Case Study Research on Nausea and Vomiting in Pregnancy and the Benefits of Hinaishin Needles at Kidney 27

by Coleen Smith

Abstract

Research Question: How effective are hinaishin needles at Kidney 27 (KI-27) following a regular acupuncture treatment for the treatment of morning sickness?

Background: Morning sickness affects 50-90 percent of women in varying degrees during their pregnancy. Existing medications help but there is no perfect remedy. Women continue to suffer with nausea and vomiting and this fact prompted this case study research.

Methods: Four patients were treated over a oneyear time period. The data in the case study was compiled using multiple methods: questionnaires, then direct and participatory observations.

Results: This paper may advance two insights: firstly, treating morning sickness with acupuncture is effective. Secondly, while valuing acupuncture and Chinese medicine, the respondents experienced significant improvement with tiny imbedded skin needles at (KI-27). The data will reveal that the *hinaishin* needle treatment had a more significant outcome than regular acupuncture treating morning sickness.

Conclusion: Hinaishin acupuncture is a Japanese approach and at the time of this study, little to no research was available in English about it. The immediate and long-term relief resulting from treatments using the subcutaneous needle technique suggests that this area needs to be developed and more widely used. The implications of this case study propose an entirely new way of treating nausea during pregnancy and may help further the usefulness of acupuncture. Further studies could be done using (KI-27) for all types of nausea and vomiting.

Case Studies

Materials and Methods

The four subjects of this study were receiving acupuncture on a regular basis at my clinic in Spokane Washington prior to getting pregnant. The length of treatment time prior to pregnancy

was between two and seven months. None of the subjects were taking any medications for nausea and vomiting, but had a physician monitoring their early pregnancy. Each subject came for acupuncture because of difficulties in conceiving and then continued their care throughout the pregnancy.

In this case study, I chose Japanese Seirin brand intradermal needles. There are different sizes (3-8 mm), materials (silver, gold, stainless steel) and gauges 40-44. The Japanese intradermal needles are 3-6mm stainless steel, individually packaged and tooled for relatively painless insertion. In *Japanese Acupuncture: A Clinical Guide* (Birch and Ida, 1998) we are told the angle of insertion follows the natural fold of the skin. When using intradermal needles on the chest, the authors suggest the needle point outward toward the limbs. Needle selection recommended by Birch and Ida for the chest is 3mm (Birch and Ida, 1998). In these case studies, 3mm intradermals were used and inserted subcutaneously toward the limbs.

Case Study One

Introduction/Chief Complaint

TIC, a 28-year-old female, presented to the clinic with morning sickness that started with both nausea and vomiting at six weeks of gestation.

Present Illness: The patient is a yoga instructor and part time retail sales person. She began getting sick this week with nausea building quickly to sudden violent bursts of vomiting. Sickness lasts all day, patient feels embarrassed and miserable. She had lost some weight: she believes three to five pounds.

History: TIC had trouble conceiving prior to her pregnancy. She tried to conceive for three years (Western medical diagnosis was diminished ovarian reserve). Her progesterone was low and her follicle-stimulating hormone (FSH) was high. On her initial visit prior to her pregnancy she said she had problems with anxiety, cramping, cravings, night sweats, low energy, hair loss, oily skin, and PMS symptoms.

Significant History Negatives: No complaints of lower back pain, hypertension, digestive issues, respiratory illness, or urinary discomfort.

Medications/Supplements/OTC: Prenatal vitamins, Vitamin C, Vitamin D, probiotics.

Dietary Information: TIC does not drink coffee. She does eat limited dairy, but enjoys vegetables; she does not drink alcohol or use recreational drugs or cigarettes. She eats only organic meats and vegetables. She has recently eliminated soy products.

Bowel and Urinary Habits: One BM daily, formed. Leans toward constipation, dry stool; normal urinary habits, denies any frequency or urgency.

Sleep Habits: Normal sleep 8 hours on average.

Activity/Exercise: Yoga five to six times a week.

Physical Appearance: Patient is physically fit. Thin build.

Vital Signs: Ht: 5'4" Wt: 115 lbs BP: 110/60 Pulse: 92 Respiration Rate/min: 20.

Tongue: Red thin tongue body with a thin white coat.

Pulse: Slippery, full, slightly rapid.

Physical Exam: Patient has thin dry skin, tender on palpation at KI-21 and soft and deficient at CV-12.

Diagnosis: TCM: Qi and Blood Deficiency (of Heart and Stomach) leading to Liver Qi Stagnation.

Western: Morning sickness.

Treatment

Principles: Strengthen Spleen and Stomach; tonify the Chong Mai and soothe Liver Qi. Benefit the Heart.

