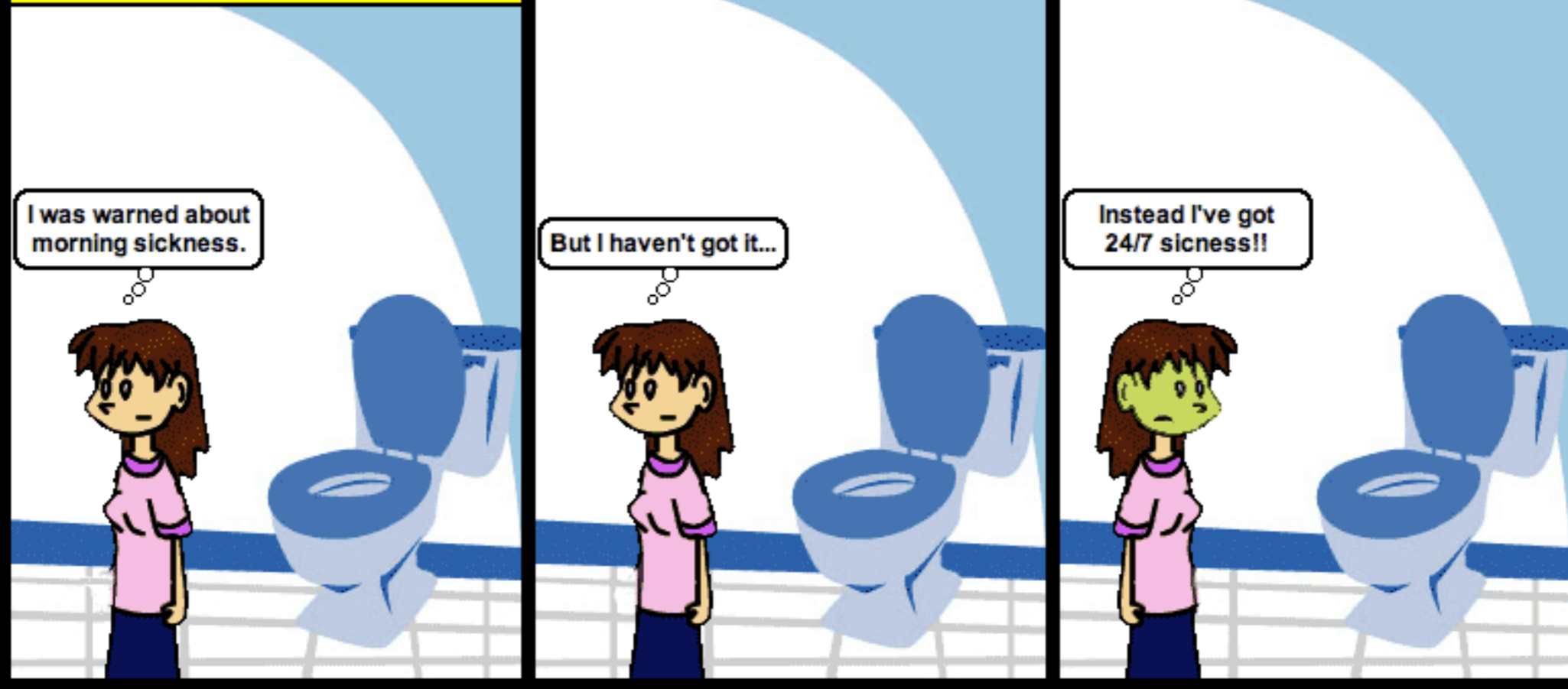


Morning sickness

by Going2Bdotcom
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Early symptoms of pregnancy...



Hyperemesis Gravidarum

Hyperemesis Gravidarum helped with Vitamin K and Vitamin C-A Case study

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Abstract



- ❖ **A case study of a patient with Hyperemesis Gravidarum comparing 2 pregnancies is presented.**
- ❖ **Her dilemma of constant vomiting, the frustration of finding effective care,**
- ❖ **the use of Applied Kinesiology (AK) methods and the resultant beneficial outcome is discussed.**
- ❖ **It concludes with recommendations that may be helpful for other sufferers.**

The Patient's Story

"With my first pregnancy I felt over whelmed by the impact of hyperemesis. A week after finding out I was pregnant I was bed ridden. I became very weak and was vomiting blood.

Even after hospitalisation I vomited constantly for several weeks which made me think that there would be no end to it until the baby was born. I became resentful and depressed. Fortunately I started to feel relief at 20 weeks.

Fearing getting pregnant again I deliberately avoided intimacy. This caused strain on our very new marriage.

I was expecting the same vomiting problems with the 2nd pregnancy. Fearing the worst I had to build up courage as I knew it was a sacrifice for our family.

The vomiting began much like the first time. I was exhausted, tired and weak. This time I had a two year old to feed and care for. I found it extremely difficult. I needed my husband to take a significant amount of time off work.

I was treated at 13 weeks with Vitamin K and Vitamin C. I was getting better faster than I or my Dr's expected. I was amazed and hopeful for future pregnancies.

I wish my Dr's had more treatment information rather than the common anti nausea drugs like Maxalon but most generally didn't seem to understand! It seemed as though they had no idea how to help me and just encouraged me to "deal with it" like many other women have done over centuries.

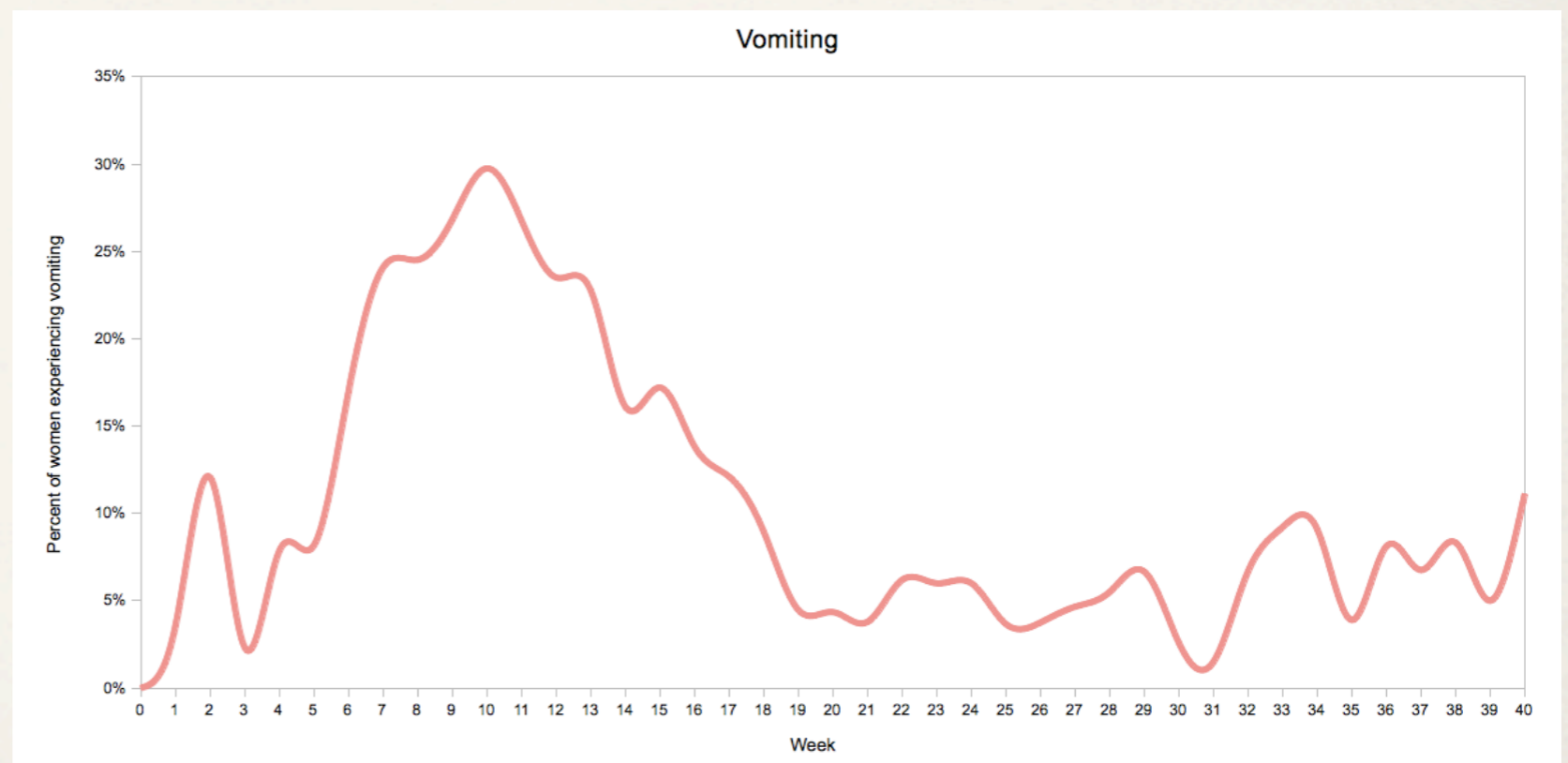
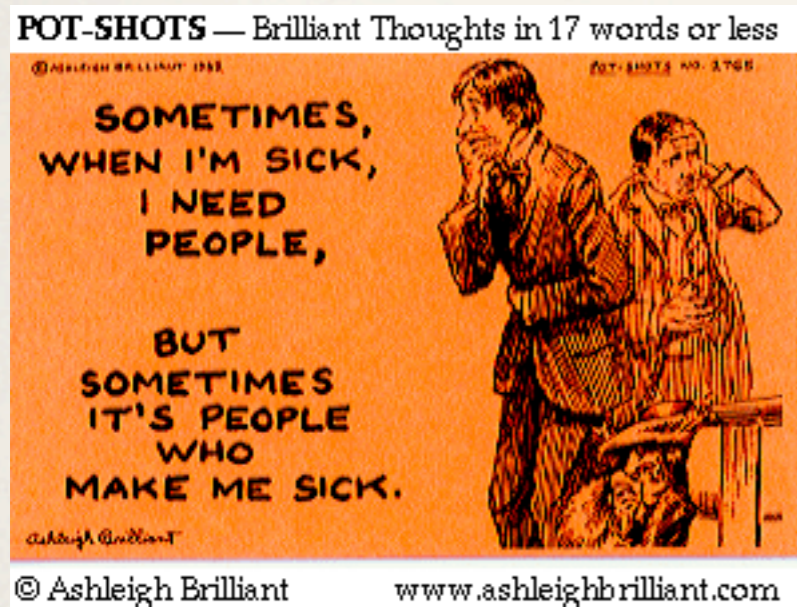
I felt this was not good enough considering our current age of medical technology and understanding."

