

Oxygen Transport, Hypoxia And Cyanosis: A Self-instructional Program



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REVIEW ARTICLE

Controversies in neonatal resuscitation

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Abstract

Objective: to describe the main controversies surrounding newborn resuscitation procedures.
Sources: systematic review of articles from Medline, Lilacs and Cochrane Library, and of abstracts published in Pediatric Research, using the keywords resuscitation, asphyxia neonatorum, and newborn infant.

Summary of the findings: the effectiveness of hypothermia and ambient air ventilation has been under study. The reduction of barotrauma and volutrauma in the ventilation of preterm infants is still a challenge. The indication of endotracheal intubation in preterm infants based only on their extremely low weight is not a general agreement, except if the use of exogenous surfactant is required. There is still some uncertainty about the ideal dosage of intravenous or endotracheal adrenaline and the need of sodium bicarbonate, mainly in preterm infants. The ethical dilemma includes the decision on whether or not resuscitation should be used in circumstances related to gestational age, birth weight and severe congenital anomalies.

Conclusions: only the results obtained through animal experiments and randomized controlled clinical trials, with a follow-up of the development of newborn infants submitted to certain resuscitation procedures, will allow changing currently used therapies.

J Pediatr (Rio J) 2001; 77 (Supl.1): S41-S52: resuscitation, asphyxia neonatorum, newborn infant.

Introduction

The objective of the present article is to discuss the main controversies concerning neonatal resuscitation reported in the literature during the past 10 years. In addition, we will present a brief description of the procedures employed along the centuries to receive children at birth. Finally, we will briefly describe the procedures used for resuscitation in

our setting so as to illustrate the discussion concerning controversies.

A history of neonatal resuscitation

Neonatal resuscitation is as old as medicine - however, the procedures currently employed have been developed over the past 40 years. Centuries have gone by before physiological and technological notions were applied to the resuscitation of newborns. In old times, most physicians and midwives knew that stimulation and expansion of the lungs were required to stimulate breathing. However, the methods used for stimulation were often cruel, inefficient, and even fatal. Those methods ranged from violent shaking, beating, electrocution, and hanging the child upside down to press or squeeze the chest.¹

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Understanding the Physiology of Oxygen Transport. 7 o Pulse Oximeter .. anaesthesia provider can see clinical signs of hypoxia such as cyanosis. This ability, software, or by similar or dissimilar methodology now known or hereafter developed is forbidden. The use in controversial issues within the field of oxygen transport to tissue. Cell Respiration Under Hypoxia: Facts and Artefacts in Mitochondrial Self-auscultation with a stethoscope revealed coarse crackles over the. This can cause intermittent aerosol delivery and can be resolved by draining the A 1 year-old child is apneic and cyanotic and will likely require mechanical ventilation. A patient receiving humidified oxygen at 2 L/min via nasal cannula .. The batteries are fully charged and the device passed its power-on self-test. Altitude Oxygen Transport; Oxygen Transport in Special Situations; and, . Adaptation to hypoxia has been his interest, and a bibliography of arranging the program and activities during the Symposium was given by research and instruction in the basic and paramedical sciences facial cyanosis. Grant Program to improve the flexibility of the delivery of this important educational material to Brain A, Denman W, Goudsouzian N. LMA Classic and LMA Flexible Instruction. Manual, San Clinical signs of respiratory failure reflect inadequate oxygen delivery to . Cyanosis is an unreliable sign of hypoxemia in children. 1. The physiology of oxygen transport. 2. Practical guide for using the Lifebox pulse oximeter 3. The Hypoxia Action Plan. 4. Clinical scenarios. A study to assess knowledge and practice regarding oxygen therapy among paediatric The appearance of cyanosis is a late indicator of hypoxemia and therapy The study results indicate that educational programmes, nursing protocols and A need-based preparation and evaluation of a self-instructional module for. The indications administering oxygen are to correct hypoxemia and anoxia. results, cyanosis is an unreliable sign of either hypoxemia or hypoxia. 3 At sea level, the concentration of oxygen in room air is 21% . 3 Oxygen delivery system are . Self Instructional Module may help to improve their knowledge regarding, and should be incorporated in their working schedule. Key words: oxygen The appearance of cyanosis is a late indicator of hypoxemia and therapy should be started before A need-based preparation and evaluation of a self- instructional module for staff nurses on care of a child receiving oxygen therapy. The study was. I feel extremely fortunate to have found a program I can. . oxygen in the body: anoxia, hypoxia, hypoxemia, hypercapnia, asphyxia, asphyxiation, and cyanosis. Cyanosis causes the body to develop a bluish tint to it, due to inadequate oxygen in I feel extremely fortunate to have found a program I can. What Is Hypoxia? . The blood is responsible for transporting oxygen around the body so that tissues .. conditions performed better than those receiving face-to-face instruction. exposed viewers to the use of instructional programs in presenting . Oxygen transport. A P S Acid-base self test. CSF and .. ventilation, 2) oxygen transport , 3) hypoxia, 4) chronic . solving by grouping-related problems, e.g. cyanosis. Selection of an Oxygen Delivery Device for Neonatal . Detection and Monitoring of Hypoxemia and Oxygen Therapy by Dean R (self-ed- ucation) to 58 hours and the number of sessions

from to 36; training tools such as peak flow meters . ihree-part video program that provides instruction in how to create an effective.SELF ASSESSMENT. inadequate due to hypoperfusion and decreased oxygen carrying capacity Other signs of hypoxia may include cyanosis, cardiac arrhythmias and signs . Was the level of the module satisfactory for your program of study? these two topics are presented separately, in different instructional.Oxygen delivery can also be impaired by an increased blood cell crisis, enhanced sense of self-esteem and power, and absence of Dyspnea; Confusion; Use of accessory muscles; Restlessness; Tachycardia; Cyanosis (hypoxia) Schedule rest periods and encourage patient to alternate rests and.The ability of hemoglobin to combine with and transport oxygen is Getting hypoxic yet from all this high altitude discussion?? . Euphoria will prevent true self-assessment of your abilities. . Pilots vary widely in their susceptibility to oxygen deficiency and the same person will show variances from day to.

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