Acupuncture Treatments:

Seven Weeks' Gestation: PC-6, CV-14, ST-21, KI-6, ST-36, moxa at CV-12 (5-6 cones).

Diet: Reduce high fat or greasy foods, maintain some protein intake, small frequent meals, drink plenty of sips of fluid, and avoid dehydration.

Follow up/Plan: Clinic visit as needed, booked for once a week.

Eight Weeks' Gestation: The prior treatment was effective for four days; nausea built back up and patient vomited once yesterday. Came in today feeling badly, tearful and upset.

KI-6, KI-16, KI-27, ST-36, PC-6, LR-14. Felt better while on the table. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Nine Weeks' Gestation: Patient said she felt better overall with some nausea but no vomiting this week until needles fell out yesterday; vomited this morning.

KI-6, KI-16, KI-27, ST-36, PC-6, CV 14. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Ten Weeks' Gestation: 80 percent better, only sick twice this week; needles fell out two days before appointment.

PC-6, ST-36, CV-14, CV-13, KI-21, ST-20, GB-34, ST-34. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

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Eleven Weeks' Gestation: 90 percent better, hinaishin needles retained all week. Experienced slight nausea with empty stomach but no vomiting this week.

ST-36, CV-13, CV-14, ST-20, ST-21, KI-6, KI-21, GB-34, ST-34. *Hinaishin* needles inserted in KI-27 following treatment.

Summary

Twenty-eight-year-old female patient treated for morning sickness. Nausea and vomiting began insidiously with patient reporting some symptoms around six weeks of gestation. Came for treatment at clinic for nausea and vomiting when it became severe at seven weeks gestation. This patient was violently sick with morning sickness for four weeks; acupuncture treatment was effective but *hinaishin* needle treatments made effects last longer.

Case Study Two

Introduction/Chief Complaint: KP was a 31 yearold female presenting to the clinic with morning sickness that started with extended nausea at five weeks/three days of gestation. Patient states she is unable to work or attend classes. She feels too sick (nauseated) to do anything.

Present Illness: The patient is a full-time student and has part-time data-entry position. She began getting sick with nausea lasting all day, unable to get up or resume daily activities.

History: KP had trouble conceiving prior to her pregnancy. She tried to conceive for almost two years with a Western medical diagnosis of unexplained secondary infertility. On her initial visit prior to her pregnancy she said she had problems with cysts, back pain, anxiety, and stress. Prior to pregnancy the doctor has offered the patient Clomid, but KP did not try it.

Significant History Negatives: No complaints of hypertension, digestive issues, respiratory illness, or urinary discomfort.

Medications/Supplements/OTC:

Fish oil 2000 mg a day.
Daily Max (used as a prenatal).
Vit C 2000 mg daily.

Dietary Information: KP does not drink coffee, does not eat dairy, as she is lactose intolerant. She eats a lot of vegetables, rice and meat; she does not drink alcohol, use recreational drugs or cigarettes. She is allergic to shellfish.

Bowel and Urinary Habits: One or two BMs daily, normal urinary habits, denies any frequency or urgency.

Sleep Habits: Normal sleep eight hours on average; has some trouble falling asleep.

Activity/Exercise: Worked out at the gym two or three times a week until pregnant; now unable to exercise, feels too tired.

Physical Appearance: Patient is healthy and in her weight range, average build.

Vital Signs: Ht: 5'3" Wt: 135 lbs BP: 112/64 Pulse: 72 Respiration Rate/min: 20

Tongue: Purplish-pink with a thin white coat, good shape.

Pulse: Slippery, full.

Physical Exam: Patient has sallow yellow pallor, she is clammy and skin is cool to touch on hands and feet. Abdomen is warm, no tenderness on palpation. CV-12 area is soft.

Diagnosis

TCM: Spleen and Stomach deficiency with Liver Qi stagnation; underlying Kidney deficiency.

Western: Morning sickness.

Treatment

Diet: Reduce high fat or greasy foods, maintain some protein intake, small frequent meals, drink plenty of sips of fluid, and avoid dehydration.

Follow up/Plan: Clinic visit as needed, booked for once a week.

Principles: Strengthen Spleen and Stomach; tonify Chong Mai and soothe Liver Qi. Tonify Kidney deficiency.

Acupuncture Treatments:

Five Weeks' Gestation: PC-6 and CV-13, CV-14, ST-20, KI-21, ST-36, KI-6.

Six Weeks' Gestation: The prior treatment was effective for four days; nausea started to be bad 2-3 days ago. Nauseated today missed work day before treatment.