Introduction

- ❖ This presentation reviews the dilemma of finding treatment for patients suffering Hyperemesis Gravidarum (HG).
- ❖ A literature review of traditional care, methods of the applied kinesiology approach
- ❖ and a discussion of outcomes of a patient's two pregnancies will be presented

Nausea and Vomiting of Pregnancy (NVP)

- ❖ is common and not associated with an abnormal outcome if it finishes in the first trimester.



Hyperemesis Gravidarum (HG)

- * HG is a more severe (the worse case) scenario for the NVP nausea sufferer and may extend through the full term.
- * Complications of dehydration and malnutrition may create dangers for the mother such as Vitamin B1 deficiency resulting in Wernicke's encephalopathy, severe hyperkalemia and hyponatremia resulting in central pontine myelinolysis.
- * The baby may suffer from premature birth and growth restrictions.
- * It is estimated that 50-90% of pregnant women may suffer some form of nausea with only .3 to 2% of this group having HG.
- * However HG can account for 30% of hospital admissions for pregnancies before 20 weeks.

Low Risk for HG

- ❖ advanced age
- ❖ smoking
- ❖ the stress of war.



Minimum Work Loss



- ❖ Time lost from work may be up to 14 days at a cost of about \$3000 per patient with severe symptoms of NVP in the USA.
- ❖ Another study reported a loss of 62 hours of lost employed work and 32 hours of lost household work.



Self Care Methods

- ❖ Proposed natural treatments including Acupuncture,
- ❖ hypnosis,
- ❖ ginger and
- ❖ vitamin B6,
- ❖ red raspberry,
- ❖ vitamin C and vitamin K



Conservative Medical Care

- ❖ includes vitamin B-6, doxylamine and ginger capsules.
- ❖ Metoclopramide, promethazine, ondansetron and
- ❖ methylprednisolone may be progressively added and used with caution.

