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## Treatment of hyperemesis gravidarum with anthroposophic complex therapy in 3 case reports

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## ABSTRACT

**Background:** Hyperemesis gravidarum (HG) is generally characterized by intractable nausea and vomiting which interferes with daily life. As the cause of HG has not yet been clearly identified, conventional medicine therapies address only the symptoms. Conventional treatment is also effective for a comparatively short time and may have unfavorable side effects. Given that the condition affects more than 1% of pregnant women, there is a significant need for effective long-lasting treatments with limited side effects.

**Case reports:** This paper is based on three case reports of pregnant women suffering from HG. They received inpatient treatment based exclusively on anthroposophic medical approaches at the Paracelsus Hospital Richterswil, Switzerland. Treatments were selected individually based on the specific patient profiles and included infusion therapy with *Nux vomica*, *Solum uliginosum compositum* and *Bryophyllum pinnatum* as well as art therapy (wet-on-wet painting), eurythmy therapy and rhythmical massage therapy. Anthroposophic complex therapies induced an improvement in symptoms of nausea and vomiting within one week in all three cases.

**Conclusion:** Anthroposophic complex therapy is a valuable option in the treatment of HG. Well-tolerated and long-lasting, it represents a holistic and causal approach that does not only address symptoms.

## 1. Introduction

Nausea and vomiting are among the most common complications during pregnancy, affecting about 70% of all pregnant women worldwide.<sup>1</sup> Most pregnant women experience nausea in the first trimester, between the sixth and twelfth week of pregnancy. Nausea can last up to 20 weeks, or even longer in 20% of women.<sup>2</sup>

Hyperemesis gravidarum (HG), the strongest form of nausea and vomiting in pregnancy, affects 1.1% of all pregnant women.<sup>1</sup> The diagnostic criteria of HG include nausea and vomiting more than three times per day, the detection of ketones in the urine or acetone in the blood, and a weight loss of more than 3 kg or 5% of the pre-pregnancy weight.<sup>3</sup> It begins before the end of the 20th week of pregnancy and is associated with metabolic disorders such as dehydration, hypoglycemia and disturbance of the electrolyte balance (ICD 10 no. 021.1).<sup>4</sup>

The cause of HG is unclear. Wylde et al.<sup>5</sup> discuss various potential causes, including hormonal factors (e.g. estrogen, human chorionic gonadotropin (HCG), progesterone and thyroxine) but also genetic predisposition, psychological factors, external factors, metabolic risk factors (e.g. hypoglycemia) or other biomarkers. In their review, Wylde

et al. do not identify any clearly dominant reason for HG.<sup>5</sup>

There is also little knowledge about the consequences of HG for the child. In their review paper Veenendaal et al. describe a relationship between HG and reduced birth weight and size of the child; no evidence of long-term health consequences could be identified, however.<sup>6</sup> There are several approaches to treat HG. Non-pharmacological interventions include dietary and lifestyle modification, acupuncture, electric stimulation, acupressure, ginger intake or administration of intravenous fluids. Common pharmacological interventions are vitamin B6, antihistamines, dopamine antagonists, benzodiazepines, serotonin antagonists or corticosteroids. A 2016 Cochrane review of all these treatments found little evidence to support the superiority of one intervention over another in the treatment of hyperemesis, due in part to the lack of high-quality and consistent evidence.<sup>7</sup>

Standard treatment of HG focuses primarily on the main symptom, i.e. dehydration. The patient receives an intravenous infusion of fluid, electrolytes and vitamins to prevent deficiency situations for mother and child. Metoclopramide is often used as an antiemetic, as are antihistamines with antiemetic effects.<sup>8</sup>

Anthroposophic medicine perceives HG as an imbalance between

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the mother’s own organism and the developing organism, i.e. the unborn child. At an unconscious level, the mother-to-be experiences the pregnancy as an alarming, uncontrollable and invasive growth process within her own body structure.

