

Application prospect and clinical effect analysis of Fu Chan Xue Jing during bleeding after abortion

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Abstract: To investigate the application future of Fu Chan Xue Jing during bleeding after abortion and to observe the clinical effect analysis of Fu Chan Xue Jing on the treatment of bleeding after medical abortion. 86 patients who were willing to perform medical abortion in Women and infants Hospital of Zhengzhou from December 2013 to November 2014 were randomly divided into two groups, with 43 cases in either observation group or control group. Basic medical abortion was conducted on the patients in control group, apart from which Fu Chan Xue Jing was added on the patients in observation group. Meanwhile, the vaginal bleeding volume and vaginal bleeding time for patients in both groups were observed and compared. The treatment results showed that the vaginal bleeding volume for patients in treatment group was lower than that in control group, showing statistically significant difference ($P < 0.05$); the average time (7.5 ± 1.3 d) of vaginal bleeding for patients in treatment group was shorter than that (13.5 ± 4.1 d) in control group, showing statistically significant difference for the data of the two groups ($P < 0.05$). Fu Chan Xue Jing is conducive to reduce the bleeding after abortion and help to recovery the normal menstruation faster, which has good effects to prevent the bleeding volume after medical abortion and control the bleeding time, worth popularizing on clinic.

Keywords: Fu Chan Xue Jing; abortion; artificial; bleeding; treatment results.

INTRODUCTION

As the modern life becomes increasingly opening, the abortion patients also are increasing day by day. At present, it has been reported that there are about 13 millions of abortion cases every year in China (Wu, 2012). Comparing with the pain of operative abortion and the complications it may bring, medical abortion has been accepted by more and more patients. However, medical abortion also has some problems such as the long bleeding time and large bleeding volume after abortion. With the current popularization of the integration of traditional Chinese and Western medicine, more and more obstetricians are paying much attention to the traditional Chinese medicine. This study was to investigate the vaginal bleeding volume, bleeding time and the recovery situation of menstruation after adding Chinese medicine Fu Chan Xue Jing in order to perform its clinical application analysis.

Medical abortion refers to the methods through oral mifepristone in combination with misoprostol medicine to terminate early pregnancy. However, this abortion method also exists more profile on the bleeding after abortion (Feng *et al.*, 2008), with relatively long bleeding time and great harm. Relevant studies indicated that Fu Chan Xue Jing has a certain effect in medical abortion. This study was to discuss the clinical effect of Fu Chan Xue Jing on treating 86 medical abortion patients in Women and infants Hospital of Zhengzhou.

MATERIALS AND METHODS

Clinical data

Eighty-six patients who were willing to perform medical abortion in Women and infants Hospital of Zhengzhou from December 2013 to November 2014 were selected. All patients were with menelipsis in 49d and pregnant women with positive urine pregnancy test. Patients' age were ranging from 21 to 33 years, with average age of (24.8 ± 2.3) years and pregnancy days in 36-45 d. In the enrolled patients, there were 25 multiparas (29.07%), 45 complete abortion patients (52.33%) and 16 primiparas (18.60%). Patients were randomly divided into two groups, 43 cases in each group. Proportionality was shown in the ages, pregnancy time and gravidity and parity history for patients in both two groups. The study was approved by the institutional research ethics committee of Women and infants Hospital of Zhengzhou, and written informed consent was obtained from each subject.

Exclusive criteria

(1) Patients with presumed ectopic pregnancy; (2) Patients with taboo in prostaglandins drugs: those with heart disease, asthma, glaucoma, gastrointestinal dysfunction and allergic constitution; (3) Patients with taboo in mifepristone drugs: abnormal liver or renal function, endocrine disease (such as thyroid disease, diabetes and adrenal gland disease), blood disease or thrombotic disease, benign and malignant tumors of various organs, hypertension; (4) Pregnancy patients with intrauterine device; (5) Patients with adverse reaction

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after taking medicine such as vomiting and patients with dilatation and curettage to terminate pregnancy after taking medicine; (6) Patients suffered from nervous system disease.

