Prevalence and thirst intensity in children in the immediate postoperative period

Prevalência e intensidade da sede de crianças no pós-operatório imediato

Prevalencia e intensidad de la sed de niños en el posoperatorio inmediato

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Abstract

Objective: To identify the prevalence and thirst intensity in children in the immediate postoperative period and its associated factors.

Methods: This is a cross-sectional and analytical study. The sample consisted of 78 children aged four to twelve years in the post-anesthesia care unit in the immediate postoperative period. Thirst presence, as well as its attributes and signs, were identified by questioning by the researcher and/or self-report of children and their caregivers. Thirst intensity was measured using the face scale. The outcome variables were thirst presence and intensity. Prevalence ratio was calculated by Poisson regression, with robust variance.

Results: The prevalence of thirst was 88.5%, with 39.7% reporting thirst in the postoperative period and 48.7% since the preoperative period. As for the intensity, 20.5% reported strong thirst and 37.2% intense thirst. Additionally, more than half of the children (59%) reported it spontaneously. The factors associated with greater thirst intensity were: female sex (PR=1.27); spontaneous complaint (PR=1.29); reporting feeling of dry mouth (PR=1.93) and thick saliva (PR=1.43); age was inversely associated with thirst intensity, i.e., the younger the age, the greater the thirst intensity (beta= -0.053; p=0.01).

Conclusion: Thirst in surgical children has a high prevalence and intensity. Children are able to identify the signs related to thirst and spontaneously reports it. Sex, spontaneous complaints, age, dry mouth and thick saliva were associated with intensity. These results signal the need for intentional interventions to reduce child thirst in clinical practice.

Resumo

Objetivo: Identificar a prevalência e intensidade da sede de crianças no pós-operatório imediato e seus fatores associados.

Métodos: Estudo transversal e analítico. A amostra consistiu-se de 78 crianças de quatro a doze anos em sala de recuperação anestésica no pós-operatório imediato. A presença de sede, bem como seus atributos e sinais foi identificada por questionamento da pesquisadora e/ou autorrelato da criança e seu cuidador. A intensidade de sede foi mensurada por meio da escala de faces. As variáveis desfecho foram presença e intensidade da sede. A razão de prevalência foi calculada por regressão de Poisson, com variância robusta.

Resultados: A prevalência de sede foi de 88,5% sendo que 39,7% referiram sede no pós-operatório e 48,7% desde o pré-operatório. Quanto à intensidade, 20,5% referiram sede forte e 37,2 % sede intensa. Adicionalmente, mais da metade das crianças (59%) a verbalizou de forma espontânea. Os fatores associados à maior intensidade da sede foram: sexo feminino (RP=1,27); queixa espontânea (RP=1,29); referir sensação de boca seca (RP=1,93) e de saliva grossa (RP=1,43); a idade apresentou associação inversa com a intensidade da sede, ou seja, quanto menor a idade, maior a intensidade da sede (beta= -0,053; p=0,01).

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Conflicts of interest: nothing to declare.

Conclusão: A sede na criança cirúrgica apresenta elevada prevalência e intensidade. A criança é capaz de identificar os sinais relacionados à sede e a verbaliza espontaneamente. Sexo, queixa espontânea, idade, boca seca e saliva grossa apresentaram associação com a intensidade. Estes resultados sinalizam a necessidade de intervenções intencionais para reduzir a sede da criança na prática clínica.

Resumen

Objetivo: Identificar la prevalencia e intensidad de la sed de niños en el posoperatorio inmediato y los factores asociados.

Métodos: Estudio transversal y analítico. La muestra fue formada por 78 niños de 4 a 12 años en sala de recuperación anestésica en el posoperatorio inmediato. La presencia de sed, así como sus atributos y señales, fue identificada mediante cuestionario de la investigadora o autorrelato del niño y su cuidador. La intensidad de la sed fue medida mediante escala de expresiones faciales. Las variables de resultado fueron presencia e intensidad de la sed. La razón de prevalencia fue calculada por regresión de Poisson, con varianza robusta.

Resultados: La prevalencia de sed fue del 88,5 %, de los cuales el 39,7 % relató sed en el posoperatorio y el 48,7 % desde el preoperatorio. Con relación a la intensidad, el 20,5 % relató sed fuerte y el 37,2 % sed intensa. Además, más de la mitad de los niños (59 %) la verbalizó de forma espontánea. Los factores asociados con una mayor intensidad de sed fueron: sexo femenino (RP=1,27), queja espontánea (RP=1,29), relatar sensación de boca seca (RP=1,93) y de saliva espesa (RP=1,43), la edad presentó asociación inversa respecto a la intensidad de la sed, es decir, cuanto menor la edad, mayor la intensidad de la sed (beta= -0,053; p=0,01).

Conclusión: La sed en niños quirúrgicos presenta una elevada prevalencia e intensidad. Los niños son capaces de identificar las señales relacionadas con la sed y la verbalizan espontáneamente. Sexo, queja espontánea, edad, boca seca y saliva espesa presentan asociación con la intensidad. Estos resultados indican la necesidad de intervenciones intencionales para reducir la sed de los niños en la práctica clínica.

Introduction

Surgical procedures can result in numerous discomforts for the child throughout the perioperative period. This period consists of preoperative, intraoperative, and postoperative. The preoperative period ranges from the news of the surgery being carried out up to 24 hours before the surgery. The intraoperative period refers to the moment a patient is received in the operating room until leaving the operating room. The postoperative period is classified as immediate, mediate, and late. Immediate, comprises the first 24 hours after the end of the surgical procedure, including length of stay in the post-anesthesia care unit. The mediate period starts after the first 24 hours of the procedure. The late postoperative period occurs after 15 days to one year after the anesthetic-surgical procedure.[1]

Preoperatively, some preparations inherent to the surgical anesthetic act must be performed. Fasting stands out, indicated in order to protect children from the risk of aspiration of gastric contents regurgitated by loss of protective reflexes in the airways during the anesthetic procedure.[2] Although children's stomachs should be free of solids prior to surgery, it is important not to interrupt their water intake any longer than necessary. The recommendations are two hours for clear liquids, four for breast milk, six for milk formula and light meals and eight for a fatty meal.[3] However, in clinical practice, this time is excessively long, reaching up to 11 hours, being therefore harmful for children.[4]

Among the damages that prolonged fasting can cause, thirst is highlighted. It is a prevalent discomfort in this period for children, with rates of 58% [5] and 66%.[6] Although it has a high prevalence and generates discomfort for children,[7] thirst is still an underexplored and undervalued topic in surgical child care.

The physiological mechanism that triggers thirst and satiety in children is similar to that of adults. Among the differences, it is worth noting: greater surface area in relation to body mass; lower tolerance to heat, as children sweat more, dehydrating more easily.[8] These differences lead to a greater need for fluids in children compared to adults.

In surgical children, thirst is triggered by several factors such as prolonged fasting, anxiety, fear of the unknown, in addition to the stress inherent to the procedure.[6,9,10] Surgical stress, nausea and hypoglycemia stimulate the secretion of antidiuretic hormone (ADH), therefore they also trigger a sensation of thirst.[11-13] Intraoperatively, intubation and the use of medications such as opioids and anticholinergics cause dehydration of the oral mucosa, generating a perception of dry mouth, culminating in the release of ADH.[11-13] Children's difficulty in expressing themselves properly often constitutes a challenge in identifying thirst. However, we can detect it through self-report, as well as through

physical signs such as dry mouth, whitened lips and moistening movement of the lips with the tongue.[7]

The immediate postoperative period (IPP) is also characterized by the presence of stressful factors for children, such as thirst, constituting one of the main factors responsible for the anguish experienced in this period.[4] Although thirst presence and discomfort is clearly observed in the practical experience of caring for children in anesthetic recovery, no studies were located that intentionally addressed this theme, as well as its prevalence in this period.

Other complications such as pain, hypothermia, nausea and vomiting are extensively researched. Thirst, however, is not part of the guidelines and protocols for child care in the IPP. Some studies analyze thirst only from the perspective of prolonged fasting[5,6,9,10] without investigating other factors related to it, as well as the perception of children about this symptom in the post-anesthesia care unit (PACU). Additionally, these studies are focused on the preoperative period. There is, therefore, a scarcity of evidence on children's thirst in the IPP.

Recognizing the presence and relevance of this symptom, therefore, can contribute to the appreciation of the identification and treatment of thirst in the PACU. Thus, there is a need to carry out this research, with the aim of identifying the prevalence and thirst intensity in children in the IPP and its associated factors.