Anthroposophic complex therapy, therefore, aims to ground and anchor the woman, providing a solid foundation as well as boundaries to support both the mother-to-be and the growing pregnancy. The complex therapy is applied using a combination of available methods based on the clinical presentation of the patient as well as her personality and wishes. The common therapeutic principle underpinning the anthroposophic medical concept is the goal of supporting women as they adapt to their new condition as a mother-to-be. In the following, we discuss four primary methods applied in anthroposophic medicine: intravenous infusion, anthroposophic art therapy (painting), eurythmy therapy and rhythmical massage according to Ita Wegman.

1.1. Intravenous therapy

Intravenous therapy with *Solum uliginosum* is supposed to support the warmth organization of the patient, creating a feeling of protection and providing the patient with boundaries. The infusion may include *Nux vomica* which is often used against nausea and often used in the treatment of stress. *Bryophyllum pinatum* is also administered intravenously due to the plant’s calming effect.<sup>9</sup> (Fig.1). Rhythmical massage is conducted using peat oil. Peat also has a warming and “wrapping” effect and forms a protective layer or shell around the body. Eurythmy therapy strengthens and expands the protective shell in a way that creates space for the developing child. In art therapy, the act of painting supports the patient in learning to balance reflection and action.<sup>10</sup>

According to physicians’ experience, patients with hyperemesis are often in highly stressful situations. HG occurs in the first 21 weeks of pregnancy, in particular, a period in which the child develops a plenitude of needs but is not yet physically felt by the mother-to-be. Being pregnant and physically nurturing the unborn child inevitably pulls a mother from her daily life and demands her attention.

1.2. Anthroposophic art therapy (painting)

Anthroposophic art therapy actively seeks a therapeutic effect from the process of painting, the painting style and the colors used. Colors influence humans on an emotional but also on vegetative and a physical level.<sup>11–13</sup> They can have harmonizing and balancing but also distracting effects. Paracelsus Hospital Richterswil favors the method

according to Liane Collot d’Herbois, which primarily works with light, darkness and color.<sup>11</sup> The act of painting in this way supports the patient in balancing reflection and action.<sup>10</sup> The therapeutic goal for patients affected by HG is to create room for the growing child as well as for the mother-to-be. The wet-on-wet technique is the method of painting generally employed, promoting wider, more fluid spaces compared to dry painting. The range of colors is determined according to the Liane Collot d’Herbois method.<sup>14</sup> In HG specifically, the focus is on colors between viridian green and blue. Viridian green is said to light up the soul and help balance feelings, while blue has a withdrawing and cocooning effect, which can help to create space for the child without taking energy from the mother’s body.

1.3. Eurythmy therapy

Eurythmy therapy is a mindful movement therapy. It essentially consists of converting the sounds of language into movements that regulate and harmonize healing processes. Another key aspect of eurythmy therapy is its role in training awareness and self-perception. Self-healing forces can be activated if the movement is connected to an inner image. Eurythmy therapy assumes that nausea is caused by something that is unable to go down due to intolerance or a lack of space. In patients with HG, the physical feeling of everything “coming up” is latent, and not only experienced postprandially. Patients have to find or create a new anchor and center to feel comfortable again. Within the concept of eurythmy therapy, patients with HG can be particularly supported by certain exercises.

The “I-A-O” movement strengthens and centers a person in the upright position in all three dimensions of space. The “I” supports the vertical position, the “A” stabilizes and grounds the person and the “O” helps them perceive the space around them. The exercise helps individuals to find their center in situations where their strength has become unbalanced, as is the case with HG.

Besides these vowels, “B” is used to create interior space and the “D” has an antiemetic effect.<sup>15</sup>

Patients severely affected by HG may lack the energy to participate actively in eurythmy therapy, in which case the therapist can apply a passive technique.