PC-6, KI-6, KI-16, KI-27, ST-36. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Seven Weeks' Gestation: She said she felt better overall with some nausea that began when one *hinaishin* needle fell out and more when both were out.

PC-6, KI-6, KI-16, KI-27, ST-36, CV-14. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Eight Weeks' Gestation: Needles fell out two days before appointment. Nausea was controlled while *hinaishin* were in place.

PC-6, ST-36, CV-13, CV-12, KI-20, ST-20. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Ten Weeks' Gestation: *Hinaishin* needles retained six days; some nausea the day after they came out. Has not missed any work in the week.

PC-6, ST-36, CV-12, CV-14, ST-20, ST-21, KI-6, KI-21. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Eleven Weeks' Gestation: *Hinaishin* retained all week, nausea significantly reduced, describes a queasy feeling but not really nauseated.

PC-6 ST-36, CV-12, CV-14, ST-20, ST-21, KI-6, KI-21. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Twelve Weeks' Gestation: PC-6, ST-36, CV-12, CV-14, ST-20, ST-21, KI-6, KI-21. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Summary

Thirty-one-year-old female patient treated for morning sickness. Started suddenly with patient reporting excessive nausea around five weeks/ three days gestation and lasted until 12 weeks. Came for treatment at clinic for nausea and vomiting with onset of symptoms. Patient wore pressure point bands on wrists everyday as well as using acupuncture. Treatment was effective but hinaishin needle treatments made treatments last longer and nausea diminish to a manageable queasiness.

Case Study Three

Introduction/Chief Complaint: TS is a 29-yearold female presenting at the clinic with morning sickness that started at eight weeks/two days of gestation. Patient states she was unable to work one day during the week. She feels "terrible." Vomiting one to two times a day with nausea lasting several hours; worse in the morning.

Present Illness: The patient is a full-time sales representative for outside sales. She has nausea and occasional vomiting that is much worse in the morning, she was not missing work but felt terrible and had lost three pounds prior to seeking treatment.

History: TS had a history of irregular periods prior to pregnancy. She had acupuncture treatments for two months prior to pregnancy. She works a 50-60 hour work week.

Significant History Negatives: No complaints of hypertension, digestive issues, respiratory illness, or urinary discomfort.

Medications/Supplements/OTC Fish oil 2000 mg a day. Daily Max (used as a prenatal). Vitamin 2000 mg daily. **Dietary Information:** TS stopped drinking coffee when she started trying to conceive. She eats dairy: about three or four servings a week using full fats. She eats a balanced diet with vegetables, whole grains and meat; she does not drink alcohol, use recreational drugs or cigarettes.

Bowel and Urinary Habits: One BM daily. She has no problems or difficulty with stool. She has normal urinary habits, denies any frequency or urgency.

Sleep Habits: Normally sleeps eight or nine hours a night.

Activity/Exercise: Works out at the gym five times a week. Does prenatal yoga.

Physical Appearance: Patient is healthy and in her weight range, thin build.

Vital Signs: Ht: 5'5" Wt: 135 lbs BP: 118/62 Pulse: 76 Respiration Rate/min: 20

Tongue: Pale pink with a thin white coat, misshapen with teethmarks.

Pulse: Slippery, weak on right side.

Physical Exam: Patient has pale, pasty appearance. Abdomen is warm, no tenderness on palpation. CV-12 area is firm.

Diagnosis: TCM: Spleen and Stomach deficiency with Liver Qi stagnation. Deficient Chong Mai.

Western: Morning sickness.

Treatment

Diet: Reduce high fat or greasy foods, maintain some protein intake, small frequent meals, drink plenty of sips of fluid, and avoid dehydration.

Follow up/Plan: Clinic visit as needed, book for once a week.

Principles: Strengthen Spleen and Stomach, tonify Chong Mai and soothe Liver Qi.

Acupuncture Treatments:

Six Weeks' Gestation: Excited to be pregnant, exhausted all the time. She has noticed a heightened sense of smell. Appetite is poor but not really nauseated.

PC-6, ST-36, SP-4, GV-20, KI-6, CV-12, LR-3.

Seven Weeks' Gestation: Felt pretty good most of the week. Fatigue returns in the evenings. Can sleep easily anytime. Sensitive to all strong smells but remains hungry. Schedule does not permit regular food intake but she is drinking more fluids.

PC-6, ST-36, CV-12, GV-20, KI-21, SP4-, KI-27.

Eight Weeks' Gestation: Nauseated and vomiting began this week. She missed one afternoon and a full day of work this week. Skin damp to touch.

PC-6, ST-36, CV-13, CV-12, KI-20, ST-20. *Hinaishin* needles inserted in KI-27 following treatment.