Methods

This is a cross-sectional and analytical study, carried out in a large public teaching hospital in northern Paraná, with 313 hospital beds for the Unified Health System (*Sistema Único de Saúde*). Data collection took place in the PACU of the institution's operating room (OR) in question. The OR has seven rooms, where an average of 150 pediatric surgeries are performed per quarter. It has a general PACU whose physical recovery space is the same as that of adults. It has specific equipment and resources to assist children and specialized professionals who periodically participate in training related to postoperative care. The mother or guardian is included in the recovery process as soon as children regain consciousness. Data collection took place between February 1 and May 31, 2016. The study population consisted of children aged four to twelve years, of both sexes, who underwent an anesthetic-surgical procedure under any anesthetic techniques, surgical clinics and time of duration. Children in the IPP, in the PACU, from seven to nine pm on weekdays, oriented and aware, with an index of six on the Steward scale were included.[14] The age group from four years old was determined, when children already identify sequences involving more than one object, demonstrating elementary understanding of verbs, identifying differences in pictures and reporting known stories without pictures.[15] Children in a state of agitation and intense crying (characteristics suggestive of delirium) and special children (with altered neurological status and no effective possibility of communication) were excluded. The sample size was non-probabilistic, determined by collection time. Clinical data were obtained from medical records; information on preoperative fasting time and onset of thirst were reported by children or parents or guardians, whether preoperatively or postoperatively. The approach to children was carried out in the IPP, in the PACU, when children reached the Steward index six. This index assesses three domains: patent airways; consciousness; movement. The score ranges from 0 to 6, and each of the three domains can be scored from 0 to 2, thus the lowest value indicates that patients have not yet recovered, and the highest value, already recovered from anesthesia.[14] After interaction, the researcher asked children about thirst presence, when she had not already expressed it spontaneously. If so, the child was asked to quantify their thirst, pointing to the adapted visual scale of faces,[16] with zero indicating no thirst, and four, unbearable thirst. We chose to use the face scale, considering that it is a visual analogue scale, which is extensively used in investigations that measure thirst.[17] The differential of the face scale is the use of Brazilian characters, Mônica and Cebolinha, which are familiar to children. Moreover, the face scale is used to assess the presence of another subjective symptom in chil-

dren, pain.[16] Since thirst is also a subjective and self-reported symptom, we chose to use this analog scale to measure its intensity. Additionally, children were asked about the presence of signs they perceived regarding thirst: dry mouth, dry throat, cracked lip, thick tongue and thick saliva. Outcome variables were thirst presence and intensity; predictors were: sex, age, preoperative fasting, classification of physical status according to the American Society of Anesthesiologists (ASA), use of opioids, endotracheal intubation, type of anesthetic technique, surgical procedure, anesthesia time, spontaneous thirst complaint, onset of thirst, signs and symptoms of thirst.[12,13] For data tabulation and analysis, the Statistical Package for Social Sciences (SPSS) software, version 20.0, was used, with double typing, for greater security. Descriptive analyzes were performed with the presentation of absolute and relative frequencies for categorical variables, and means, median, standard deviation, minimum and maximum values for continuous variables. Bivariate analysis was performed to verify the association between thirst presence and intensity and predictor variables. For bivariate analysis, all variables with $p<0.20$ were selected to compose the multivariate regression model using the backward method. Prevalence ratio (PR) was calculated by Poisson regression, with robust variance and respective confidence intervals (95%CI). The predictor variables that maintained a significant association after adjustment ($p<0.05$) remained in the final model, according to the Wald test. The guardians signed the consent form and children's consent form in the preoperative period. The Institutional Review Board approved the research project, under Protocol CAAE (*Certificado de Apresentação para Apreciação Ética* - Certificate of Presentation for Ethical Consideration) 29069414.5.0000.5231 of 15/04/2014, as determined by Resolution 466/2012 of the Brazilian National Health Council (*Conselho Nacional de Saúde*). This study was the result of a dissertation master's degree.

Results

During the study period, 231 children's surgeries of various specialties were performed, of which 21 children recovered from anesthesia in the intensive care unit, five did not make contact due to cognitive impairment, 122 underwent surgeries outside the established time and day, and five drank water or gelatin before applying the instrument. The sample, therefore, consisted of 78 children, most of them male (70.5%), aged between 4 and 12 years (mean =7.6; SD 2.7); the prevalent clinics were: pediatric surgery (59%), orthopedics (19.2%), otolaryngology (10.3%) and other specialties (11.5%). Of the total, 82.1% of cases were classified as ASA I and 17.9% as ASA II; the preoperative fasting time ranged from 1.5 to 72 hours, with a mean of 13.48 hours (SD 8.6) (Table 1).