Passive eurythmy therapy employs variations of eurythmy therapy and is conducted with the patient lying in bed. “L” and “M” shapes are well suited to passive therapy as they create space in the abdominal area without the need for the patient to stand up.<sup>15</sup>

1.4. Rhythmical massage according to Ita Wegman

In patients with hyperemesis, therapy focuses on three pillars: calming, grounding and balancing. Rhythmical massage acts on the autonomic nervous system to support balancing and regulation. During the massage itself, the patient’s breathing slows down, which has a calming effect. Therapists select oils to warm, protect and cocoon the patient, e.g. peat oil enriched with gold and lavender.<sup>16–18</sup>

2. Case reports

We report three cases of hyperemesis gravidarum treated exclusively with anthroposophic complex therapies at Paracelsus Hospital Richterswil in accordance with the patients’ wishes.

2.1. Case 1

We discuss a 38-year-old secundigravida. She was hospitalized in her 14 + 0 weeks of pregnancy with the diagnosis of HG and cachexia. During hospitalization, she was treated solely with anthroposophic medication as well as anthroposophic therapies and could be discharged after seven days.

The patient had not fully regained her strength following her first

	Physical body	Life body	Emotional body	Individual
	Matter	Growth	Feeling	Thinking
Intravenous infusion + medication	Stop nausea	Warm the body	Calm the feeling	
Painting therapy		Facilitate flow through the body	Calm and harmonize feelings	Realize and promote self-reflection
Eurythmy therapy	Balance the body	Create space and enable self-perception	Feel the body	
Rhythmical massage	Balance the autonomic nervous system	Cocoon and warm the body	Feel the body and calm the rhythm	

Fig. 1. Anthroposophic medical complex therapy for women with HG.

pregnancy; her first child was less than five months old when she conceived the second. She experienced nausea from the beginning of her second pregnancy and had unsuccessfully tried several methods to cope with nausea from the 5th week onwards. At 14 + 0 weeks, she could no longer eat and had lost over 5% of her pre-pregnancy weight. She had to be hospitalized.

Over the week as an inpatient, she received intravenous infusions of NaCl 0.9% enriched with *Solum uliginosum* 10 ml (Weleda), *Hypericum* 6 x 1 ml, *Bryophyllum* 5x/*Conchea* 7x aa 10 ml (Weleda) and 2 times *Nux vomica e semine* 6 x 1 ml. In addition, she had oral medication with *Bryophyllum argenteum cultum Rh* 3x (0.1%) dilution (Weleda), *Argentum/Saccarum globules* (WALA), *Gentiana lutea*, ethanol. *Decoctum* 3x dilution (Weleda) and *Choleodoron* dilution (Weleda). Five sessions (45–60 mins–60 min) of rhythmical massage supported the regeneration process, alongside four sessions of painting therapy and three of eurythmy therapy.

On the first day, she received an intravenous infusion with *Solum uliginosum*, *Bryophyllum* 5x/*Conchea* 7x aa and *Nux vomica* 6x and had time to rest. As she felt sick and had still no appetite on the second day, *Hypericum* was added to the intravenous infusion to stimulate her appetite. She also had her first painting therapy session, in which she identified colors that alleviated or aggravated her symptoms. The painting used light viridian green and light turquoise. The patient was highly sensitive. In the afternoon, she had a rhythmical massage which helped her calm down and rest. The night passed well with no nausea. The third day started without vomiting and she once again had painting therapy and rhythmical massage and received her first session of eurythmy therapy. Using the passive technique, small movements were applied by the therapist as excessive movement triggered nausea. Afterwards, the patient had time to relax and reported an improvement in her condition compared to the last week. On the fourth day, she began to eat normally and her health had stabilized. During the night, she felt hungry and ate a light meal. Over the following days, she regained her strength and her eating continued to normalize further. She continued the therapies and felt better from day to day. On the fifth day, the intravenous infusion could be stopped and her bodyweight stabilized. On the seventh day, she was discharged from the hospital. She received regular follow-ups until the birth and did not report any further HG episodes.

## 2.2. Case 2

A 34-year-old primigravida was hospitalized in her 13 + 0 weeks of pregnancy. She was diagnosed with HG that had begun six weeks previously. The patient presented with up to 10 episodes of vomiting per day, weight loss of 7 kg and ketones in the urine. During hospitalization, she was exclusively treated with anthroposophic medication as well as anthroposophic therapies and could leave the hospital after 10 days.

