Case Report: Acupuncture for Pediatric Post-Operative Pain Relief

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Introduction: Acupuncture is being increasingly used as an anesthetic adjunct to decrease side effects related anesthesia and to decrease post-operative discomfort. In the pediatric population we have found that acupuncture can alleviate post-operative pain symptoms and decrease reliance on opiate and other medications.

Case Summary: A 16 year-old girl underwent right thoracotomy to resect a metastatic lung lesion from osteosarcoma. A thoracic epidural was placed intra-operatively for pain control. The patient had excellent pain relief during the first three post-operative days. On day three the surgeons requested the epidural be discontinued due to fever. Patient was then placed on a dilaudid PCA at 1μg/Kg/hr basal rate and 2μg/Kg boluses. The fever subsequently resolved. While the incisional pain was controlled, patient complained of excruciating right upper quadrant abdominal muscle cramping which led to decreased respiratory effort and prevented her from walking. Baclofen was tried at 5mg TID without effect.

Acupuncture was next performed and the following points were stimulated: LV13, ST25, GB26, GB37. Patient’s spasms disappeared immediately after the treatment for 2 hours but then returned. On the following day, acupuncture was repeated on the same points with complete resolution of the spastic pain.

Conclusion: Although one may argue that patient’s spasms will eventually resolve, the immediate relief of her symptoms by acupuncture after failure of both the PCA and baclofen treatment suggests that in this particular case, acupuncture did provide relief of symptoms. The resolution of spastic pain upon repeating acupuncture also supports its efficacy. Acupuncture can be a useful modality for peri-operative anesthetic management and pain control. Further studies need to be performed to elucidate its mechanisms of action and to define specific areas where it can be best applied.

References: