

TABLE FIVE: Acupuncture and Endometriosis

Author, date	Study Design	Methods/Outcome Measured	Control Group (n)	Acupuncture Method and Timing (n)	Additional Information	Conclusion
Chen <i>et al</i> , 2010	Prospective, randomised.	Changes in clinical effects, pain scores, onset time of producing analgesic.	Patients receiving oral administration of Jiawei Mojie tablet (n = 37).	Patients receiving acupuncture combined with acupoint sticking therapy (n = 36).	ONLY ABSTRACT AVAILABLE. All patients had dysmenorrhea caused by endometriosis.	Short and long term effective rates were significantly higher in acupuncture group compared to control. NB: Exact definition of 'effectiveness' unclear from abstract. Pain scores were significantly lowered by acupuncture compared to control group, and time to effect was lower in acupuncture group.
Rubi-Klein <i>et al</i> , 2010	Prospective, randomised, cross-over.	Changes in pain score.	No controls.	Group 1: Patients receiving verum-acupuncture twice a week for 5 weeks, followed by non-specific acupuncture twice a week for 5 weeks (n = 47); Group 2: Patients receiving non-specific acupuncture followed by verum-acupuncture (n = 54).	All patients had dysmenorrhea caused by endometriosis. Both groups received a 'set' of 10 treatments (twice a week, 5 weeks) followed by an observation period of 2 cycles, then another 'set' of 10 treatments according to a cross-over design ie: all patients received true and sham acupuncture. 83 of 101 participants completed the study.	Group 1 showed a significant reduction of pain intensity after the first 10 treatments. In comparison, group 2 showed significant pain relief only after the cross-over suggesting acupuncture can reduce pain associated with endometriosis.
Jin <i>et al</i> , 2009	Prospective, randomised.	Changes in dysmenorrhea severity score (DSS), plasma prostaglandin (PGE2) and 6-Keto-PGF1alpha levels.	No controls.	Group 1: Patients receiving auricular acupuncture (n = 40); Group 2: Patients receiving body acupuncture (n = 40).	ONLY ABSTRACT AVAILABLE. All patients had dysmenorrhea caused by endometriosis.	Both protocols can improve clinical effects, but auricular acupuncture is superior to body acupuncture in reducing pain, possibly due to the effect on reducing plasma PGE2 and raising 6-Keto-PGF1alpha level which were significantly different to body acupuncture group by the 3rd menstrual cycle.

Wayne <i>et al</i> , 2008	Prospective, randomised, controlled.	Changes in pain score, and multiple 'health-related quality of life' (HRQOL) questionnaires	Patients receiving sham acupuncture (n = 5).	Patients receiving true Japanese-style acupuncture (n = 9).	Aim of study was to collect preliminary data for a subsequent randomized, sham-controlled trial.	Pain score was initially significantly lower in acupuncture group, but increased to match control group after 4 weeks. There was a non-significant trend to improved HRQOL answers in the acupuncture group. No adverse effects reported.
Sun <i>et al</i> , 2006	Prospective, randomised.	Changes in clinical symptoms and signs, tumor marker serum CA125 values and reports of adverse effects.	No controls.	Group 1: Patients receiving Shu-Mu acupuncture at Ganshu (BL 18), Pishu (BL 20), Shenshu (BL 23), Qimen (LR 14), Zhangmen (LR 13), Jingmen (GB 25) (n=30); Group 2: routine needling at Hegu (LI 4), Zhongji (CV 3), Guanyuan (CV 4), Sanyinjiao (SP 6) (n=30); Group 3: oral administration of western medicine Danazol.	ONLY ABSTRACT AVAILABLE. Outcomes measured in all groups before and after treatment.	Shu-Mu group was superior to all other interventions in improving dysmenorrhea, irregular menstruation, lumbago and sacrodynia, anus engorge, etc. (P < 0.01). After treatment, serum CA125 in the Shu-Mu point combination group significantly decreased (P < 0.01).
Tsenov, 1996	Prospective, randomised status unclear.	Changes in pain.	No controls.	Group 1: primary dysmenorrhea (n = 24); Group 2: secondary dysmenorrhea (n = 24). All received acupuncture at LI4, SP6, 10, S30, 36 CV2, 3, CX5, 6, B20, 23 applied via torment method for 30 min.	ONLY ABSTRACT AVAILABLE. Included primary and secondary dysmenorrhea patients.	Authors concluded the effect of acupuncture treatment on dysmenorrhoea depends on its kind - primary dysmenorrhoea is influenced very well, while secondary dysmenorrhoea is influenced satisfactorily.

Animal Studies

Author, date	Study Design	Methods/Outcome Measured	Control Group (n)	Acupuncture Method and Timing (n)	Additional Information	Conclusion
Chen <i>et al</i> , 2008	MURINE MODEL: Endometriosis model established by unknown method.	Changes in the largest diameter of ectopic tissue, pathological observation of ectopic tissue and changes in matrix metalloproteinase-2 (MMP-2) expression in the ectopic tissue.	Group 1: Normal control rats; Group 2: Model rat receiving no interventions.	Group 1: Model rats receiving acup-moxibustion; Group 2: Model rat receiving TCM acupuncture; Group 3: Model rat receiving acupuncture and medicine.	ONLY ABSTRACT AVAILABLE. Sample numbers unknown, specific intervention timing/protocol unknown but observations taken after 35 days, medicine used in group 3 unknown.	Ectopic diameter and MMP-2 expression was significantly reduced in group 3 intervention rats (acupuncture and medicine) compared to all other groups. Acupuncture in conjunction with medicine can down-regulate the abnormal increase of MMP-2 level to inhibit the invasion of ectopic tissue to extracellular matrix, reducing the ectopic tissue and therefore cure <u>endometriosis</u> .
Shu-ping <i>et al</i> , 2008	MURINE MODEL.	Changes in immune cell level.	Group 1: Normal control rats. Group 2: model rats, no intervention.	Model rats receiving acupuncture.	ONLY ABSTRACT AVAILABLE. Sample numbers unknown, specific intervention timing/protocol unknown.	Acupuncture reduced the increased humoral immunity seen in model rats, improved the function of cell immunity, significantly increased NK activity, and reduced the secreting levels of IL-1 and IL-6 in serum. Acupuncture can improve the immune disturbances seen in model rats.