

# ‘An empty and happy feeling in the bladder. . .’: health changes experienced by women after acupuncture for recurrent cystitis

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**SUMMARY.** **Objective:** The aim of this study was to explore changes in health as reported by cystitis-prone females after having received prophylactic acupuncture treatment for recurrent cystitis. **Design:** A qualitative study based on written free text answers on the women’s own experience of changes related to health after completion of TCM acupuncture treatment. **Data were analyzed using Giorgi’s phenomenological approach.** **Setting:** Subjects living in the Bergen area, Norway, were recruited by advertisement in local newspapers and included provided they had had three or more episodes of lower UTI during the previous 12 months. **Results:** The main topics reported were related to improved pressure during micturition and more complete bladder emptying; more normal bowel movement and less abdominal discomfort; more energy, reduced stress level, and better sleep. Only a few reported feeling worse. **Conclusion:** The symptoms described as relieved by the women in our study seem to fit TCM theory for diagnoses of their vulnerability to cystitis. **Qualitative methods have a role in TCM research that may enrich our knowledge in other ways than traditional quantitative methods may.** © 2002 Elsevier Science Ltd. All rights reserved.

**Keywords:** acupuncture, urinary tract infection, women, qualitative methods

## INTRODUCTION

It seems to be a common experience among acupuncturists and their patients that acupuncture treatment results in a positive effect on health in general, in addition to its intended treatment effect. The overall effect of acupuncture treatment may be to restore harmony as described in ‘The web that has no weaver’.<sup>1</sup> This concept may be implicit for patients in China and therefore taken for granted as a natural result of a treatment given according to TCM. It is uncertain whether western patients without these preconceptions will experience similar changes.

Although in our experience these effects are not uncommon, they seem to have received limited

attention in published material, and little is found on the topic in textbooks or research papers. One recent article has addressed this topic. During 9277 acupuncture treatments, questionnaires were filled in at the end of each treatment session by the treating physician/acupuncturist. Both positive and negative side effects were registered, resulting in 27% positive and 22% negative assessments. Positive changes were mainly a pleasant feeling of fatigue, calmness and improved sleep. Negative effects were mainly bleeding and haematoma. This study focused on experiences at the end of each acupuncture session.<sup>2</sup> To our knowledge no study has explored more lasting experiences.

As the literature on changes in patients’ perceived health after receiving acupuncture

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treatment is sparse, initial research on this theme needs a broad approach. Qualitative research methods are better suited to exploring the full range of subjective experiences,<sup>3</sup> and may therefore be the method of choice when addressing sparsely documented areas of knowledge.

The aim of this study was therefore to explore changes in health as reported by cystitis-prone women after having received prophylactic acupuncture treatment for their recurrent cystitis.

## METHODS

Cystitis-prone women, aged 18–60 years, were recruited for a clinical trial by advertisement in local newspapers in the Bergen area on the West coast of Norway during a period of 27 months from May 1998. Criteria for inclusion were three or more episodes of lower urinary symptoms (defined as dysuria, urinary frequency, and/or suprapubic discomfort) during the previous 12 months, provided that at least two had been diagnosed and treated as an acute cystitis by a medical doctor. Subjects were excluded if they were pregnant, or known to have any complicating illness (e.g. diabetes, cancer, obstruction or anomalies of the urinary tract).

The subjects were recruited for a study on acupuncture treatment in the prevention of recurrent cystitis, the results of which will be published elsewhere. Of 94 women included, 67 were randomized to acupuncture treatment. Each of the patients was diagnosed simultaneously by two experienced acupuncturists. The diagnosis was based on the mainstream principles found in Traditional Chinese Medicine (TCM).<sup>1</sup> The treatment was given twice weekly for four weeks, by one of two acupuncturists. The main acupuncture points used were St 36, Sp 6 and 9, LR 3, KI 3, Bl 23 and 28, and other points according to the TCM diagnosis of the patients. The needles were inserted and manipulated to obtain De Qi. Needles were left in place for 20 minutes, with intermittent manipulation if indicated.