Ten Weeks' Gestation: *Hinaishin* needles retained six days, experiencing some nausea today. Has not missed any work in the week.

PC-6, ST-36, CV-12, CV-14, ST-20, ST-21, KI-6, KI-21. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Eleven Weeks' Gestation: *Hinaishin* lasted all week; nausea significantly reduced; describes a queasy feeling but not really nauseated.

PC-6, ST-36, CV-12, CV-14, ST-20, ST-21, KI-6, KI-21. *Hinaishin* needles inserted in KI-27 following treatment.

Twelve Weeks' Gestation: PC-6, ST-36, CV-12, CV-14, ST-20, ST-21, KI-6, KI-21. Burping occasionally, but overall much improved. Retaining needles remained in place.

Wants one more week to be sure she is feeling better. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Summary

Twenty-nine-year-old female patient treated for morning sickness. Started suddenly with patient reporting nausea around eight weeks/three days gestation until twelve weeks. Came for treatment to clinic for nausea with onset of vomiting. Treatmentwas effective but *hinaishin* needle treatments made treatments last longer and nausea and vomiting diminish to a manageable queasiness.

Case Study Four

Introduction/Chief Complaint: SS is a 45-yearold female. Presents to the clinic with morning sickness that started with nausea and vomiting at seven weeks' gestation. Patient started getting queasy and unable to tolerate smells or food. Vomiting a couple of times a day.

Present illness: The patient is a successful working executive, pregnant with twins after successful IVF. She began getting sick between six and seven weeks with her queasy feeling transforming to sudden episodes of vomiting following meals. SS is overweight; BMI is 43. She stated that even food that smelled and tasted good would be vomited. After the episodes of vomiting, loss of hunger, nausea, and general "yucky" feeling.

History: SS waited to until later life to conceive and went with IVF when she was ready to start a family. She was successful on the first try of IVF and became pregnant with fraternal twins, both eggs transferred implanted. She received regular acupuncture for three months prior to her transfer. She continued with acupuncture every week to

help her hold the pregnancy.

Significant History Negatives: No complaints of hypertension, digestive issues, respiratory illness, or urinary discomfort.

Medications/Supplements/OTC: Prenatal vitamins.

Dietary Information: SS does not drink coffee, tries to eats healthy, limits dairy to three servings or less a week. She eats a lot of vegetables, rice and meat; she does not drink alcohol, use recreational drugs or cigarettes. SS eats in restaurants most of the time.

Bowel and Urinary Habits: One or two BMs daily, normal urinary habits; denies any frequency or urgency.

Sleep Habits: Normal sleep eight hours does not have any reported trouble sleep.

Activity/Exercise: Stopped working out with pregnancy.

Physical Appearance: Patient is generally healthy but is overweight: considered obese. Has in the past run marathons and worked out hard with a trainer. Yo-yo dieter.

Vital Signs: Ht: 5'4" Wt: 250lbs BP: 116/68 Pulse: 80 Respiration Rate/min: 20.

Tongue: Pink with teeth marks and thick yellowish, white coat.

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Pulse: Slippery, full, wiry on left side.

Physical Exam: No pain on palpation of abdomen. Obese woman.

Diagnosis: TCM: Liver overacting on Spleen and Stomach, accumulation of phlegm.

Western: Morning sickness.

Treatment

Diet: Reduce high fat or greasy foods, maintain some protein intake, small frequent meals, drink plenty of sips of fluid, and avoid dehydration.

Follow up/Plan: Clinic visit as needed; booked for one a week.

Principles: Strengthen Spleen and Stomach; tonify Chong Mai and soothe Liver Qi. Eliminate Phlegm.

Acupuncture Treatments:

Seven Weeks' Gestation: She said she felt sick with unexpected vomiting. Loss of appetite, bothered by strong smells. Food has lost all appeal, tries to eat because she knows she should.

PC-6, KI-6, KI-16, KI-27, ST-21, ST-40, ST-19, ST-36, CV-14, GB-34. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Eight Weeks' Gestation: Needles fell out three days before appointment. Nausea and vomiting were diminished while *hinaishin* were in place. PC-6, ST-36, ST-21, GB-34, CV-14, ST-40, KI-6, CV-12, KI-20, ST-20. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Ten Weeks' Gestation: Hinaishin needles lasted six days, experiencing some nausea and vomited before treatment after hinaishin fell out. Had an identical breakfast the day before treatment, felt fine after eating, then on day of treatment vomited immediately following breakfast.