Treatment methods

25mg (1 piece) mifepristone was taken orally for patients in control group in empty stomach or after 2h eating, twice/d, being taken 3 d continuously. At 8:00 morning of the fourth day, 600ug (3 pieces) misoprostol tablets were taken orally or 1mg (one) carboprost methylate suppository was placed at the posterior vaginal fornix. Placebo was performed on patients continuously during 3d before and after abortion, without taking other drugs (Han *et al.*, 2010). Mifepristone in combination with misoprostol medicine was adopted for patients in the observation group with the same method in the control group. At the same time, at the first day with taking mifepristone and the third day after abortion, Fu Chan Xue Jing was began to take, with warm-taken decoction in empty stomach, 100mL/time, twice/d, a total of 6d, without taking other drugs.

Observation indicators and evaluation criteria

After taking medicine for a time, the vaginal bleeding time and vaginal bleeding time were observed and compared for patients in both two groups. Patients' vaginal bleeding volume was referred to the time quantum from the beginning of the day of villus hair follicle elimination to the day that the patients' vaginal had stopped bleeding. Comparing the bleeding volume and menstrual blood volume of patients, the vaginal bleeding volume was calculated. Those less than menstrual blood volume was light volume, those nearly the same with menstrual blood volume was moderate volume, and those large than menstrual blood volume was rich volume. Patients' vaginal bleeding time was calculated with the days of the time quantum from the beginning of the day of villus hair follicle elimination to the day that the patients' vaginal had stopped bleeding.

STATISTICAL ANALYSIS

SPSS 13.0 statistical software was adopted for statistical analysis. $\bar{x} \pm s$ was represented for measurement data, t test for comparison among groups and χ^2 test for enumeration data.

RESULTS

The treatment results showed that the vaginal bleeding volume for patients in treatment group was lower than that in control group, show statistically significant difference ($P < 0.05$, See table 1); Moreover, the average time ($7.5 \pm 1.3d$) of vaginal bleeding for patients in treatment group was shorter than that ($13.5 \pm 4.1d$) in control group, showing statistically significant difference for the data of the two groups ($P < 0.05$).

DISCUSSION

At present, the contraception knowledge has not been popularized in China, inducing numerous abortion cases. Abortion is associated with operative abortion and medical abortion. Compared with operative abortion, medical abortion has the advantages of litter injury and pain as well as convenience to use. But unsafe factors will appear after the medical abortion, such as heavy bleeding volume, long bleeding time and fever, which may cause pelvic inflammation and endometriosis. Experiments have proved that Fu Chan Xue Jing is able to reduce the bleeding volume and shorten bleeding time after medical abortion.

Chinese medicine consider that the reason of bleeding after abortion is that static blood blocking in uterus and failure of blood circulation lead to spill over the pulse, with static blood and bleeding on patients. If the Huatong time is too long after the blood stasis, even the Huatong can't proceed, patients' vigour is impaired to some extent, thus anemia. However, if the blood chamber *in vivo* is open, pathogenic factors will take advantage of a weak point and the probability of pelvic infection will be increased. Therefore, Chinese traditional treatment involves in principles of promoting blood circulation to remove blood stasis, benefiting qi and resolving blood stasis, regulating qi and activating blood and removing blood stasis for promoting tissue regeneration (Cao, 2004).