Thirst occurred in 88.5% (69) of the cases, reporting was spontaneous for 59% (46) of the children, with 39.7% (31) reporting thirst postoperatively and 48.7% (38) from the preoperative period. Regarding thirst intensity, 11.5% expressed to have mild, 19.5%, moderate, 20.5%, strong and 37.0%, intense. Of the 69 children who reported thirst, 74.4% complained of dry mouth, 19.2% of dry throat, 20.5% of thick saliva and 47.8% had a combination of two or more attributes of thirst (Table 2).

Initially, a bivariate analysis was performed between the outcome variables "thirst presence and intensity". For the outcome thirst presence, no significant association was found with the predictor variables: sex, age, fasting, ASA index, use of opioids, intubation, type of anesthetic technique, surgical procedure, spontaneous thirst complaint and thirst attributes.

In the bivariate analysis performed between thirst intensity and clinical-surgical variables, the multivariate model included ($p<0.20$) sex ($p=0.012$), use of atropine ($p=0.167$), spontaneous thirst complaint ($p=0.000$), perception of dry mouth ($p=0.004$), perception of thick saliva ($p=0.005$) and age ($p=0.011$). The variables described in Table 3 remained in the final model.

The factors associated with greater thirst intensity were: female sex (PR=1.27 95% CI: 1.05-1.54), spontaneous thirst complaint (PR=1.29 95% CI: 1.04-1, 60), mention a sensation of dry mouth (PR=1.92 95%CI: 1.33-2.80) and thick saliva

Table 1. Sample distribution in relation to clinical-surgical variables of children in the post-anesthesia care unit (n=78)

Variables	Mean	Standard deviation	Minimum	Maximum	95%CI
Age (years)	7.65	2.70	4	12	7.11-8.20
Fasting time (hours)	13.48	8.60	1.5	72	11.75-15.21
Anesthesia time (minutes)	94.58	6.36	10	370	81.90-107.25
Procedure time (minutes)	70.32	5.49	5	240	59.39-81.25
			n(%)		IC 95%
Sex					
Male			55(70.50)		58.95-80.02
Female			23(29.50)		19.97-41.04
Specialties					
Child surgery			46(59.00)		47.25-69.80
Orthopedics			15(19.20)		11.50-30.04
Otolaryngology			8(10.30)		04.84-19.72
Others			9(11.50)		05.73-21.25
ASA					
I			64(82.10)		71.37-89.49
II			14(17.90)		10.50-28.62
Intubation					
Yes			64(82.10)		71.37-89.49
No			14(17.90)		10.50-28.62
Atropine sulfate					
Yes			33(42.30)		31.36-54.00
No			45(57.70)		45.99-68.63
Fentanyl citrate					
Yes			40(51.30)		37.77-62.65
No			38(48.70)		7.34-60.22
Ketamine hydrochloride					
Yes			3(3.80)		00.99-11.59
No			75(96.20)		88.40-99.00
Midazolam hydrochloride					
Yes			9(11.50)		05.73-21.25
No			69(88.50)		78.74-94.26
Morphine sulfate					
Yes			18(23.10)		14.59-34.24
No			60(76.90)		65.75-85.40

(PR=1.43 95%CI: 1.15-1.78). Age was inversely associated with thirst intensity, i.e., the younger the age, the greater the thirst intensity (beta= -0.053; p=0.01) (Table 3).

Discussion

It was found that the theme of thirst in children in the IPP constitutes an approach little explored in the scientific literature. The present study innovates with the investigation of this theme in children aged over four years in the PACU. The analysis of factors related to thirst presence and intensity brings additional understanding about the prevalence of this symptom in surgical children. Furthermore, children's perceptions regarding attributes inherent to

Table 2. Sample distribution in relation to variables spontaneous complaint, presence, onset, intensity and attributes of thirst of children in the post-anesthesia care unit (n= 78)

