

Clinical Report

Postoperative pain of mixed hemorrhoid treated by embedding needles in Èrbái (二白 EX-UE 2)*

穴位埋针二白穴治疗混合痔术后疼痛*

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Objective To explore the effectiveness of treating postoperative pain of mixed hemorrhoid by embedding needles in Èrbái (二白 EX-UE 2) and find possible ways for relieving postoperative pain of mixed hemorrhoids. **Methods** press needle (SEIRIN pyonexes) were embedded in EX-UE 2 of patients with postoperative pain of mixed hemorrhoid, once a day and totally 7 treatments. **Visual analogue scale (VAS) values were adopted for evaluation. Results** Complete remission of clinical pain was observed in 34 cases, accounting for 50.00%; significantly effective in 19 cases, accounting for 27.94%; effective in 13 cases, accounting for 19.12%; and ineffective in 2 cases, accounting for 2.94%; the total effective rate was 97.06%. **Conclusion** The therapy of treating postoperative pain of mixed hemorrhoid by embedding press needle in EX-UE2 is effectively satisfactory.

KEY WORDS: Èrbái (二白 EX-UE 2); postoperative pain of mixed hemorrhoids; press needle; acupoint needle-embedding

Postoperative pain of mixed hemorrhoids directly discourages patients from being operated on, which has been one of common and tough clinical problems. It even becomes one of the main concerns among patients with anorectal diseases that are afraid to seek medical treatment^[1]. Currently, postoperative analgesia methods for anorectal disease are multiply, such as topical application of long-acting analgesics, application of patient-controlled analgesia (PCA), oral administration of analgesic drugs, etc., and evaluation on whether they may bring negative impacts on the healing of wounds after surgery are not available. Acupuncture has been widely applied clinically for its rapid effect, economy, convenience and no adverse reactions. The authors treated postoperative pain of mixed hemorrhoid by embedding press needle in Èrbái (二白 EX-UE 2). Here's the report.

CLINICAL DATA

General Information

All the 68 patients were recruited from inpatient department of Liaoning Coloproctological Hospital from July 2013 to December 2013. They were firstly diagnosed with mixed hemorrhoids and accepted milligant-morgant hemorrhoidectomy, and those with anal fissure and anal papilla tumor detected by digital rectal examination (DRE) and anoscope were excluded. Thirty-six cases were male and 32 cases were female, aged 18 to 60, with the average of 32.2 ± 10.1 years old, and the course of disease of 0.4 to 6 years.

Diagnostic criteria

The included cases were in conformity with

criteria of mixed hemorrhoids specified in *Anorectal Epidemiology Treated with Integrated Chinese and Western Medicines* (China Press of Traditional Chinese Medicine, 2009)^[2], and aged 18 to 60 years old; they could respond properly with clear mind, sign the Informed Consents Form and cooperate with the physician on completion of visual analogue scale (VAS) with the rating ≥ 4 ; and they were not operated on within half a year.

METHODS

Before the surgery, a routine examination was conducted; during the surgery, caudal anesthesia was followed by milligant-morgant hemorrhoidectomy. After the surgery, the Chinese medicine was applied over the wound surface. Four hours after the surgery, the therapy by embedding needles was conducted.

Acupoints selection: bilateral EX-UE 2 (Figure 1 is the specific locations).

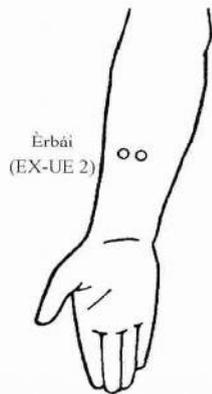


Figure 1 The specific location of EX-UE 2

Manipulation: the patient was asked in lateral position, and the skin was pierced by press needles (SEIRIN pyonexes, 0.20 mm×1.5 mm), which were fixed by breathable tape and gently pressed for 5 to 10 min to the extent that the patient felt sore. The patient was asked to press the needles for one time every two hours and half an hour prior to medication after surgery. The pyonexes were pulled out after being retained for 24 h. Without any interval, the press needles were applied in the same way as described above with 7 days as a course of treatment. The efficacy was elevated after one course of treatment.

Observation indicis

In accordance with the diagnostic criteria of pain proposed by the Seventh National Coloproctological Conference in 1992, visual analog scale (VAS) values were evaluated at varying points of time before and after treatment. VAS was applied in the way: a line of 10 cm was drawn on a sheet of paper, and “0” was

marked on one end for no pain and “10” marked on the other end for sharp pain; the rest indicated various degrees of pain. The patient was asked to mark on the line in line with how painful he or she felt. The rating was determined. The percentage of change in pain was observed by means of weighted value of VAS, and clinical effect was analyzed according to the changes in pain. A was set for VAS score before treatment and B for VAS score after treatment, and VAS weighted value = $(A-B)/A \times 100\%$.

Evaluation criteria

Efficacy criteria: VAS weighted value = $(A-B)/A \times 100\%$, clinical cure and complete remission of pain, weighted value $\geq 75\%$; significantly effective and apparent remission of pain, $50\% \leq$ weighted values $< 75\%$; effective and partial remission of pain, $25\% \leq$ weighted values $< 50\%$; ineffective and no remission of pain, weighted values $< 25\%$.

