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Acupuncture

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Drug Levels and Effects

Summary of Use during Lactation

Acupuncture at traditional Chinese medicine (TCM) sites used to treat low milk supply has been claimed to cause release of prolactin and oxytocin, although published studies have found mixed results on serum prolactin. In one study, acupuncture did not affect prolactin hyperresponsiveness after stimulation with metoclopramide in women with amenorrhea-galactorrhea syndrome. Galactorrhea has been reported following acupuncture for pain treatment. No adverse effects on milk production were seen among lactating women who received acupuncture for postpartum sciatica.[1]

Acupuncture has been well described in TCM for treating insufficient milk supply,[2,3] and is also recommended in some Western countries.[4] Numerous studies found acupuncture at CV 17 (also referred to as Ren 17 or Shanzong; located at the center of the sternum), SI 1 (Shaoze; on the little finger), and ST 18 (Rugen; lower breast margins) to benefit women with a low postpartum milk supply. These studies generally do not meet current evidence-based guidelines, partly because of the extreme difficulty in double-blinding and placebo-controlling acupuncture studies. However, 2 studies did find a better response to electroacupuncture applied at a traditional site for lactation stimulation (SI 1) than electroacupuncture applied at a site unrelated to milk production (LI 1). None of the studies reported to date have made an attempt to optimize maternal nursing technique before acupuncture. Although less studied, acupressure at milk acupuncture sites has had similar effects. Galactogogues should never replace evaluation and counseling on modifiable factors that affect milk production.[5]

Acupuncture therapy has been used to treat breastfeeding for milk stasis (engorgement). Randomized, nonblinded studies in an outpatient Swedish lactation clinic compared routine care (including oxytocin spray) to routine care plus acupuncture at 2 or 3 points for treating milk stasis.[6,7] A meta-analysis concluded that women who received acupuncture were less likely to develop an abscess, had less severe symptoms on day five, and had a lower rate of fever than women in the usual care group However, there is insufficient evidence from published trials to justify widespread implementation.[8] A survey of 50 Swedish maternity units in 2007 found that 60% of hospitals used acupuncture to treat milk stasis, 18% used acupuncture to treat mastitis, and 2.2% each used it for painful breastfeeding or to improve milk supply. The authors felt that this extensive use was not justified based on the limited evidence for most of these uses.[9]

Auricular therapy uses stimulation of acupoints on the ear corresponding to various anatomical sites and functions of the body for the diagnosis, treatment, an prevention of disease. A systematic review of 26 studies on auricular therapy to increase milk supply included 3691 patients All studies applied vaccaria seed to press on ear acupoints. Overall, studies found a positive effect on milk production, onset of lactation, serum prolactin, breast fullness, neonate states, and frequency of newborn urination and defecation. No adverse effects were reported.[10]

Effects in Breastfed Infants

Relevant published information was not found as of the revision date.

Effects on Lactation and Breastmilk

Galactorrhea has been reported after acupuncture for pain treatment in 2 women who had previously breastfed, but were not currently breastfeeding.[11,12]

In a Polish study, 8 women who had galactorrhea for 2 to 9 years after delivery were given metoclopramide as a diagnostic agent before and after acupuncture. After a 10 mg oral dose of metoclopramide, serum prolactin was measured within the first hour after the dose and at 2 hours after the dose. Women were divided into 2 groups. All women had normal baseline serum prolactin levels, but were hyperresponsive to metoclopramide, with average prolactin elevations of 760% and 926% in the two groups. The women underwent 10 sessions of acupuncture, with each group receiving acupuncture at different points thought to reduce hyperlactation. Although galactorrhea resolved in 1 woman and improved in 3 others, no difference was noted in the prolactin response to metoclopramide stimulation. The authors interpreted this finding to indicate that acupuncture's effect on galactorrhea is not mediated via prolactin secretion.[13]

An uncontrolled case series on 27 women in Romania who reported insufficient lactation following delivery were given acupuncture, but no instructions on proper breastfeeding techniques. The main acupuncture points were CV 17, SI 1, and ST 18, with some women receiving treatment at additional TCM points. Acupuncture was done daily until milk supply improved, then every 2 to 3 days. No blinding or controls were attempted. Improvement was rated as good in 19 women, satisfactory in 8 women and no response in 4 women. Women who responded required 2 to 7 sessions, while nonresponders received up to 10 sessions. Primiparous women responded with fewer sessions than multiparous women.[14]