During the first five days, she received an intravenous infusion with NaCl 0.9% enriched with *Nux vomica e semine* 6 x 1 ml, *Solum uliginosum* 10 ml (Weleda) and *Bryophyllum* 5x/*Conchae* 7x aa 10 ml (Weleda). She was also given *Nux vomica globules* 6x to take as required.

From the sixth day, therapy was supplemented through *Chamomilla cupro cult. rh* 3 x 1 ml (Weleda) and *Aqua maris* 3x/*Prunus spin.sum.* 5 x 1 ml (Weleda). She received within the second and the seventh days each day an anthroposophic therapy setting. On the last two days, the infusion could already be stopped and the patient was observed while leaving the hospital for hours, gradually getting back to her daily life.

## 2.3. Case 3

A 28-year-old primigravida was hospitalized for the fourth time due to HG in her 13 + 2 week of pregnancy. She was first admitted to another hospital at 8 + 0 weeks of pregnancy weighing 54 kg but without

ketones in the urine. At 10 + 6 weeks she was readmitted and unsuccessfully treated with *Fragmin* 2500 IE s.c.; *Primperan* 10 mg iv 2 x 2 daily followed by *Primperan Tabl* 10 mg; *Itinerrol B6 Supp* 3x daily; *Esomep Tab* 40 mg per os 1x daily. Requiring hospitalization for a third time at 11 + 5 weeks of pregnancy, she came to the Paracelsus Hospital Richterswil. She presented with lower abdomen pain, fatigue, migraine and emotional imbalance. As she had no ketones in her urine, however, she was not specifically treated for hyperemesis at first. Only towards the end of her stay was she introduced to the anthroposophic medical therapies typically used for patients with HG. In the 13 + 2 week of pregnancy, she was admitted to Paracelsus Hospital Richterswil again, this time with all the typical symptoms for HG. She had ketones in the urine and was vomiting more than eight times per day. Her weight was 51.6 kg and she had lost more than 3 kg of her pre-pregnancy weight. During hospitalization, she received only anthroposophic medication (intravenous infusion with *Nux vomicae semine* 6x, *Solum uliginosum* and *Aurum met. präp.* 10x (Weleda) and oral *Bryophyllum argenteo cult. rh* 3x (Weleda)) as well as painting therapy. In the painting therapy sessions, progress was noted and the patient felt that it supported her healing process. After eight days in the hospital the patient was discharged and reported no further complications during the pregnancy.

## 3. Discussion

The presented case reports demonstrate positive results in applying anthroposophic complex therapy. Overall health improved within seven to 10 days to the extent that patients could be discharged from the hospital. Furthermore, the therapy had a lasting effect with all three patients remaining free of complications for the duration of their pregnancies. Although we only discuss a small number of patients, it is interesting to note that the anthroposophic medical complex therapy was effective in both primigravida and secundigravida patients, and in women ranging in age from 28 to 38 years. These encouraging results indicate a need for further research, ideally in an observational head-to-head study.

Anthroposophically extended medicine supports physical regeneration using natural substances already shown to be effective in other scenarios. Unlike conventional medicine, anthroposophic therapies do not simply focus on the primary symptom of dehydration but aim to treat the patient in a holistic manner. Each aspect of anthroposophic medical complex therapy supports the patient in the process of pregnancy. Anthroposophic medical complex therapy is well tolerated and so far there are no known side effects. It allows for a tailored approach, with different types of therapy modalities covering different elements of the concept of anthroposophically extended medicine (Fig. 1). The patient is seen as a person with a physical body, a life body, an emotional body and an individual inner being ("I"). While all of the therapies address the emotional and the life body, they focus on the other areas to differing degrees. It, therefore, makes sense to combine different therapies to create a complete treatment covering all aspects of a person.

## 4. Conclusion

Anthroposophic medical complex therapy is a valuable treatment option for women suffering from HG. Well tolerated and long-lasting, it represents a holistic and causal approach that does not only address symptoms.

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## Conflicts of interest

The authors declare that they have no conflicts of interest.

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