In order to explore all possible reactions to the treatment, an open-ended free text questionnaire was used. Two weeks after the end of treatment, 46 of the subjects were sent a questionnaire by post. In the questionnaire, they were informed that: 'We experience sometimes that people who receive acupuncture treatment may notice changes in themselves after treatment. Therefore we ask you to write down in *your own words* if you have noticed anything which may have been different in one way or other. Include everything, even though you think it does not mean anything.' Due to unforeseen problems, 21 patients included in the trial were not registered for this part of the study. All 46 subjects returned the questionnaire by pre stamped envelopes to the doctor (AB) in this project. The texts from the informants were short, matter-of-

fact, and often presented as lists. Median length was 65 words, range 2–211 words. The study was approved by the Regional Ethical Committee.

The resulting text elements were analyzed phenomenologically using Giorgi's approach.<sup>4</sup> The analysis went through the following stages: 1) *Sense in the whole*. The entire description was read in context in order to get a general sense of the whole body of text, identifying themes. Descriptions of fewer cystitis episodes were excluded, as this was the main aim of the treatment in the original quantitative study. 2) *Discrimination of units of meaning*. We went back to the beginning and read through the text once more with the specific aim of discriminating units of meaning, using a general health perspective as reference. Units of meaning were abstracted from the text and grouped under themes. 3) *Transformation and abstraction of units of meaning*. We went through all the different groups of units of meaning expressing their message in more general terms, within the specific perspective we had chosen. 4) *Synthesis into a consistent statement*. The insights contained in the transformed units of meaning were synthesized and integrated into a consistent description of conceptual categories.

The procedure described under stage two is a decontextualization of the original text, and the procedures under stages three and four are the recontextualization of the message contained in the different conceptual categories. The material was analyzed separately by the two authors. One (AB) was unfamiliar with TCM theory. The other author (TA), who also was one of the two acupuncturists who carried out the treatment, has been practicing acupuncture for 19 years.

## RESULTS

The 46 cystitis-prone women returning the questionnaires averaged 39.7 (range 19–61) years old. Seven reported no changes at all. Consequently, the present material consists of 39 free-text assessments on experienced changes in health as reported by cystitis-prone females two weeks after eight sessions of individualized acupuncture treatment.

Major experiences expressed by the women were changes in urinary habits, digestion, energy levels, stress levels, sleeping patterns and bodily discomfort and pain.

The following conceptual categories were found.

### **Better pressure during voiding, and more complete emptying of the bladder**

Many informants told of a normalization of the voiding process. They reported increased pressure

during micturition, a feeling of a better emptying of the bladder, and also less frequent toilet visits.

I felt a happiness and emptiness as if there was no more pressure from the bladder. I do not go so often to the toilet.

A reduced need of voiding both during the day and the night were reported. This had a positive influence on other aspects of their health, such as better sleep and less stress from excessive attention to their toilet habits.

Earlier I used to go to the toilet many times during the night, in some periods once every hour. Now I sleep through the night. . . and I feel good in the morning.

Several women reported that, when they now experienced warning symptoms that previously would have indicated imminent cystitis, these symptoms resolved without developing into an infection.

A feeling that it should deteriorate again, but it is as if the process is reversed. It has never been like this before.

Few women reported adverse affects, some experiencing a sensation of needing to urinate during sexual activity but without any actual urination.

### **Normalized bowel movements and less abdominal discomfort**

Several women described an overall better functioning of the digestive system. Long-standing problems with diarrhea and constipation were normalized. A common experience was a more comfortable feeling in the whole lower abdomen together with less pressure in the bladder/lower abdominal area.

Usually diarrhea and problems with the stomach. Believed that it was caused by food intolerance—since it has gone I am not sure.

Feeling that the stomach/belly is much lighter, before there was pressure or a feeling of discomfort all the time.

