

## Clinical Report 1 (Japan)

### *Acupuncture for Puerperal Mastitis*

Koji Seo, Zhongwei Yang and Yukie Miyamoto  
Clinic of Acupuncture and Massage  
GOTO College of Medical Arts & Sciences

## I. Introduction

Mastitis is an inflammatory disease of the breast. Acute mastitis occurs almost exclusively during the lactation period, in particular during the puerperal period<sup>1)</sup>, so that inflammations of the breast observed during the puerperal period are also called postpartum mastitis. (below the term postpartum mastitis will be abbreviated as mastitis)

Mastitis is classified into congestive and suppurative mastitis. This then causes obstruction of the milk ducts. Moreover, fatigue, stress, the presence of infections within the family, reduction of the frequency of the breast-feeding, galactostasis, trauma to the breast, nutritional deficiencies and similar factors have been indicated as having a significant correlation to the development of mastitis<sup>2)</sup>.

Congestive mastitis is a cause for milk ejection disorders but not necessarily caused by an infectious agent. Local pain, swelling may be present, but conservative therapy is considered to be appropriate<sup>1)</sup>. To improve mild congestion active promotion of breast-feeding, milking or massage of the breast should be performed. In case of swelling of the breast associated with a local heat sensation, mild fomentation is generally employed. Suppurative mastitis on the other hand, can develop on the basis of congestive mastitis, or else result from bacterial infection of lesions of the nipples<sup>3)</sup>. Mastitis is included among the indications for acupuncture and moxibustion treatment specified by the WHO, but in Japan there are only very few reports about this treatment form, which seems currently to be very little known in general.

In this facility we have used acupuncture and moxibustion therapy since 2003 for the treatment of

mastitis for patients referred to us from local midwifery centers. In this paper we have analyzed 24 patients with chief complaints of indurations in the breasts and pain after developing mastitis, then have performed acupuncture and moxibustion treatment based on traditional Chinese medical pattern identification and report here some typical cases in which an alleviation of the symptoms has been achieved.

## II. Analysis of 24 Patients with Mastitis

[Patient profiles]

Acupuncture and moxibustion treatment was given to 24 patients with chief complaints of indurations or pain of the breast during the breast-feeding period. The patients were first seen between September 2003 and December 2007. All patients had received Oketani style breast massage in maternity hospital, after which the maternity nurses recommended the combination therapy with acupuncture and moxibustion. (Table 1)

1. Age distribution
2. Ranging from 29 to 45 years, average age: 35 years
3. Birth conditions
4. Primiparas: 14 women, multiparas (second child): 9 women, multiparas (third child): 1 woman

[Symptoms]

1. Symptoms of the breast
  - 1) Indurations: yes = 24 women / no = 0 women
  - 2) Pain: yes = 21 women / no = 3 women
  - 3) Local heat sensation: yes = 16 women / no = 8 women
2. Symptoms unrelated to the breasts
  - 1) Fever: (higher than 38°C) yes = 14 women / no = 10 women
  - 2) Shoulder/neck stiffness: yes = 24 women / no = 0 women
  - 3) Chilliness: yes = 13 women / no = 11 women

4) Stress: yes = 15 women / no = 5 women / unclear = 4 women

### 3. Tongue and pulse findings

- 1) Red tongue: yes = 12 women / no = 12 women
- 2) Dark red tongue: yes = 4 women / no = 20 women
- 3) Slimy yellow coat: yes = 8 women / no = 16 women
- 4) Wiry pulse: yes = 17 women / no = 7 women
- 5) Thin pulse: yes = 15 women / no = 9 women

#### [Treatment course]

1. Number of treatments: range 1-20, average 7 times
2. Changes in the symptoms of the breast
  - 1) Indurations: In the 21 patients with indurations these disappeared and decreased in size in 3 other patients.
  - 2) Pain: The pain was alleviated in all 21 patients, who had complained of pain.
  - 3) Local heat sensation: The heat sensation disappeared in all 16 patients, who had complained of it.
3. Performance of incisions

Incisions were performed in 10, not performed in 14 women.

### III. Typical Cases

Patient: 39 years old, female

[Initial visit]: June 25, 2005

[Chief complaint]: Induration and pain in the left breast

[Diagnosis]: Mastitis

[Present illness]:

Delivery in December 2004 by Caesarean section. Currently lives in a family of three with her husband and child. Since Mai 2005 she returned to work 8 hours per day in an office. She reported the work related stress not to be overly intense, but stated, she could not yet find a comfortable rhythm between work and mothering, but since she could manage to get only 5 hours of sleep per day, a significant degree of exhaustion has developed.

