Electro-Acupuncture for Pain Relief and Relaxation During an Oocyte Retrieval

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TCM Patterns & Identification

PATIENT HISTORY: The patient had been trying to conceive for 3 years, this was her first IVF cycle. Because of her high BMI, it was not advisable for the patient to receive the intravenously administered atropine & fentanyl anesthetic which is usually used during the oocyte retrieval procedure. She would, however, receive a local vaginal mucosa anesthetic of 1% lidocaine with epinephrine. The patient requested that acupuncture be used during the oocyte retrieval to assist with pain management and relaxation. She also received 1 mg of ativan, and an intravenous drip of saline & glucose.

Treatment Protocols and Duration

ACUPUNCTURE PROCEDURE: The patient had received acupuncture treatments at our clinic in previous months for fertility reasons. On the oocyte retrieval procedure day, she received one long acupuncture treatment at the ART clinic, which included 3 separate acupuncture needle insertions. Before the acupuncture treatment began, the patient was hooked up to an intravenous drip of saline and glucose, in a vein near the acupuncture point ZhongZhu / TE3 of her left hand. The first part of her acupuncture treatment was done in a lounging chair outside of the surgical suite. Acupuncture point Baihui / GV20 was connected to Yintang with 1 htz of continuous electro-stimulation. Bilaterally Hegu / LI4 was connected to Zusanli / ST36, Sanyinjiao / SP6 was connected to Taichong / LV3, and Siman / KI14 was connected to both Guilai / ST29 and Zigong, all with 200 htz of continuous electro-stimulation. Part one of her acupuncture treatment lasted 30 minutes. All needles except GV20 & Yintang were
removed, and the patient was allowed to empty her bladder before moving to the surgical suite. The second part of her acupuncture treatment began directly before her egg retrieval procedure, in the surgery suite. GV20 and YinTang were again continuously electro-stimulated with 1 hz, and bilaterally LI4 & ST36, and SP6 & LV3 were continuously electro-stimulated with 200 hz throughout the procedure. No abdominal acupuncture points were stimulated used during the oocyte retrieval procedure itself. The egg retrieval procedure lasted approximately 15 minutes. At the completion of the egg retrieval procedure, all electro-stimulation was discontinued, and all acupuncture needles except GV20 & YinTang were removed, and the patient was wheel-chaired back to her lounging chair for the third part of her acupuncture treatment. YinTang and GV20 were again electro-stimulated, and LI4 & ST3, and SP6 & LV were also electro-stimulated as in part one of her acupuncture treatment. Abdominal points KI14 & ST29 were again needled, but without electro-stimulation in the interests of minimizing any post-procedure ovarian bleeding.

Conclusions

RESULTS: Before the first part of her acupuncture treatment began, the patient was awake and alert, and was displaying what I would consider to be "nervous energy". She mentioned she had not slept well the night before. Within 30 seconds of beginning electro-stimulation, the patient was asleep and snoring in her lounging chair. During this part of her treatment she woke a few times, but remained asleep for most of the time. During the oocyte retrieval the patient remained calm, while awake and alert. At one point she requested the intensity of the stimulation of her right foot (SP6 & LV3) be increased so that she could feel it more, as it seemed to be helping her pain tolerance. At the end of her oocyte retrieval procedure, the patient reported that the most painful part of her day so far had been the IV needle inserted into the back of her hand. Just before the third part of her acupuncture treatment, the patient reported that her post-procedure pain was minimal, and she seemed strong and in good spirits. Two days later, when her embryos were transferred into her uterus, the patient reported that since the oocyte retrieval she had experienced some mild cramping pain, which Tylenol was helping to relieve.
REMARKS: The choice of acupuncture points and electro-stimulation intensities used in this case study were decided upon after consulting with colleagues who had used the protocol to assist an anesthetic-free caesarian section, with good results. I would consider this to have been a "strong" acupuncture treatment, with the intensity of the electro-stimulation adjusted to the maximum level of her pain threshold. The fact that this patient had already received acupuncture treatments with myself and my colleagues at Acubalance, and was familiar and comfortable with acupuncture's effects and sensations, in my opinion contributed my ability to give her the necessarily strong treatment. I believe it is therefore important that future patients who request acupuncture assisted oocyte retrieval first experience electro-acupuncture in a series of treatments before the oocyte retrieval itself, to assess their particular responses to the effects of acupuncture. In future treatments I would be curious to see if certain protocol steps could be streamlined or improved - perhaps adding manual stimulation of auricular points ShenMen during the egg retrieval procedure, or adding electro-stimulation of abdominal points during the egg retrieval procedure, or replacing the electro-stimulation of the foot points SP6 & LV3 with strong manual stimulation using thick gauge needles before the egg retrieval procedure, to minimize the number if cords used in the surgical suite, and therefore reduce time. In my opinion, electro-acupuncture for pain relief during minimally invasive surgical procedures such as oocyte retrieval is an area well worthy of more research.

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