A few women described a greater tendency to gas in the intestines, sometimes difficult to shift.

### **More energy, reduced stress level and better sleep**

Many of the participating women reported better mental health after acupuncture treatment. They slept better and woke up feeling good. They felt more energetic during the day, and less tired after work, and needed less sleep. Some felt stronger and less easily stressed. Their bodies felt more relaxed, and they felt a certain 'peace inside.' Their mood was improved and they wanted to be more active. Some were more optimistic, happy and easy going. A few reported more sexual energy.

I have had depression for a while. (My mother has cancer.) After each treatment I felt a lift in my mood, looking at life with a more bright light.

I felt I had more energy, wanted to do more, and my body is more relaxed.

### **Miscellaneous changes**

Many women reported improvements in painful disorders, most commonly headache, but also pain in the back, joints and other areas of the body.

For many years I have had bad attacks of pain which I was told were due to adhesions. But now, which to me is a miracle, after acupuncture this pain is nearly gone!

Several women reported less menstrual pain and more free flow of menstrual blood. Other miscellaneous changes were reported by a few women such as disappearance of acne, and stronger nails.

## **DISCUSSION**

The changes in health reported in the present study were related to normalized urination with better pressure during voiding and more complete emptying of the bladder; normalization of bowel movement and less abdominal discomfort; and more energy, reduced stress level, and better sleep.

Negative experiences from the acupuncture treatment were more or less absent in this study. We did not specifically ask for negative effects, but the opening text of the questionnaire allowed for them, not stating whether positive or negative experiences should be reported. Our data illustrate how qualitative methods may be highly productive of a broad response. Our results give broad descriptions of changes related to a better mental status. In addition, we received many statements on better digestion and voiding habits, changes that we hardly could have foreseen in a closed questionnaire.

By using qualitative methods we may explore the full range of subjective changes as perceived by the patients.<sup>3</sup> These subjective changes may be important to our patients and we gave them the chance to tell us their 'story.' This may be reflected in the 100% response rate on our questionnaire.

Acupuncture is currently well known to the public in the west. However, as far as we know, knowledge that the treatment should induce a whole set of changes related to overall health is not common in the general population and probably not to our patients in the present study. We are aware that acupuncture can be looked upon as a procedural therapy involving an intentional interaction between the practitioner and the patient. At the first TCM consultation, we asked diagnostic questions that reflected an understanding of recurrent cystitis not related solely to the bladder, which may have induced parallel expectations in the patients. We find it, however, hard to believe that such expectations should be capable of inducing the variety of statements that are

shown in our results. Rather, the informants' free-text descriptions probably reflect these women's genuine experiences of health changes after having had acupuncture.

Our material was based on short written answers, which usually do not give as rich data as interviews. Less rich data require a more stringent method of analysis.<sup>4</sup> We met this by deciding on robust conceptual categories. Still, we feel that the short and often matter-of-fact type of free-text we had access to did pose restrictions in the recontextualization stage of the analysis, giving our results a more matter-of-fact flavor.

Our analysis of the women's descriptions will inadvertently be colored by our preconceptions, since in all research the researchers carry with them preconceptions and a theoretical framework which can create expectations of certain results. Since two of us, one doctor (AB) and one acupuncturist (TA), analyzed this material, we have probably looked upon the data with different preconceptions. This may reduce the chance that results were colored or narrowed down to reflect one view only. What was unexpected for the doctor may have been expected by the acupuncturist, and vice versa.

We have recently published data indicating that acupuncture has a place in the prophylaxis of recurrent cystitis in women.<sup>5</sup> Viewed from the perspective of western medicine, the first symptom complex of the present study, better emptying of the bladder, increased pressure during voiding, and more frequent voiding is a fair description of the goal for bladder training, most often used in children with unstable bladder.<sup>6</sup> Such training is expected to reduce residual urine and thereby the recurrence rate of urinary tract infection.<sup>7</sup> We find it interesting that acupuncture treatment, formerly shown to reduce the recurrence rate,<sup>5</sup> leads to symptom descriptions matching the normal working of the urinary bladder.