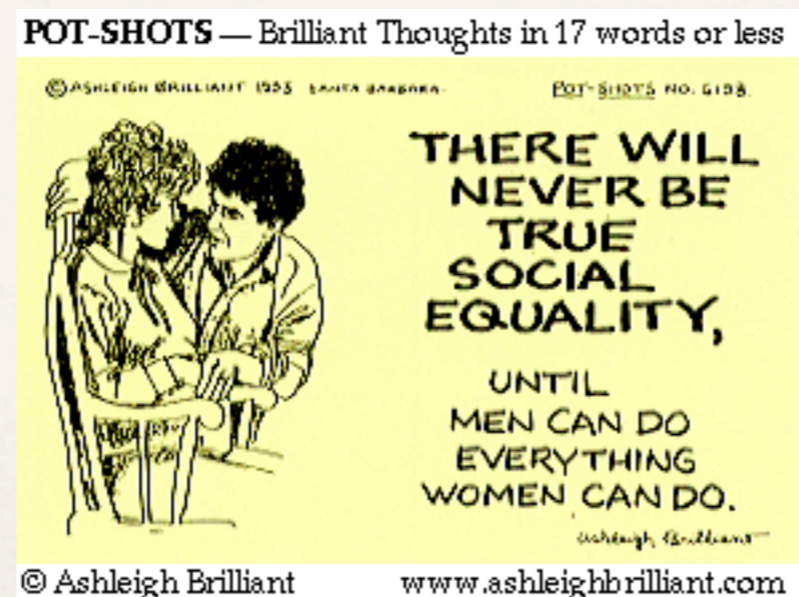
Why this case study is important.

- * This case study comparing two pregnancies is important. It is one of the few cases recorded that uses a novel approach to resolving HG with a shorter timeline for the 2nd pregnancy than the patient's first pregnancy.
- * It is also unusual in that it uses old research observations that showed promising results with relative safety but for some reason more extensive research was never conducted.



The Null Hypothesis

- ❖ A method of using Vitamin K and Vitamin C will have no benefit for a patient suffering HG in her 2nd pregnancy compared to her 1st pregnancy.



Case Study



- ❖ This study describes a 28 year old homemaking mother, 5' 7 1/2 tall, 72 kilo weight before her 2nd pregnancy.
- ❖ She said she was referred by a family member to contact our clinic.
- ❖ She consulted by telephone describing her distress suffering the nausea of pregnancy diagnosed as hyperemesis gravidarum.
- ❖ She said her weight had dropped to 62 kilo's over the previous 13 weeks from constant vomiting.



Pregnancy 1		
Symptoms	Intervention	Results
None	None	None
HG from Week 6 to Week 20	Hospitalization at 6th week, 9 bags of Saline over next 3 days. Maxalon injections and Ondanzatron wafers.	Rehydrated
Nausea and vomiting from week 7 to Week 20.	Home care included 4 Mg Maxalon every 4-6 hours. 8 Mg of Ondanzatron then Cyclamine.	nausea remained, medications were vomited, Ondanzatron suppressed vomiting, but nausea remained, rehydration reduced vomiting.
As above	As above	As above
As above	As above	as above
HG stops beginning Week 21.	No Medication	No Nausea or HG





Pregnancy 2		
Symptoms	Intervention	Results
HG begins at 4 weeks and more severe than P1		
HG continues through week 8	Hospital care included 2-3 Maxalon injections and Ondanzatron from weeks 5-8	Nausea abated enough to eat but food would reflux
As above	As above	As above
HG continues through week 10. 10 kilo weight loss.	Home care with Maxalon and Ondanzatron	No improvement
HG continues through week 13	One Vitamin K injection given by GP. Patient includes 2-500 mg of Bio C daily with liquid chlorophyll as a Vitamin K supplement as a preventative.	24 hour relief from HG, 3-4 days of Nausea then HG Stops in Week 13.



	Pregnancy 1			Pregnancy 2		
No of Weeks	Symptoms	Intervention	Results	Symptoms	Intervention	Results
1, 2, 3, 4	None	None	Normal	HG begins at 4 weeks and more severe than P1		
5, 6, 7, 8,	HG from Week 6 to Week 20	Hospitalization at 6th week, 9 bags of Saline over next 3 days. Maxalon injections and Ondanzatron wafers.	Rehydrated	HG continues through week 8	Hospital care included 2-3 Maxalon injections and Ondanzatron from weeks 5-8	Nausea abated enough to eat but food would reflux
	Nausea and vomiting from week 7 to Week 20.	Home care included 4 Mg Maxalon every 4-6 hours. 8 Mg of Ondanzatron then Cyclamine.	nausea remained, medications were vomited, Ondanzatron suppressed vomiting, but nausea remained, rehydration reduced vomiting.	As above	As above	As above
9, 10, 11, 12	As above	As above	As above	HG continues through week 10. 10 kilo weight loss.	Home care with Maxalon and Ondanzatron	No improvement
13, 14, 15, 16	As above	As above	as above	HG Continues through week 13	One Vitamin K injection given by GP. Patient includes 2-500 mg of Bio C daily with liquid chlorophyll as a Vitamin K supplement as a preventative.	24 hour relief from HG, 3-4 days of Nausea then HG Stops in Week 13.
17, 18, 19, 20.						
21, 22, 23, 24,	HG stops beginning Week 21.	No Medication	No Nausea or HG			
25, 26, 27, 28,						
21, 22, 23, 24,						
25, 26, 27, 28,						
29, 30, 31, 32						
33, 24, 35, 36						
37,38			Normal birth of Female			

