

## **Hand Acupressure Reduces Post-Op Vomiting in Children**

One of the most common problems for surgical patients is the incidence of postoperative nausea and vomiting. According to the journal *Anesthesiology*, up to 43% of all patients who undergo surgery experience some form of nausea or vomiting after the procedure.<sup>1</sup> Other studies have shown that the highest incidence of postoperative vomiting occurs in children, especially those three years and younger.<sup>2,3</sup>

Both acupuncture and acupressure have been shown to reduce the effects of nausea and vomiting following surgery, with varying degrees of effectiveness depending on the acupuncture points used and the duration of treatment.

In a recent study conducted at Leopold-Franzens University in Innsbruck, Austria, researchers found that a relatively new technique, Korean hand acupressure, has shown promising results in reducing postoperative nausea in children following strabismus surgery.

Fifty children aged 3-12 were chosen for the study, the results of which were published in a recent issue of the *British Journal of Anaesthesia*.<sup>4</sup> All of the children were scheduled to undergo surgery for strabismus, a condition that causes one of the eyes to be misaligned horizontally or vertically.

Before surgery was performed, the children were divided into two groups. Half of the children received acupressure in the form of a special acupressure disc affixed to K-K9, an acupoint located on the middle phalanx of the ring finger on both hands. Acupressure was performed on the K-K9 points of both hands 30 minutes before anesthesia was given; the discs remained in place for 24 hours. The other children had their ring fingers taped in a similar fashion, but no acupressure disc was applied.

Strabismus surgery was then performed on the children. After the procedure was completed, the children were transferred to a pediatric ward for observation. All of the children remained in the university's clinic for a minimum of 24 hours following surgery.

## Observations

The researchers noted a "significantly lower" incidence of vomiting in the acupressure group compared to the placebo group. During the first 24 hours after surgery, only 20% of the acupressure patients experienced an episode of vomiting, compared with 68% of the placebo patients. The greatest difference was seen in the time immediately following surgery; three hours after the procedure, vomiting had occurred in just 12% of the acupressure group compared to 40% of the placebo group.

<b>Table I:</b> Time of first incident of vomiting after surgery. Results are expressed in total numbers and percentages of patients who experienced postoperative vomiting.					
<b>Group</b>	<b># of patients</b>	<b>0-3 hours after surgery</b>	<b>0-6 hours after surgery</b>	<b>0-12 hours after surgery</b>	<b>0-24 hours after surgery</b>
Acupressure	25 (100%)	3 patients (12%)	5 patients (20%)	5 patients (20%)	5 patients (20%)
Placebo	25 (100%)	10 patients (40%)	14 patients (56%)	17 patients (68%)	17 patients (68%)

Although other studies have shown needling of the K-K9 point to be effective in reducing postoperative nausea (POV), the investigators suggested that acupressure be delivered rather than acupuncture for several reasons. "Acupressure is painless, easy to perform and well tolerated by children," they wrote. "Hence, it seems to be a useful method for preventing POV in pediatric patients."

The researchers also suggested that in order for treatment to be effective, acupressure must be delivered before a patient is anesthetized. "The correct timing of acupuncture and acupressure is of great importance," they noted. "We found that, in order to achieve a satisfactory antiemetic effect, stimulation of acupuncture points must be performed before the induction of anesthesia."

Because Korean hand acupressure is relatively new, it has not received as much attention as other forms of care; in fact, it has gone virtually unnoticed by Western researchers, with few studies published regarding its effectiveness.

The results of the Austrian study suggest that stimulating K-K9 can reduce postoperative nausea in children, and that further research should be conducted to determine the proper stimulation and duration of treatment for optimal results. As the scientists stated in their conclusion:

"Acupressure of the Korean hand acupuncture point K-K9 is a cheap and effective method for reducing the incidence of POV in children undergoing strabismus surgery. Korean hand acupuncture has been scarcely investigated so far, but its effectiveness has been clearly demonstrated in this study."

#### *References*

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