Variables	n(%)	95%CI
Spontaneous thirst complaint		
Yes	46(59.00)	47.25-69.80
No	32(41.00)	30.19-52.74
Thirst presence		
Yes	69(88.50)	78.74-94.26
No	9(11.50)	05.73-21.25
Onset of thirst		
Before surgery	38(48.70)	37.34-60.22
After surgery	31(39.70)	29.02-51.47
No thirst	9(11.60)	05.73-21.25
Thirst intensity		
0 None	9(11.50)	05.73-21.25
1 Mild	9(11.50)	05.73-21.25
2 Moderate	15(19.50)	11.50-30.04
3 Strong	16(20.50)	12.52-31.45
4 Intense	29(37.00)	26.71-48.91
Dry mouth		
Yes	58(74.40)	63.00-83.28
No	20(25.60)	16.71-36.99
Dry throat		
Yes	15(19.20)	11.50-30.04
No	63(80.80)	69.95-88.49
Split lip		
Yes	6(7.70)	03.16-16.58
No	72(92.30)	83.41-96.83
Thick tongue		
Yes	11(14.10)	07.58-24.25
No	67(85.90)	75.74-92.41
Thick saliva		
Yes	16(20.50)	12.52-31.45
No	62(79.50)	68.54-87.47

Table 3. Factors associated with greater thirst intensity in children in the post-anesthesia care unit (n=78)

Variables	Thirst intensity			p-value
	Prevalence ratio	95% confidence interval		
		Lower	Upper	
Sex				
Female	1.27	0.04	5.71	0.017
Male	1.00	.	.	.
Spontaneous thirst complaint				
Yes	1.29	0.03	0.47	0.022
No	1.00	.	.	.
Dry mouth				
Yes	1.92	0.28	1.03	0.001
No	1.00	.	.	.
Thick saliva				
Yes	1.43	0.14	0.57	0.001
No	1.00	.	.	.
Age (years)	0.95	-0.095	-0.01	0.015

Beta= -0.053

thirst were explored, such as dry mouth, thick saliva, dry throat, cracked lip, thick tongue.

The prevalence of thirst in this study was high, with more than half of the children expressing it spontaneously. The reference to thirst was often the first report on awakening from anesthesia, with demonstrations of crying, agitation, discomfort and repeated requests for water. Thirst becomes noticeable as children regain proprioception and ability to identify environmental stimuli during recovery from anesthesia. Adult patients also cite thirst as the first intense discomfort after waking up from anesthesia.[18] For children, this feeling can be heightened by the disorientation generated by the anesthetics and anxiety due to the unknown environment. In addition to changes in consciousness levels inherent in the anesthetic recovery period, water deprivation can trigger cognitive variations, causing irritability in children.[15,19,20]

A study revealed a prevalence of thirst in the preoperative period higher than that found in this research, reaching 66%.[3] In another investigation carried out with caregivers of children aged between 0 and 3 years, thirst presence was identified in 58.9%, and children over the age of 3 years self-reported their thirst with a prevalence of 58%.[5] These results indicate that thirst is experienced by many children who undergo surgery.

There was a positive association between thirst intensity and thirsty reporting. Thirst intensity was greater in children who complained spontaneously compared to those who did not complain. Studies carried out with adults revealed spontaneous report of thirst between 12% [21] and 38.3%.[18] It is observed, therefore, that children have fewer filters, spontaneously expressing their discomfort.

At the same time, it is noticed that many children who feel thirsty do not report it unless they are questioned. It is argued that the guidelines given to the child regarding the impossibility of drinking water in any way since the preoperative period interfere with their courage to report thirst.[7] The perception of an unpleasant symptom is influenced by culture, knowledge and received guidance. Past experiences can also affect their reaction and expression when experiencing thirst.[22,23]

It was noted in the results that more than half of the children reported strong or intense thirst, indicating the magnitude of this discomfort. Other studies have evaluated thirst intensity in surgical children in the preoperative period.[5,6] One of them showed that 27% of the children reported feeling very thirsty, with the average fasting time for liquid being approximately 8 hours.[6] In another study, 23.8% of children over three years of age reported intense thirst, and the mean time of fasting for liquid was 9.4 hours.[5]

Age was inversely associated with thirst intensity, i.e., the younger the age, the greater the thirst intensity. The body water content decreases with increasing age. Thus, younger children have a lower tolerance for lack of water. In case of dehydration, even mild, children may experience tiredness, headaches, decreased concentration, irritability, and dry skin.[8,24]

The identification of the onset of thirst in the preoperative period occurred in almost half of the children, performed by parents or caregivers. In the perioperative period, parents and caregivers experience the fasting period with children[5,7] and are able to identify and report signs and symptoms of thirst, including: oral cavity and dry and whitish lips, constant swallowing of saliva, sore throat water seeking behavior when the lips are moistened by someone.[7]

The result of the present study showed that the fasting time that children undergo is much longer than recommended, corroborating data found in other realities.[2] A research carried out in France found a preoperative fasting time of approximately 11 hours.[4] Another study, carried out in Canada, revealed that the preoperative fasting time was longer than recommended for 70% of children, and for 34% of them, it was recommended from midnight onwards.[25] In a hospital in Switzerland, fasting time for clear liquids ranged from 1.1 to 15.5 hours.[26]

Maintaining prolonged fasting in order to protect children is paradoxical considering the evidence from several studies that advocate the abbreviation of the time of water restriction.[10,20] Intake of clear fluids two hours before the surgical procedure does not result in increased gastric volumes or lower gastric pH values in children.[10] Additionally, when

encouraged to drink clear fluids up to two hours before surgery, children have less intense thirst for 24 hours after surgery.[27] Recent evidence indicates that it is safe for children to drink clear fluids even just an hour before general anesthesia.[20] These results alert us to the need to change the practice of prolonged fasting, which is performed in many institutions without scientific evidence, based on institutional habits and routines.

The mere communication of the fasting state is recognized as a non-regulatory stimulus for the onset of thirst.[23] In this study, practically all children were kept fasting for periods longer than eight hours. Keeping children for 72 hours preoperatively fasting is not compatible with the principles of humanized care, and this practice needs to be reviewed in health institutions.

Thirst is a multifactorial symptom and is expressed by several attributes. The way children perceive it is individual and is influenced by their health status and personal and environmental characteristics.[22,23,28] In the present study, children, when questioned, were competent to identify and report the perception of their attributes: dry mouth, split lip, thick tongue, thick saliva. A study carried out with adult PACU patients identified the prevalence of similar attributes that made up a perioperative thirst discomfort rating scale.[29] Even in the absence of reporting by children, it is important to intentionally assess the attributes that may indicate thirst presence.

The PR of thirst intensity was higher in children who reported dry mouth than in those who did not. The thirst intensity was greater in children who reported thick saliva compared to those who did not report. Thirst also involves a motivational and affective dimension that includes the desire for water and aversion to the sensation of dry mouth – perhaps the most perceptive attribute for adults and children.[28] Adult surgical patients mention the sensation of dry mouth as extremely aversive, comparing it to ingesting a tube of glue.[30]

In this study, we found a higher PR for thirst intensity in girls than in boys. Children differ from adults in total body water content, and boys and girls differ in body water content with maturation. Generally boys of all ages tend to have higher proportions of total body water than girls.[31]

This study addressed the identification and intensity of the thirst symptom by children in the IPP, in addition to identifying the attributes perceived by them. We still need to advance in understanding the physical and emotional repercussions of thirst for surgical children, as well as in the adoption of strategies for its management.

The limitation of this study was the use of a non-probabilistic sample, reducing its external validity. Subsequent studies should be conducted with a design that includes sample calculation to better explore these associations, allowing for greater generalizations. Although the literature shows that opioid and anticholinergic drugs – widely used in surgical anesthesia – may favor thirst presence, as they cause dryness of the oral cavity,[13] in this study, this association was not evidenced. Future studies should contemplate the analysis of the influence of drug doses on children's thirst.

Regarding the contributions to the nursing field, this study evidenced the scenario of a prevalent and intense discomfort that surgical children experience, but which has been neglected both in research and in clinical practice. Thirst is a complex symptom, perceived and decoded by the child as a stressor, affecting their reactions and post-surgical recovery. It is essential to understand that the surgical child's thirst is multifactorial and individual. Its perception and management by the nursing team has the potential to affect the repercussions of this symptom in a critical phase for children, such as anesthetic recovery.

It should be seen as a priority and challenge to raise awareness of the team that takes care of the child with regard to perioperative thirst. It is essential that protocols and strategies to manage it, already available in the literature, be incorporated into the care of surgical children.

Conclusion

The prevalence of thirst in the PACU was very high, taking into account that almost half of the children

reported being thirsty since the preoperative period. The reported intensity was predominantly strong and intense, demonstrating the magnitude of this symptom for children. When recovering from anesthesia, the child is able to identify the attributes of thirst, particularly dry mouth and thick saliva. The factors associated with greater thirst intensity were being female, spontaneous thirst complaint, reporting sensation of dry mouth and thick saliva, and younger age. No statistically significant association was found between predictor variables such as fasting time and use of medications with thirst presence and intensity.

Collaborations

Riviera A, Pierotti I, Mello CRL, Birolim MM and Fonseca LF contributed to the project design, data analysis and interpretation, article writing, relevant critical review of the intellectual content and final approval of the version to be published.

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