Initial Consultation

- ❖ I was unable to physically examine the patient as this consultation was a telephone enquiry.
- ❖ I advised the patient that I would complete a literature search and return her call.
- ❖ I conducted the search and could find little additional information to assist her outside of the medical care she was receiving.
- ❖ I did advise her that hydration was important and attending a hospital for a saline drip may be necessary.
- ❖ First aid measures involving sipping fluids, sucking ice and a salt water enema were all suggested.

Literature Search

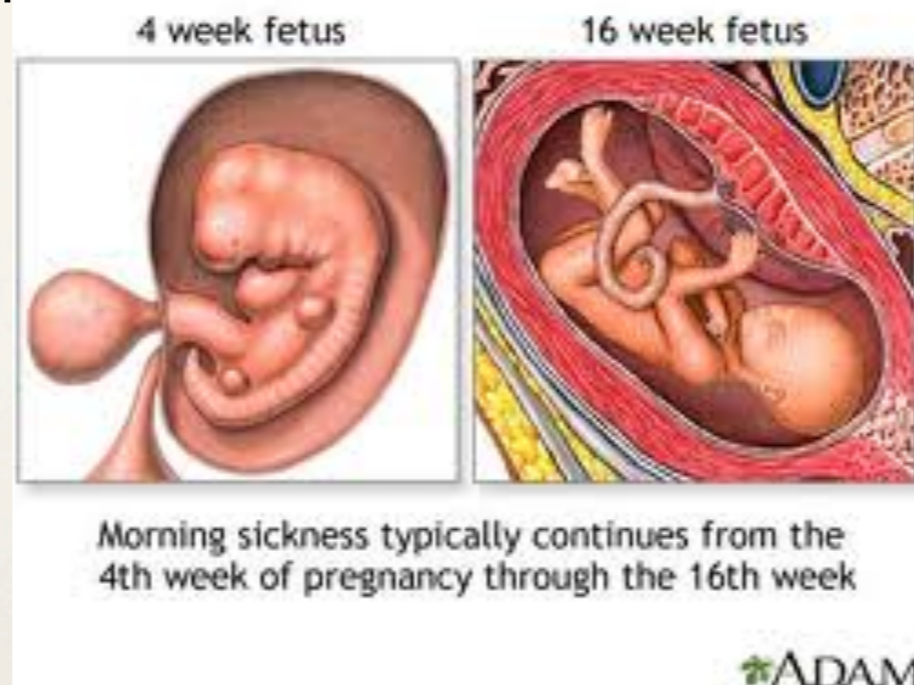


- ❖ A search of AK literature was conducted to find alternative methods of care for HG. George Goodheart, a chiropractor discussed his methods for helping this condition in 1987.
- ❖ Goodheart's Method:
 1. Oral Vitamin C diagnosed with lingual Vitamin C absorption test. Up to 25 mg 3x per day.
 2. Vitamin K 5 mg per day
 3. Use liquid or tablet forms of chlorophyll.
 4. Consider Psychological counseling
 5. Use a protomorphogen (desiccated liver extract)
 6. Diagnose lymphatic, vascular, neurological, acupuncture, and respiratory reflexes relating to the liver.
 7. Review Postural stress with fetal development needing mechanical treatment and/or exercise.

Goodheart based this nutritional supplementation of Vitamin K and Vitamin C on current nutritional knowledge at that time and his experience with manipulative skills as a chiropractor.