Fu Chan Xue Jing is component with *Codonopsis pilosula*, *Angelica sinensis*, *Herba leonuri*, *Glossy privet (Ligustrum lucidum) fruit*, *Herba patrinia*, *Rubia cordifolia*, *Fried sanguisorba officinalis*, *Licorice (Glycyrrhiza glabra) root*. *Herba leonuri* and *Codonopsis pilosula* are shared as sovereign drug, among which *Herba leonuri* has the effect of removing static blood and protecting vigour and *codonopsis pilosula* can promote secretion and nourish blood as well as tonify and benefit qi; the combination of the two drugs has the efficacy of removing blood stasis for promoting tissue regeneration and benefiting qi and raising yang and is able to improve patients' qi deficiency and blood stasis. Moreover, *Angelica sinensis*, *Rubia cordifolia* and *Fried sanguisorba officinalis* are minister drugs. *Angelica sinensis* is specialized in enriching the blood and able to help herba leonuri remove blood stasis for promoting tissue regeneration. *Rubia cordifolia* has the effect in cooling blood and hemostasis as well as removing blood stasis. On the one hand, it helps *Codonopsis pilosula* nourish blood and clear deficient heat, on the other hand, it helps *Herba leonuri* promote blood circulation to remove blood stasis. *Fried sanguisorba officinalis* also has the effect in cooling blood and hemostasis and can be used for various hemorrhage syndrome, showing a best efficacy on blood-heat and bleeding and an assistance in

Table 1: Vaginal bleeding volume for patients in the two groups (n(%))

Group	Cases	Light volume	Moderate	Rich volume
Control group	43	10 (23. 26)	18 (41.86)	15 (34. 88)
Treatment group	43	22 (51. 16)	16 (37.21)	5 (11. 63)

activating blood and clearing heat for *Codonopsis pilosula*. Glossy privet fruit and *Herba patriniae* are taken as the assistant drugs. The former can benefit the yin of patients' liver and kidney as well as clear deficiency fire, helping *Codonopsis pilosula* benefiting qi and raising yang, thus helping the failed healthy qi. The latter can remove blood stasis and refine deficiency heat and treat stasis and stomachache and leucorrhoea with bloody discharge after abortion. *Licorice root*, as the conductant drug, has the ability to reconcile the various drugs. The pharmacological studies have manifested that *Herba leonuri*, *Angelica sinensis* and *Rubia cordifolia* can excite uterine smooth muscle, further strengthen uterine contraction, which is conducive to reduce vaginal bleeding time and bleeding volume. *Codonopsis pilosula*, *Herba patriniae* and *Glossy privet fruit* can augment organism immunity ability, which is useful to decrease infection after bleeding. *Sanguisorba officinalis* is able to significantly shorten bleeding and coagulation time, playing a hemostasis role. It is concluded that Fu Chan Xue Jing has the ability to promote uterine contraction, help patients discharge residual decidua tissues successfully, playing the role in hemostasis and anemia correction, thus strengthening patients' body immunity, helping patients against the invasion of pathogenic bacteria and promoting patients' uterine recovery, which can reduce vaginal bleeding volume and vaginal bleeding time and promote the resumption of menstruation as soon as possible (Li, 2010).

In recent years, using mifepristone in combination with misoprostol medicine to terminate pregnancy has been extensively applied in clinic. However, medical abortion also exists adverse reactions, such as allergy, fever, massive vaginal bleeding and too long time of vaginal bleeding. As to those syndromes, Chinese medicine treatment has a better efficacy. In this study, it presented that Fu Chan Xue Jing had the effect in reducing vaginal bleeding volume and shortening bleeding time, which also had a certain promotion effect for resuming the normal menstruation, having broad and nice prospect in clinical applications.

Fu Chan Xue Jing is composed with *Codonopsis pilosula*, *Angelica sinensis*, *Herba leonuri*, *Glossy privet fruit*, *Herba patriniae*, *Rubia cordifolia*, *Fried sanguisorba officinalis*, *Licorice root* (Han et al, 2010). It can not only promote the degeneration, edema and necrosis of decidua tissues, but also augment the contraction ability of uterine in order to promote patients' quicker healing and hemostasis.

CONCLUSION

The results in this study showed that Fu Chan Xue Jing has clinical efficacy in reducing the bleeding volume and shortening bleeding time for vaginal bleeding after medical abortion, thus worth extensively applying and popularizing in clinic.

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