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Use of Distraction to Reduce Pain in Venipunture when a Venoclysis Is Placed

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Abstract

The use of a venoclysis in hospitalized pediatric patients is a necessity, a procedure perceived by children as painful, so that distraction techniques have been suggested to attenuate this suffering. Evaluating the implementation of a distraction method with an uncontrolled trial with pre and post maneuver evaluation without control group.

Keywords:

Pediatric patients, pain, alternative therapy, Ipad

Introduction

One of the most frequent procedures by nurses is the placement of venoclysis for the administration of medications in hospitalized patients [1]. As part of the control of nosocomial infections, the routine change of the venoclysis is recommended because of the above, more than 90% of the hospitalized children are subjected to venipuncture for the placement of a venoclysis. [2,3]

In pediatric care, an important goal is to manage pain by minimizing the suffering it entails, while ensuring the necessary procedures for its treatment. Among the procedures associated with pain most experienced by children and adolescents hospitalized are venipuncture related to the placement of venoclysis. [4]
Such has been the impact of this situation that it is not uncommon to find the memory of this suffering in children after their hospitalization. Sometimes this memory can significantly influence anxiety and fear of future hospitalizations or interventions. The reduction of pain in the face of venipuncture not only has an impact on the suffering, but also on the cooperation of the minor to facilitate the procedure. Occasionally, very painful or lived experiences with high anxiety affect the welfare of the child and the environment of the staff in charge. [5]
For this reason, strategies have been proposed to minimize or eliminate the pain of the venipuncture procedure. Among these, they have been classified as pharmacological and non-pharmacological. The former have the disadvantage of being able to influence the clinical conditions of the patient. Therefore, many strategies have been directed to non-pharmacological actions or procedures (meditation, relaxation and distraction techniques). Although there is no accepted universal theory of how distraction works, it is understood as a way of diverting directed attention from a painful damaging stimulus to another activity that requires high concentration. If this attention is high, neurotransmitters such as adrenaline are released. Important to generate a lower response to pain. In this way, distractors that force the child to use more than one neuronal system, are usually efficient. Therefore the use of interactive Apps can be a very appropriate distractor, the child not only deviates and concentrates their visual and audible attention, but has to perform motor actions to participate in the game and at all times, the interactive response generates reward stimuli when It is winning. The objective was to evaluate the potential use of a distracting maneuver to reduce pain during venipuncture associated with the placement of venoclysis, in the cooperation of the minor, the reduction of punctures and little time consumption

Methods

This is an uncontrolled trial with pre and post maneuver evaluation without a control group in hospitalized patients aged 8 to 16 years, a sample size was calculated by proportions, with non-random sampling and convenience. An Ipad was used with educational games for the children in order to influence the variable of distraction, while to evaluate the pain obtaining physical and verbal responses.

Results

In all patients, the reason for venipuncture was to have an intravenous access route for medical treatment, mainly haemato-oncological (80%). Most punctures were achieved with the participation of a single nurse (64%). , with respect to the evaluation of the perception of pain and stress appreciated by the observers, and the first thing to comment is that they showed an adequate agreement (Rho = 0.76). According to the Campbell scale, 92% (22 of 25) reported having moderate or minor pain, even 20% (5 of 25) without apparent pain. In the evaluation of pain self-perception (EVA scale), it was found that only two patients (48%) rated it as moderate (4 to 7 out of ten) and eleven as mild (44%); of these, two marked pain absence (0 out of 10). When analyzing the correlation between the EVA scale and those evaluated by the observers, we found that: with relation to the Campbell scale, this was moderate to regular (Rho 0.48)

Discussion

Venopunctions are necessary procedures in the care of hospitalized children, either for taking samples or for placement of ways to infuse medications and solutions, it is inevitable that these procedures generate pain and, therefore, resistance to their performance by minors. . Therefore any strategy to help them have less suffering is recommended.

Conclusions

For the moment we can conclude that: the use of devices with electronic didactic videogames to generate distraction during venipunctures can reduce pain and stress in children; Moreover, it favors the cooperation of the minor and his relatives and allows a more efficient procedure, that is, with the participation of fewer nurses and fewer punctures.

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