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Letters to the Editor

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Independent nursing actions in the mediate postoperative period of patients with infectious endocarditis

Acciones independientes de enfermería en el postoperatorio mediato de pacientes con endocarditis infecciosa

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To the Editor:

The infectious endocarditis is a serious disease caused by the colonization of germs –mainly bacteria and fungi– of the endocardium, which mainly affects the heart valves and can produce lethal complications[1,2]. The persistent infectious state, the possibility of systemic embolisms, arrhythmias, valvular lesions and congestive heart failure can ruin the patient's life[2-4].

The prolonged antibiotic therapy is an essential part of therapy, but some patients also need heart surgery[5] and, in turn, the infectious endocarditis is one of the postoperative complications of such kind of surgery[4].

Establishing a system of independent nursing actions, in order to guide the actions of the staff, is essential to achieve a favorable patient's evolution and helps to prevent the onset of such disease[6-8].

There are microorganisms that normally live on the skin, in the mouth, and in other regions of the body, but not in the blood. However, in certain circumstances (such as a surgical or dental procedure, or due to iatrogeny) they can enter the bloodstream, which is not a problem in most patients, but it is for those with previous valvular lesions or newly implanted mechanical prostheses[9].

Intravascular catheters are the most common source of bacteremia among patients with infectious endocarditis associated with health care, thus, significant efforts must be made in order to minimize the risk of bloodstream infections related to the catheter. Measures should also be implemented to prevent the infection of prosthetic valves and implantable cardiac devices[3].

For these reasons, the nursing assistance in the postoperative care of the patient with heart surgery needs to exercise caution and take independent action in this regard (**Box**)[6-8].

All these interventions are part of the Nursing Care Process (NCP), which is the working tool for professional practice and allows to identify the problems derived from the effect of the health-disease process; in addition, to assess and prevent complications, and plan and execute the most appropriate nursing care[7]. It is also important to emphasize the role of this specialized staff in the health education and promotion for preventing new infectious processes[7].

The implementation of the NCP with the methodological approach of Virginia Henderson meet the expectation of providing specialized care to a person with a health problem, with the additional component of integration based on scientific evidence in-

Recuadro. Nursing independent actions for the care of patients with heart surgery due to infectious endocarditis, as well as prevention and identification of new septic complications.

General
• To maintain an environment of hygiene, safety and comfort (quiet and without noise).
• Psychological support to patients and relatives.
• To educate the primary caregiver regarding rehabilitation exercises and patient care.
• To identify affected needs in the patient.
• To provide the patient with the most comfortable position, according to the one he needs.
• To contribute to physiotherapy and early rehabilitation.
• Electrocardiographic monitoring.
• To apply the measures established for avoiding the appearance of pressure ulcers.
• Vigilance of vital signs (FR, pO_2S, FC, TA, PVC [when possible], diuresis, temperature) and action before the appearance of hyperthermia, polypnea, tachycardia, high blood pressure.
• To monitor the permeabilization of the vascular access routes and the puncture location.
• Handwashing before and after each nursing procedure (whatever, but particularly related to wound healing, the use of central venous catheter and peripheral vein).
• Administration of drugs according to medical indications.
• To apply the Norton scale
Específicas (en pacientes sépticos o susceptibles de infección y embolismos)
• Extreme measures of asepsis and antisepsis.
• Isolation of the patient fulfilling the established epidemiological biosecurity rules.
• Health education to patients and families for general hygienic-health measures.
• To perform blood cultures with the correct technique.
• Periodic neurological assessment.
• To monitor changes in behavior, respiratory distress, presence of hematuria.
• To stay alert for the presence of petechiae in the neck, upper trunk, eyelids, eye conjunctiva and extremities.
• To monitor signs of embolism to the intracranial vessels: headache, numbness, weakness, tingling, paresthesias, paralysis, hemiparesis, ataxia, aphasia, blindness or sudden hemiplegia.
• To monitor signs of embolism to the extremities: painful nodules, edema, erythema, pain, cyanosis, decrease or absence of pulses, coldness, decreased capillary refill.
• To control the hydromineral balance (incomes-outputs).
• To provide the patient with a change of position every two hours, if he/she remains immobile, or as required in other circumstances.

BP, blood pressure; CVP, central venous pressure; HR, heart rate; pO2S, peripheral oxygen saturation; RR, respiratory rate.

terventions that achieve a high level of care and independence; a reason why the nursing work is essential for the health recovery and stability of the patient's needs[8,9].

The favorable evolution of these patients depends on our successful daily work.

CONFLICTS OF INTERESTS

None

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