What is the effect of acupressure on pain during venipuncture in children?

Abstract:

AIMS: The study was conducted as a randomized controlled trial in order to determine the effects of acupressure on acute pain during venipuncture in children.

METHODS: The population of the study consisted of children, aged between 9 and 12 years, who received venipuncture between September 2015 and June 2016 at a university hospital in Istanbul. The sample consisted of a total of 90 children, including 45 children in the acupressure group and 45 children in the control group, who met the sample inclusion criteria. The results of the study were obtained by using an information form, the State Anxiety Inventory for Children (STAIC), the visual analog scale (VAS), and the Faces Pain Scale-Revised (FPS-R). Acupressure was applied to the children in the acupressure group for 10 min before the venipuncture procedure. Pain, heart rate, and oxygen saturation levels of the children in the acupressure and control groups were evaluated both before and after the venipuncture procedure.

RESULTS: The children in the acupressure and control groups were found to be similar in terms of age, gender, parents’ educational levels and working status, number of venipuncture procedures, and mean anxiety scores. In the evaluation that was conducted before the venipuncture procedure, no statistically significant differences were observed between the heart rates, oxygen saturation levels, and expected pain scores from the venipuncture procedure in the children in the acupressure and control groups. On the other hand, it was observed that the children in the acupressure group (VAS: 19.51 ± 4.98; FPS-R: 2.08 ± 0.41) experienced less pain than the children in the control group (VAS: 47.37 ± 9.89; FPS-R: 4.84 ± 1.08), and there was a significant difference between the two groups (p< .000).

LINKING EVIDENCE TO ACTION: Acupressure administration is effective in reducing the pain that is experienced by children during a venipuncture procedure.

Reference: