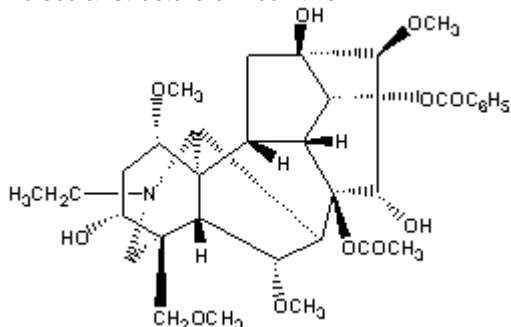


## THE EFFECT OF CHINESE HERBAL MEDICINE CONTAINING ACONITINE ON THE PAIN RELIEF IN INTERSTITIAL CYSTITIS PATIENTS. - A PRELIMINARY STUDY -

### Hypothesis / aims of study

Interstitial cystitis (IC) is characterised by urinary frequency, urgency, pressure and/or pain in the bladder and/or pelvis. Research has determined that the quality of life of IC patients is equivalent to those with end stage renal failure. In the treatment of IC patients, pain control is usually necessary. There have been a variety of therapies, traditional pain medications, including opiates, biofeedback, electronic pain-killing options, bladder distensions. However, these therapies are often unsuccessful in extreme cases. Aconitine is a highly poisonous alkaloid derived from various aconite species. It is a neurotoxin that opens TTX-sensitive Na<sup>+</sup> channels in the heart and other tissues. Some types of Chinese herbal medicine containing Aconitine are known to have analgesic effect. The purpose of this paper is to evaluate pain-killing effect of Chinese herbal medicine containing Aconitine.

### Molecular structure of Aconitine.



### Study design, materials and methods

Two types of Chinese herbal medicine, Keisika-jutsu-buto, and Mao-bushi-saisinto were evaluated in 10 IC patients resistant for usual medication. These 2 drugs have been used according to Manufacturer's guideline, because these 2 drugs have different indication due to different component of herbal extracts. The effects were evaluated by IC symptom index and IC problem index (*Urology*, 1997 49: 5A Suppl:58-63 The interstitial cystitis symptom index and problem index), visual analogue scale of pain, and bladder capacity estimated by frequency volume chart. Data are expressed as mean + - s e mean, and statistical analysis was done by paired t-test.

### Results

Median duration of follow-up was 5.7 (1-14) months. IC symptom score before and after medication were 17.8 + - 1.14, and 8.8 + - 1.32 (p <0.001). IC problem score before and after medication were 13.8 + - 0.55, and 6.8 + - 1.58 (p <0.001). Bladder capacity before and after medication were 51.11 + - 10.33 ml, and 117.78 + - 18.16ml (p <0.001). Pain VAS before and after medication were 88.00 + - 7.86, and 13.17 + - 4.16 (p <0.001).

### Interpretation of results

TTX-sensitive Na channel are also present in bladder/ DRG (dorsal root ganglion) / C - fiber, hence, Aconitine may relieve a pain by inhibiting the pain signal transduction.

### Concluding message

Two types of Chinese herbal medicine containing Aconitine, Keisika-jutsu-buto, and Mao-bushi-saisinto may be effective in relieving pain in IC patients.

### References

1. *Planta Med*, 60:391-4, 1994
2. *Prog Neurobiol*, 56:211-35, 1998
3. *J Ethnopharmacol*, 103:398-405, 2006

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<b>Is this a clinical trial?</b>	No
<b>What were the subjects in the study?</b>	HUMAN
<b>Was this study approved by an ethics committee?</b>	Yes
<b>Specify Name of Ethics Committee</b>	Ethical Committee of University of Yamanahi, School of Medicine
<b>Was the Declaration of Helsinki followed?</b>	Yes
<b>Was informed consent obtained from the patients?</b>	Yes