Since there was a tendency towards milk obstruction from the beginning, she milked the breasts once in the morning and afternoon even during work and on holidays received breast massage. On June 6 a 39°C fever developed, leading to the onset of mastitis. Even after the fever had subsided, the left breast remained reddened, felt warm and the pain did not recede. Since the pain grew more intense after June 15, she was referred to us by the maternity hospital and visited our clinic on June 25.

[Associated symptoms]

Shoulder and neck stiffness, back pain, eyestrain, intense perception of stress

[Anamnesis]: N.A.D.

[Family history]: N.A.D.

[Current condition]: height: 156 cm, weight: 41 kg, temperature: 36.6°C

Findings during the first examination

The left breast was generally swollen and had indurations medially and inferior to the nipples. There was reddening, local heat sensation and pain. The patient had resting pain that was aggravated by lifting or lowering the left arm or vibrations.

Tongue diagnosis: red tongue body, no fur

Pulse diagnosis: wiry and rapid

Traditional Chinese medical pattern identification:

Basically yin deficiency, liver Qi congestion resulting the development of heat, obstruction of milk

[Treatment]

1. Therapeutic principle: clear heat and drain toxin, soothe the liver and rectify qi, resolve congestion and promote milk flow.

2. Point selection: Gokoku (LI4 = Hegu), Kyokuchi (LI11=Quichi), left Shotaku (SI1=Shaoze), Sokusanri (ST36=Zusanli), Taisho (LV3=Taichong), Ashi no rinkyu (GB41=Zulinqi), left Kensei (GB21=Jiangjing), left Tensu (SI11=Tiangezong), left Ketsuinyu (BL14=Jueyinshu).

3. Method

I. Acupuncture treatment: Seirin disposable needles, 0.18×40mm, were inserted perpendicularly into the above mentioned points (except left Shotaku) for about 15~20mm, and at left Shotaku perpendicularly for about 1.5~2.0mm.

II. Blood letting and cupping: sitting position, network vessels appearing in the interscapular area, search for tender points or eruptions on the back corresponding to pain of the breast, performance of pricking and cupping in these areas.

4. Treatment period: from June 25, 2005 to July 16 (total of 5 treatments)

[Course]

Second treatment on June 30, 2005; pain and reddening had markedly subsided, indurations were still present, but reduced in size and the local heat sensation had disappeared.

Third treatment on July 2, 2005; no pain, reddening, or feverish feeling, indurations remained hard.

Fourth treatment on July 9, 2005; no pain, reddening, or local heat sensation, indurations were reduced in size. Additional needling of the vicinity of the indurations.

Fifth treatment on July 16, 2005; no pain, reddening, or local heat sensation, indurations were reduced in size, with only a mild degree remaining at the base of the breast. After additional needling of the vicinity of the indurations completion of the acupuncture treatment.

#### IV. Discussion

The clinical symptoms of postpartum mastitis are in case of congestive mastitis: tension of the breasts, swelling, reddening, indurations, pain, local heat sensation. In case of suppurative mastitis: local findings characterized by a marked degree of congestion, chills, fever (more than 38 degrees) and general malaise<sup>4)</sup> are cited.

On this occasion we investigated in the 24 patients with mastitis the changes in indurations of the breasts,

pain and local heat sensation before and after the treatment. All of the 24 patients (100%) had indurations prior to the treatment, 21 patients (88%) complained of pain and 16 (67%) of local heat sensations. The three patients without pain also did not report local heat sensations. Based on the above described findings the symptoms of mastitis were considered to progress in the order induration -> pain -> local heat sensation -> fever.

Regarding general symptoms all of the 24 patients (100%) complained about shoulder and back stiffness. In particular indurations or tenderness corresponding to the indurations and tender spots of the breasts appeared on the back. According to some reports cupping performed in these areas seems to be effective<sup>5)</sup>.

Stress has been cited as one of the causes for mastitis<sup>2)</sup>, but only 15 of the patients (63%) complained of a marked degree of stress. The causes of this stress included child care, husbands and work. From a traditional Chinese medical point of view the depression of emotions due to mental stress causing stagnation of liver qi, which then results in congestion of the milk vessels<sup>6)</sup>, can be cited as one of the etiologic factors leading to the development of mastitis.

Also, 13 of the patients (54%) complained of an excessive sensitivity to cold, indicating the necessity to investigate the correlation between this factor and mastitis.