The descriptions presented cover many areas of the body and include different organ systems and may therefore reflect the ancient view of TCM as stated in Kaptchuk: 'The Chinese are interested in discerning the relationships among bodily events occurring at the same time. The logic of Chinese medicine is organismic or synthetic, attempting to organize symptoms and signs into understandable configurations. The total configurations, the patterns of disharmony, provide the framework for treatment. The therapy then attempts to bring the configuration into balance, to restore harmony to the individual.<sup>1</sup> The vulnerability to cystitis of the women in the present study may in TCM be called a 'disharmony.'

Accordingly TCM symptoms which are present between infections will be a part of the diagnosis but the symptoms at an acute infection will add information towards a final diagnosis. However, in treating women with an acute episode of cystitis the syndromes and treatment would be different

than when treating between attacks as addressed in our study.

In a former study<sup>8</sup> we found that women with recurrent cystitis mainly fell into two patterns of disharmony, Spleen and Kidney Qi/Yang xu and Liver Qi stagnation. According to TCM textbooks, the signs and symptoms of both Spleen and Kidney Qi/Yang xu and Liver Qi stagnation include: slight discomfort in the abdomen, frequent urination, loose stools/constipation, tiredness, lack of will-power, feeling of cold, abdominal distension, irritability and mental depression.<sup>9</sup> We find it interesting how closely the patients of our study describe such symptoms as having disappeared after individualized acupuncture treatment.

The reported changes in urinary habits seem to be more related to Kidney. From TCM textbooks some of the pathology linked to urinary symptoms may be caused by a Cold pattern, which will in turn give rise to weak Kidney Qi.<sup>9</sup> The Kidneys will then not have energy available for the Bladder to perform its Qi transformation upon the urine. The weakened holding function will then give rise to frequent urination, for example, enuresis and weak stream. Further, one study reported that acupuncture may improve urgency, frequency and nocturia in patients with irritative bladder symptoms.<sup>10</sup>

Many of our informants reported changes related to better functioning of the digestive system. Many cystitis-prone women have been diagnosed as having a Spleen Qi/Yang xu disorder.<sup>8</sup> Any Spleen disharmony will influence the digestive process, with such symptoms as abdominal distension, lack of appetite, loose stools and lassitude.<sup>9</sup> It is possible to address these changes due to a normalization of the Spleen's function of transportation and transformation of food and water. Again, the statements of the informants seem to support TCM theory.

'Anger' is a broad term in TCM and includes aspects like feelings of frustration, repressed anger, resentment and irritation. The relationship between emotion and organs is mutual in Chinese Medicine. The Liver's responsibility for the free flow of Qi throughout the body, for example, also has an important influence on the emotional state, whilst at the same time the emotions will influence the Liver function. 'Thus if the Liver is functioning well and its Qi flowing smoothly, the emotional state will be happy and free-going and the person will be in good spirits and freely express his or her emotions.'<sup>9</sup> Again this seems to be reflected in our results under the heading 'More energy, reduced stress level and better sleep', reflecting that some of the patients were treated for Liver Qi stagnation.

The external validity of our results can only be pragmatic, meaning that it depends on whether other acupuncturists recognize our findings as valid for their own patients.<sup>4</sup> The sample method we used should make our results valid for how most women with recurrent cystitis may feel a

few weeks after acupuncture treatment. Other patients not vulnerable to recurrent cystitis, but having Kidney and Spleen Yang/Qi xu or Liver Qi stagnation, may be expected to experience changes of health more or less similar to those found in our study. These patients could present symptoms not necessarily related to the urinary system.

In conclusion, the symptoms described as relieved by the women in our study seem to fit TCM theory for diagnoses of cystitis-prone women. Qualitative methods have a role in TCM research that may enrich our knowledge in other ways than traditional quantitative methods may.

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