An uncontrolled case series from one Chinese hospital reported on 30 women who had insufficient postpartum milk supply and were treated with acupuncture at the CV 17, SI 1, and ST 18 primary sites, with supplementary treatment at ST 36 (Zusanli; middle of shin) and LR 3 (Taichong; dorsal foot near big toe). No instructions on proper breastfeeding techniques were provided. Most reportedly improved to some degree with one treatment and markedly improved with 3 to 5 treatments, especially if treated within 10 days of delivery.[15]

A multicenter, randomized, single-blind clinical trial in China compared breast fullness, amount of milk produced, TCM symptom score, and prolactin levels in two groups of 138 patients. No instructions on proper breastfeeding techniques were reported. One group received electroacupuncture (EA) at the SI 1 site and the control group received EA at the LI 1 site. The percentage of women rated as clinically "cured" or "markedly improved" was 98% in the treatment group and 24% in the control group, which was a statistically significant difference. The TCM score, breast fullness, milk production and prolactin levels were also reportedly better in the group treated at SI 1.[16]

A multicenter, single-blind clinical trial in China compared breast fullness, amount of milk produced, neonatal body weight, artificial feeding frequency and volume, urination frequency and crying time of neonates in 276 women randomized to receive either acupuncture at CV 17 or a traditional herbal galactogogue mixture (Tongre

Decoction). No instructions on proper breastfeeding techniques or other support were reported. The endpoints were improved in the two groups, with no significant difference between the two groups.[17]

In a Chinese study, women reporting lactation insufficiency were randomized to receive electroacupuncture bilaterally at the SI 1 site (n = 46) or the LI 1 site (n = 46). Women received a total to 10 treatments. The 24-hour milk volumes and morning serum prolactin levels were measured before and after the treatment course. At the end of therapy, all women receiving acupuncture at the SI 1 site had improved milk volumes compared to 70% at the LI 1 site. Serum prolactin was unchanged from baseline in the treatment group, but was lower at the end of the study in the control group.[18]

A study in Italy randomized women with insufficient milk supply postpartum to receive either acupuncture (n = 41) or routine observation (n = 43). The main acupuncture points were CV 17, SI 1, and ST 18 with some women receiving treatment at additional points, based on TCM diagnoses. Women received a total of 6 treatments over 2 weeks. Before therapy, the rate of exclusive breastfeeding was similar in the 2 groups at about 50%. By 3 weeks after study enrollment, the rate in the observation group was lower (60%) than in the acupuncture group (98%). At 3 months of age, exclusive breastfeeding was 15% in the observation group and 35% in the treated group.[19]

A nonrandomized trial in China used acupuncture at the neiguan and yang chi points to treat engorgement in 40 patients. After treatment, breast tenderness and swelling and milk output were all improved to a statistically significant degree.[20]

A randomized, nonblinded study in Iran compared maternal breastfeeding education to acupressure among women referred for hypogalactia. At 2 and 4 weeks after initiation, both groups had increased milk output, but the volumes of milk were greater in the acupressure group than in the education group.[21]

A study in China of women with cesarean section were randomized into an observation group (n = 28) and a control group (n = 30). The control group received routine care while the observation group acupoints from the breast related meridians received massage for 1 minute starting the 3rd day after operation, and continuously for 5 days. From the 3rd to 5th days, the lactation volume, breast filling and galactostasis score in the observation group were all lower than those in the control group. The difference in milk viscosity was not significant in the first 4 days between the two groups, but on the 5th day, the milk viscosity in the observation group was lower than that in the control group. The investigators concluded that massage at the acupoints from the breast related meridians effectively promotes the lactation secretion in postpartum hypogalactia and alleviates breast distention.[22]

A randomized, nonblinded trial compared acupressure at breast-related sites to a control group that received standard care. The lactation volume, breast filling, galactostasis scores were better in the treatment group between days 3 to 5. On day 5, milk viscosity was lower in the treatment group.[23]

Standard therapy plus tuina therapy, which involves acupoint massage at several acupoints, was compared with standard treatment alone in parimiparous mothers with full-term deliveries by cesarean section. Eighty mothers were randomized into the 2 groups of 40 each if they were producing less than 1 mL of milk per feeding at 48 hours postpartum. Mothers in the tunia group received 15 minutes of therapy to each breast daily for 2 days. At 72 hours postpartum, patients who received tunia therapy had greater increases in breast volume, and greater increases in serum prolactin than those who received only standard therapy. Treated women had average increases in milk of about 50 mL between 72 and 96 hours compared to untreated women who had average increases of only about 4 mL during the same time period.[24]

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Substance Identification

Substance Name

Acupuncture

Drug Class

Breast Feeding

Lactation

Acupuncture Therapy

Acupressure

Complementary Therapies

Galactogogues