In a typical case the patient presented with a 39-degree fever, indurations, reddening, heat sensation and pain, which were not alleviated by breast massage. Judging from the condition of the fever, the patient was considered to suffer from suppurative mastitis, but after 5 acupuncture treatments, except for some minimal residual indurations, all other symptoms could be alleviated. In this patient we strongly and clearly perceived the fatigue from child care and work as well as the influence of stress, so that treatment intended to

soothe the liver and rectify the qi, combined with resolving congestion and promoting milk flow resulted in marked improvements.

Among the 24 patients incisions were made in 10 patients. Again, among the 24 patients generalized fever developed in 14 patients, indicating the presence of suppurative mastitis in these cases. Among those patients in whom an incision appeared to be the only choice, a number of patients visited our clinic, wishing to cure the conditions without performing an incision. And in four of these patients healing could be achieved without incisions. Prognosis was favorable in the 10 patients without fever.

The cooperation with the maternity clinics and corresponding exchange of opinions led to earlier considerations of a combination therapy of breast massage and acupuncture and moxibustion treatment. Recently 6 patients have been referred to us by maternity clinics, even though there was no pain or heat sensation yet and the development of indurations had been in the initial stage of formation. Combination therapy with acupuncture and moxibustion treatment from an early stage on is considered to be effective.

## V. Conclusion

Twenty four patients with postpartum mastitis received a combination therapy of Oketani style breast massage and acupuncture and moxibustion treatment. Among the 14 patients with generalized fever the condition healed in 4 without incision. Prognosis was favorable in the 10 patients without fever. The adoption of a combination therapy with acupuncture and moxibustion treatment employed from an early stage of postpartum mastitis is considered to be useful.

## VI. References

- 1) Medical Dictionary, Nanzando; 2001; 1564
- 2) Perinatal Medicine; Vol.31, 2001:274
- 3) Extra Edition, Progress of Medicine; Ishiyaku Publisher; 2004; 587
- 4) Perinatal Medicine; Vol.26, 1996:260
- 5) Zhān gèng-bō, observation of the treatment of 150 patients with acute mastitis, Jiāngxī zhōng yīyào 1983; 5:18
- 6) Zhang Cong-zheng, Ru-men-shi-qin, 1228

Table 1 Symptoms of 24 patients with mastitis

No	Age	Day of first visit	Birth history	Indurations	Pain	Local heat sensation	Fever	Incision	Shoulder/back stiffness	Excessive sensitivity to cold	Stress
1	36	2003/9/10	2	yes	yes	yes	no	no	yes	yes	no
2	34	2004/9/16	1	yes	yes	yes	yes	yes	yes	no	yes
3	33	2004/9/29	2	yes	yes	yes	yes	no	yes	yes	no
4	29	2004/10/23	1	yes	yes	yes	yes	yes	yes	yes	yes
5	37	2004/12/3	3	yes	yes	yes	yes	yes	yes	yes	no
6	32	2005/1/15	1	yes	yes	yes	yes	no	yes	no	no
7	35	2005/2/2	2	yes	yes	yes	yes	yes	yes	yes	no
8	33	2005/3/9	1	yes	yes	yes	yes	no	yes	yes	yes
9	37	2005/6/14	1	yes	yes	yes	yes	yes	yes	yes	yes
10	39	2005/6/25	1	yes	yes	yes	yes	no	yes	no	yes
11	33	2005/6/30	2	yes	yes	yes	yes	yes	yes	no	yes
12	33	2005/7/14	2	yes	yes	yes	yes	yes	yes	no	yes
13	39	2005/7/15	2	yes	yes	no	no	no	yes	no	no
14	35	2005/8/1	2	yes	yes	yes	no	no	yes	no	yes
15	36	2005/9/22	1	yes	yes	yes	yes	yes	yes	yes	yes
16	37	2005/12/6	1	yes	yes	yes	yes	yes	yes	yes	yes
17	43	2006/6/17	2	yes	yes	no	no	no	yes	no	yes
18	39	2006/7/22	1	yes	yes	yes	yes	yes	yes	yes	yes
19	33	2006/10/31	1	yes	yes	no	no	no	yes	no	no
20	37	2007/5/29	2	yes	no	no	no	no	yes	no	yes
21	45	2007/10/20	1	yes	no	no	no	no	yes	yes	no
22	30	2007/10/26	1	yes	no	no	no	no	yes	no	yes
23	35	2007/11/9	1	yes	yes	no	no	no	yes	yes	yes
24	32	2007/12/13	1	yes	yes	no	no	no	yes	yes	no