

Catgut Implantation at Baliao and Xingfu One Acupuncture Point to Treat Urinary Incontinence in Patients with Incomplete Spinal Cord Injury: Three Cases Report

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Abstract

Objective: To explore the effect of catgut implantation at Baliao and Xingfu One Acupuncture point for patients with urinary incontinence secondary to spinal cord injury (SCI). **Methods:** Three SCI patients received catgut embedding at Baliao and Xingfu One Acupuncture point. The data of intermittent catheterization (IC) volume, intermittent catheterization frequency and the amount of using urine pad (urethral condom) were corrected. **Results:** Compared to the baseline data, IC volume increased and the leakage volume decreased. **Conclusions:** Catgut Implantation at Baliao and Xingfu One Acupuncture point is effective for patients with urinary incontinence secondary to incomplete SCI.

Keywords

Baliao and Xingfu One Acupuncture Point, Catgut Implantation, Spinal Cord Injury, Urinary Incontinence

1. Case Report

From 2018 to 2019, three inpatients with urinary incontinence secondary to incomplete spinal cord injury (SCI) were admitted in our department (**Table 1**).

All patients signed informed consent before each treatment. They received catgut embedding at bilateral Baliao and bilateral Xingfu One Acupuncture points for three times (an interval of 14 days). Four pairs of posterior sacral fo-

ramen are called Baliao (green mark); Xingfu One Acupuncture point is flush to the fourth posterior sacral foramen and it is adjacent to the lateral margin of the sacrum (red marker) (Figure 1).

Figure 2 demonstrated catgut embedding at acupoints, disposable acupoint catgut embedding assistant package and syringe needle (Figure 2).

Patients were not allowed to bathe within 24 hours after treatment as well as no spicy and irritating foods to eat within 3 days after catgut Implantation. The amount of intermittent catheterization (IC), frequency of IC and the use of pads were reported as follows before and after treatment. Compared to the baseline data, IC volume increased and the leakage volume decreased (Table 2).

No one reported related adverse events.

Table 1. Baseline characteristics of the patients.

Number	Gender	Age (y)	Duration of SCI (y)	Disease	Bladder management	Urodynamic test	Bladder Safety capacity
1	F	37	2	SCI (C4 AIS Grade D)	Self-intermittent catheterization	Detrusor overactivity during urinary storage	162
2	F	19	2	Cauda Equina Syndrome	Self-intermittent catheterization	Detrusor overactivity during urinary storage	35
3	M	51	2	SCI (T11 AISGrade C)	Indwelling catheter	Detrusor weakness	183



Figure 1. Anatomical sketch of Baliao and Xingfu One Acupuncture point.



Figure 2. Catgut embedding at acupoints.

Table 2. Urinary catheterization and urinary incontinence before and after treatment.

Number	IC (ml)		frequency of IC (n/d)		Urine pad/condom(n/d)	
	Before treatment	After treatment	Before treatment	After treatment	Before treatment	After treatment
1	100 - 260	250 - 350	3	5	3	3
2	100 - 200	200 - 350	5	5	6	0
3	0	400 - 450	0	5	0	1

2. Discussion

Baliao (BL 31-34), is located in four pairs of posterior sacral foramen, it is equivalent to the Sacral Jiaji Point, which belongs to the acupoints of the Bladder Meridian of Foot-Taiyang. The stimulation of the above target area can affect the excitation of pelvic nerve and pudendal nerve. Through the integration of S2-4, the bladder detrusor, the internal and external sphincter can be regulated to promote normal voiding reflex activity. Because of its unique features in the treatment of urogenital diseases, pelvic floor anorectal diseases and so on, it had been held in esteem by medical practitioners of past dynasties, especially for its obvious effect of Ciliao (BL 32). The clinical application is very extensive [1] [2] [3]. Xingfu One Acupuncture Point which is about 6 cm deep from the surface of the body is horizontal with the Fourth sacral posterior foramen and three transverse fingers (index, middle and ring finger) away from the sacral median ridge. It is extra nerve point, which was discovered in 2013 by Dr. Laiming Yu, an expert of Catgut Embedding and Needle Knife in China. It has a good clinical efficacy in treating urinary dysfunction, anorectal dysfunction, sexual dysfunction, gynecology and other diseases. Acupoint catgut embedding is also known as long-acting acupuncture which achieves therapeutic purposes by stimulating acupoints for a long time. This treatment is cheap, safe, simple and painless. It is easy to popularize and apply in clinic. After catgut embedding, the catheterization volume increased significantly and the leakage volume decreased. The two groups of acupoints play a mutual promotion and synergistic effect. It is a simple Chinese-style therapy of “sacral nerve regulation” and “pudendal nerve touch”.

3. Conclusion

Catgut Implantation at Baliao and Xingfu One Acupuncture point is effective for patients with urinary incontinence secondary to SCI.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- [1] Yang, T., Zhi, S.L. and Yuan, S.L. (2001) 30 Cases of Neurogenic Fecal Incontinence Treated by Electro-Acupuncture at Ciliao and Huiyang Points. *Xin Zhongyi Journal of New Chinese Medicine*, **33**, 43.
- [2] Liu, X.F., Liao, Z.A., Deng, W.H., *et al.* (2005) Effect of Baliao Point Drug Injection and Bladder Function Training on Bladder Dysfunction in Spinal Cord Injury. *Chinese Journal of Clinical Rehabilitation*, **25**, 142-143.
- [3] Qu, M.W., Li, G.D., Hong, Z.F., *et al.* (2014) Clinical Observation on 30 Cases of Chronic Transport Constipation Treated by Catgut Embedding at Baliao Point. *Journal of Traditional Chinese Medicine*, **54**, 1663-1665.