RESULTS

Among the 68 patients, 34 were cured, accounting for 50.00%; 19 were significantly effective, accounting for 27.94%; 13 were effective, accounting for 19.12%; 2 were ineffective, accounting for 2.94%. The total effective rate was 97.06%.

The VAS score of the postoperative pain of mixed hemorrhoid patients with different efficacy is shown in table 1.

Table 1 The VAS score of the postoperative pain of mixed hemorrhoid patients with different efficacy

Efficacy criteria	Patients	Before treatment	After treatment
Cured	34	6.2±3.6	3.3±4.3 ²⁾
Significantly effective	19	6.1±2.6	3.2±3.3 ²⁾
Effective	13	5.3±3.2	4.8±3.8 ¹⁾
Ineffective	2	5.1±2.6	4.7±2.8

Notes: compared with that before treatment, ¹⁾P<0.05; ²⁾P<0.01.

The change of VAS score of the 68 postoperative pain of mixed hemorrhoid patients in different time points is shown in table 2.

Table 2 The change of VAS score of the 68 postoperative pain of mixed hemorrhoid patients in different time points

Time (d)	0	3	5	7
VAS (score, $\bar{x} \pm s$, n=68)	7.3±4.3	6.2±3.3	5.8±3.8 ¹⁾	4.2±2.8 ²⁾

Notes: compared with that before treatment, ¹⁾P<0.05; ²⁾P<0.01.

It is shown in table 2 that the pain has decreased as time goes by.

EXPERIENCES

Postoperative pain is one of the common surgical complications, closely related to the disease, the surgical site and the wound. Recovery and normal life of patients may be impacted by milligant-morgant hemorrhoidectomy that causes sharp and prolonged postoperative pain resulting from anatomical factors, bowel irritation and stimulation during medication.

In recent years, studies on postoperative analgesia of anal diseases have multiplied. Preemptive analgesia and patient-controlled analgesia (PCA) in postoperative pain have been widely applied. PCA is the most effective in analgesia. However, its indwelling catheters and drugs are likely to cause a variety of complications, which are hard to bear by patients. EX-UE 2 is extra point. Though the clinical efficacy of treating anorectal diseases by needling EX-UE 2 is beyond doubt, the clinical application is rare. Needling the twelve meridians are widely applied, especially the bladder points or local points. It is inconvenient to needle local points for the postoperative patients with anorectal diseases, and secondary pain may be induced^[3]. EX-UE 2 is extra point, which originates from the masterpiece of *Bianque Shenyong Zhenjiu Yulong Jing* (《扁鹊神应针灸玉龙经》, *Bian Que Miraculous Effective Classic of Acupuncture*), which said that anal fistula can be treated with acupuncture, and tenesmus is the most troublesome; patients may suffer from itching, pain or bleeding, and EX-UE 2 located on the forearm can be used. EX-UE 2 is in the upper limb and the manipulation is easy with good effect.

Postoperative pain of mixed hemorrhoid can be intervened by embedding needles in EX-UE 2, which exert positive impact on medication, recovery and

tension relief after the surgery. Anatomical structure around EX-UE 2 includes radial artery, veins and artery and vein interossea volaris; medial forearm cutaneous nerve, nervus cutaneus antebrachii lateralis, median nerves and radial nerves. Pyonex therapy grows out of ancient Chinese acupuncture. It has been well received by the patients in fear of acupuncture or with chronic diseases due to its easy manipulation, fast efficacy, less pain, wide application and easy movement. SEIRIN pyonex developed by SEIRIN CORPORATION is disposable, slender and easy to operate^[4].

The therapy of treating postoperative pain of mixed hemorrhoid by embedding needles in EX-UE 2 is easy, safe, economical and practical with great clinical application value. The authors intends to further enhance the study so that the therapy of Chinese medicine will play a greater role in analgesia of postoperative pain of anal diseases.

REFERENCES

- [1] Wang B, Chen YP. Clinical observation of treating postoperative pain of mixed hemorrhoid by embedding needles in Èrbái (二白 EX-UE 2) with different interventions. *Liaoning J Tradit Chin Med (Chin)* 2013; 40(3): 484-486.
- [2] Lu JG, Ding YJ, Li GD. Anorectal epidemiology treated with integrated Chinese and Western medicines. Beijing: China Press of Traditional Chinese Medicine; 2009: 189.
- [3] Wang B, Chen YP, Zhang Y, CHEN YG. Overview of clinical application of acupuncture treatment on anorectal postoperative pain. *J Liaoning Univ Tradit Chin Med (Chin)* 2012; 14(4): 249-251.
- [4] Hao Y, Liu HW. Clinical application of new-typed pyonexes. *Chin Acup-mox (Chin)* 2013; 33 (supplement) 87-88.

[摘要] 目的: 探讨二白穴穴位埋针治疗混合痔术后疼痛的有效性, 为混合痔术后疼痛的缓解探索可行方法。方法: 运用“清铃”牌揸针对混合痔术后疼痛患者进行贴压治疗, 每日1次, 共7次, 采用视觉疼痛模拟评分(VAS)值评价疗效。结果: 临床疼痛完全缓解34例, 占50.00%; 显效19例, 占27.94%; 有效13例, 占19.12%; 无效2例, 占2.94%; 总有效率达97.06%。结论: 揸针二白穴治疗混合痔术后疼痛疗效满意。

[关键词] 二白穴 混合痔术后疼痛 揸针 穴位埋针