PC-6, ST-36, CV-14, ST40, ST-20, ST-21, KI-6, KI-21. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Eleven Weeks' Gestation: Hinaishin lasted all week, nausea significantly reduced, describes a queasy feeling all the time but no vomiting this week.

PC-6, ST-36, CV-12, CV-14, ST-20, ST-40, ST-21, KI-6, KI-21, LR-14. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Twelve Weeks' Gestation: She is still experiencing nausea and vomiting occasionally. Likes the hinaishin needles, states she can really notice a difference when they fall out.

PC-6, ST-36, CV-12, CV-14, ST-20, ST-21, ST-40, KI-6, KI-21. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Thirteen Weeks' Gestation: Hinaishin lasted until a day before treatment, said that she had not noticed it was out but then she vomited after her breakfast and noticed needles were missing.

PC-6, ST-36, CV-12, CV-14, ST-20, ST-21, ST-40, KI-6, KI-21. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Fourteen Weeks' Gestation: Had a very good week. Feels good but not interested in food.

PC-6, ST-36, CV-12, CV-14, ST-20, ST-21, ST-40, KI-6, KI-21. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Fifteen Weeks' Gestation: Nauseated on and off, but only vomiting one morning. One of the needles fell out a couple of days before treatment. She believes the needles keep her food in her body.

PC-6, ST-36, CV-12, CV-14, ST-20, ST-21, ST-40, KI-6, KI-21. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Sixteen Weeks' Gestation: Had a pretty good week. Needles stayed in until day before treatment. Not as sick this week but has no appetite.

PC-6, ST-36, CV-12, CV-14, ST-20, ST-21, ST-40, KI-6, KI-21. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Seventeen Weeks' Gestation: Had a good week. SS had a slight aversion to food and heightened sense of smell.

PC-6, ST-36, CV-12, CV-14, ST-20, ST-21, ST-40, KI-6, KI-21. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Eighteen Weeks' Gestation: Wanted to try a week without needles because she felt like she would not need them anymore. Had no vomiting this week and generally does not feel too nauseated.

PC-6, ST-36, KI-21, KI-6, ST-21, CV-14, ST-40.

Twenty Weeks' Gestation: Nausea and vomiting increased about two days after treatment. She vomited once or twice daily. Feels queasy and has lost three pounds since beginning of pregnancy. She does not appear pregnant. Will be having surgery for a rectal polyp next week.

PC-6, ST-36, CV-12, CV-14, ST-20, ST-21, ST-40, KI-6, KI-21. *Hinaishin* needles inserted in KI-27 following treatment.

Twenty-two Weeks' Gestation: Had surgery last week for a rectal polyp that had grown to approximately 2.5 inches. Surgery went well, the patient had an epidural block. Her nausea and vomiting were not a problem until the *hinaishin* needles fell out. Doctors gave her drugs but she said they did not work and she vomited her meals.

PC-6, ST-36, CV-12, CV-14, ST-20, ST-21, ST-40, KI-6, KI-21. Bilateral *hinaishin* needles inserted at KI-27 following treatment.

Twenty-three Weeks' Gestation: Hinaishin needles were retained a week and patient now feels better overall. She did not come back because she has been able to tolerate food and has not been vomiting. Babies growing well, SS is no longer turned off by food but it still does not hold its appeal that it once had. She is starting to look pregnant.

Summary

Forty-five-year-old female patient treated for morning sickness: started slowly increasing with patient reporting nausea and vomiting as a problem around seven weeks' gestation. Came for acupuncture treatment weekly prior and throughout pregnancy, nausea and vomiting was an issue between regular appointments. Treatment was effective but *hinaishin* needle, the retaining needles, made treatments last longer and both nausea and vomiting were reduced. The patient noticed significant improvements with the *hinaishin* needles and did not want to be without

them. Her nausea and vomiting lasted throughout most of her second trimester so the treatments were valuable to her. This patient had a weight problem but gained no weight throughout her entire pregnancy.

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Short Q&A

Question: I have a large bag of older but good quality moxa. In Colorado's arid climate it has become too dry and doesn't roll well.

What do you recommend I do to reconstitute it?

Answer: Dry moxa is considered better than damp moxa because it is softer and burns well. If the moxa crumbles to pieces when you try to roll it, I suggest you start with a small amount of moxa (about the size of a soy bean) and roll it on the board.

This should work: You can practice rolling smaller pieces like this for a while and gradually increase the amount of moxa you roll.

One tip: Don't press too hard when you roll the moxa. This can cause the moxa to crumble more easily and the resultant moxa string gets too firm. Please remember to hold the two boards gently, sliding them softly and rhythmically as you would manipulate needles.

By doing this, you can perform comfortable and effective moxibustion.