELO), Virtual Health Library, Latin American and Caribbean Literature in Health Sciences (LILACS).

Thus, the present work seeks to analyze the surgical interface within the different thematic points correlated to the emergency front, aiming to shed light on an educational path.

DISCUSSION

Minor surgeries are simple procedures, which, although there are risks, are minimal. An example of minor outpatient surgeries are dermatological and ophthalmological surgeries, which are considered safe, with a low incidence of complications, and may cause, at most, blood pressure changes due to the local anesthetic process.

However, as a result of previously carrying out procedures with major surgical access, such as oncological and plastic surgeries, associated with the physiological process of physiological aging of the population, postoperative risks are increased, even the simplest ones.

Therefore, some measures must be adopted as clinical management and, in case of complications, application of the BLS –

basic life support, in addition to perioperative routines that must be followed. To this end, the patient's physical state, anatomical scope of the minor surgery, level of sedation used are considered, thus composing the decision-making triad.

The BLS was proposed as a standard system in approaches to clinical emergencies, especially when considered low risk. For it to be effectively carried out, at least 1 member of the healthcare team must be able to carry out the recommended maneuvers, focusing on the surgical environment.

For small procedures, sedation is characterized by its ability to alter reflexes, mainly in the upper airways, and may even cause hemodynamic changes. Furthermore, a complementary strategy was also developed that encompasses the prerequisites within the medical team and the surgical environment, as well as pre-operative assessment and peri-operative care.

The training of professionals to deal with complication situations in minor surgeries through the BLS is essential, and must take into account the theoretical background and practical suitability of the professional, as well as the time it would take the team to reach the place of care and its outcome. This result is independent of the surgical procedure performed and the physical size of the patient.

An important fact associated with clinical complications is the involvement of organic systems, such as the kidney and heart, mainly in heart and nephropathy patients. Furthermore, peaks in catecholamine levels can reach values 40 times above the baseline value, influenced by stress and the level of pain suffered. The direct risk of cardiac toxicity can cause potentially fatal arrhythmias.

It is estimated that deaths occurring in the postoperative period exceed 50% of affected patients, mainly due to cardiac events in coronary artery disease patients.

The involvement of the sympathetic nervous system and the adrenal medulla, through pain or homeostatic disorders, can culminate in changes in heart rate and cardiac work, worsening the condition.

The amount of anesthetics, the patient's anatomy and the location of the surgical procedure, operative time, bleeding and other physiological factors directly influence the occurrence of complications and, therefore, the need for measures supported by the BLS in these patients.

The strategy for preventing complications in minor surgeries is configured in the following order:

prerequisites for an adequate professional team must be followed. They must undergo specialized and supervised training in minor surgeries, as well as obtain training in BLS and know how to apply BLS in places where these minor surgeries occur. An emergency medical system must also be available, with an action plan in case of surgical complications, in addition to a local scale of emergency brigades and provision of telephone numbers for ICU ambulance centers equipped with a defibrillator.

In the background, the prior provision of medications that influence the surgical procedure and the need to apply BLS must be optimized, analyzing drug interactions. All of these factors correlate with the patient's physical state and uncompensated pathologies. Furthermore, the classification of the surgical procedure, the appropriate sedative choice and the application of the steps mentioned here must be explained and explored by the surgical team. Finally, patients must be given in writing what peri-operative care will be taken, and how pre- and post-operative care is fundamental in this process.

In the third period, the nursing team must act in a multidisciplinary manner with the medical team, measuring patients' vital signs

every six hours, reporting in the medical records emergency signs and symptoms, contraindicated medications for each case and specificities of each patient, such as pre-existing pathologies. Monitoring in diabetes and hypertensive patients must be constant. Before discharge, assess your vital signs and reinforce post-operative care.

CONCLUSION

The adoption and correct execution of the BLS allows for quick and effective action when addressing complications from minor surgeries, when necessary. This methodology can also be applied when choosing surgical procedures, whether small or large surgeries, carried out safely in offices, operating rooms and surgical centers.

The application of this proposal must evaluate and adapt patients to dermatological, ophthalmological, gynecological surgeries and other specialties that are necessary.

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