

The Importance of Oral Health as Integral Part of the Care Given to Intensive Care Unit Patients

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Abstract

Oral health is an integral part of the human systemic condition. Thus, preventive programs aimed at eliminating dental infection outbreaks, inflammatory and painful processes resulting from other issues affecting hospitalized patients, mainly Intensive Care Unit patients, should be promptly implemented. Taking correct oral cavity hygiene actions help reducing dental biofilm and tongue coating accumulation, as well as the accumulation of gram-negative bacteria linked to ventilator-associated pneumonia (VAP), hospital-acquired (nosocomial) pneumonia and bacterial endocarditis. Educational and adaptive actions directed to nursing teams, nursing technicians and to all hospital staff should be implemented in order to provide better professional qualification, integral assistance to critically-ill patients, as well as to humanize and value actions focused on oral health promotion. The aim of the current study is to provide a brief professional opinion about the clinical, technical, scientific and educational activities associated with Hospital Dentistry in Brasília, Brazil. It is possible seeing the need of having trained dental professionals and dental surgeons able to provide oral health care in a clinical, technical, scientific and educational way, as well as to deal with oral issues and their direct relation to systemic damages caused to patients hospitalized in Intensive Care Units.

Keywords: Dental service hospital; Intensive care units; Pneumonia; Ventilator-associated; Dental plaque; Oral health; Quality of life

Introduction

Different professionals provide care to critically-ill patients hospitalized in Intensive Care Units (ICUs). These professionals form an interdisciplinary team aimed at providing comprehensive health care and assistance [1,2].

It is crucial providing oral health to these patients, since oral health is directly related to systemic complications such as ventilator-associated pneumonia, nosocomial (hospital-acquired) pneumonia, bacterial endocarditis, kidney issues and other diseases. Therefore, keeping trained dental health professionals as part of the ICU team is demanding [3].

Patients hospitalized in ICUs are prone to oral hygiene deficiency, fact that contributes to the accumulation of dental biofilm and tongue coating, which are microbial reservoirs (niches) of gram-negative bacteria associated with hospital infections. This specific condition may be related to the lack of professional training among ICU personnel, as well as to the lack of a participatory dental team, both in the clinical and educational contexts, and of specific protocols [4,5].

The dental surfaces and the tongue are highly complex microbial reservoirs, mainly in hospitalized patients, fact that makes the salivary secretion extremely pathogenic. Debilitated

patients often show impaired reflexes, which predispose them to aspiration and turn their mouth into the main gateway for microorganisms harmful to their systemic health [1,6].

The oral health promotion actions taken in the ICU require correct handling and professional adaptation to the proposed activities; however, the patient's individuality and systemic condition must be always respected. The planning should be interdisciplinary and respect the clinical decisions made by physicians, ICU workers and by the patient's family [7,8].

The oral health care should have ethical and legal responsibility, which should be endorsed through the signing of an informed consent form by a family member and by patients themselves, whenever possible. The correct record in the patient's medical record, as well as the discussion about the preventive and/or invasive treatment plan, should be prioritized [1,9].

Health education and courses aimed at the professional training of the ICU team are crucial for such specific health and daily routine conducts to be successful. The hospital system needs to better understand the benefits from having dental surgeons effectively working in it [6,10].

The lack of professional knowledge about the relation between oral and systemic health, and vice versa, remains a great technical and clinical training issue to be solved in the hospital system, mainly in Intensive Care Units [3,5,11].

Preventive dental activities are necessary; however, some patients present oral issues that may be related to inflammatory, infectious and painful processes triggered during ICU hospitalization. Thus, only the dental surgeon can perform clinical procedures such as dental anesthesia, tooth extractions, supragingival scraping (to eliminate sub- and supragingival calculi), dental prostheses adjustments, orthodontic appliance-related trauma treatments, as well as laser therapy and biopsies in oral cavity lesions, since these procedures require professional training [1,3,4,6-9].

The “Full Mouth Disinfection” is a clinical planning and execution strategy that meets all the dental needs of patients by suiting their oral environment in a single session. This specific strategy should be very well organized by the ICU team, which should assess the patient’s systemic health, medication and clinical priorities, for the conducts must be safely carried out without harming the patients. In many cases, the intravenous sedation may be an alternative used in the dental treatment performed in the [1-3] ICU Figure 1.



Figure 1: Dental intervention performed in an ICU patient in order to eliminate dental infection outbreaks, as well as inflammatory and painful processes resulting from oral issues that could affect the patient’s systemic condition - interdisciplinary planning.

Conclusion

The influence of the oral health condition on the systemic one, and vice versa, shows the need of having dental surgeons as integral part of interdisciplinary teamworking in Intensive Care Units.

The poor oral hygiene, as well as the lack of clinical dental practices, professional handling and adaptation, and the neglect of oral health by the patients themselves and by health professionals, impose risks to the patients’ systemic health.

The performance of trained dental surgeons in Intensive Care Units is fundamental to promote health and quality of life to critically-ill patients, as well as to differentiate the care provided in hospitals.

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