Nutritional Therapy

- ❖ Goodheart described a paper that used Vitamin K and Vitamin C therapy published in 1952.
- ❖ An internet search of Pubmed located a paper by Richard Merkel, MD., who discussed the use of menadione bisulfite and ascorbic acid in the treatment of nausea and vomiting of pregnancy. This was described as a preliminary report. Merkel proposed that resolving the problem of NVP and HG could be accomplished by decreasing placental capillary permeability preventing transfer of the “vomiting factor” from the placenta to the expectan



Merkel's Method

- ❖ A series of 70 consecutive cases of nausea and/or vomiting of pregnancy, varying from mild to severe were selected.
- ❖ 33 of the women were primigravidas and 37 multigravidas.
- ❖ 7 were Rh negative, and 63 Rh positive. All 70 were given 25mg of ascorbic acid and 5mg of menadione bisulfite without any attempt at psychotherapy or other supportive measures.
- ❖ The prothrombin levels in the blood and the bleeding time of each patient were determined both prior to medication and afterward, but no changes were observed.
- ❖ Therapy, averaging thirty days, was continued until the temporary withdrawal of medication produced no recurrence of symptoms.

Summary of Merkel's Results

- ❖ 64 had a remission of their symptoms within 72 hours.
- ❖ 3 were relieved of vomiting but continued with nausea, 3 had no relief and one advanced case into the 2nd trimester found it was the only therapy that helped.
- ❖ 3 patients continued therapy until delivery.
- ❖ Iron absorption improved with therapy.
- ❖ Vitamin C alone had no benefit.
- ❖ No dangers with the medication at these doses were observed.
- ❖ Merkel recommended further research to validate his preliminary report.

Support for Merkel's Method

- ❖ Merkel's study was followed up in 1958 by two Canadian researchers, M Ferron and H Gibeault. The results of this study validated Merkel's work.
- ❖ A medical columnist, Gerber, describes his personal unpublished use of this therapy and the difficulty getting it peer reviewed in his column in "The Townsend Report", an online health newsletter
- ❖ He refers to a paper by Wright using Merkel's method published in 1984.
- ❖ Some evidence for Vitamin K deficiency was presented in a case study by Robinson et al in 1998. This study of a woman at 15 weeks gestation with HG and epistaxis concluded that Vitamin K deficiency and coagulopathy should be considered in women with HG who present with a bleeding diathesis.
- ❖ They also recommended prophylactic Vitamin K replacement should be considered in cases where HG is severe and protracted.
- ❖ They commented that they were not aware of previous studies similar to theirs and acknowledged that Vitamin K deficiency is a known complication of malnutrition and a known cause of coagulopathy.

Goodheart's Method



1. Oral Vitamin C diagnosed with lingual Vitamin C absorption test. Up to 25 mg 3x per day.
2. Vitamin K 5 mg per day
3. Use liquid or tablet forms of chlorophyll.
4. Consider Psychological counseling
5. Use a protomorphogen (desiccated liver extract)
6. Diagnose lymphatic, vascular, neurological, acupuncture, and respiratory reflexes relating to the liver.
7. Review Postural stress with fetal development needing mechanical treatment and/or exercise.

Only 1,2 and 3 were practical to advise with a telephone consultation. Unfortunately persistent vomiting by the patient was so severe, I suggesting that the patient ask her doctor for injections of Vitamin K other than use oral therapy given that this was the current mode of medication being used for other vomiting medications. Although Vitamin K injections are given routinely to prevent bleeding problems in babies at birth this deficiency may not correlate to the mother.

Case Treatment

- ❖ Hesitation and supply of the injections delayed therapy for 3 weeks until the patient insisted. The GP explained that while Vitamin K is routinely given to eligible infants no one has given it to their mothers.
- ❖ Injections of Vitamin C could not be sourced,
- ❖ One injection of Vitamin K was administered at 13 weeks with 2 chewable 500mg tablets of Vitamin C (bioflavonoids-Blackmores).



Case Results



- * Initially the nausea stopped for 24 hours with a return of normal appetite.
- * Fatigue and nausea returned for the 3-4 days following with vomiting. Then the nausea stopped. 2 mild vomits later occurred but were associated with missing meals.
- * Self management was now possible using liquid Chlorophyll (a source of Vitamin K) and 2 Vitamin C 500 mg tablets chewed daily for 3-4 weeks eliminating all signs of nausea.
- * Having avoided following the path of the previous pregnancy that followed the same pattern, the patient was happy to have weeks 13-20 nausea free.

What do we learn from this case?

- ❖ This case illustrates the value of consultative management of a multigravida mother suffering hyperemesis gravidarum using AK research material.
- ❖ Dr. Goodheart's observations in 1987 discussed this disabling condition of HG, while dated, enabled location of historical research material relevant to helping this patient.
- ❖ Useful information in addition to current knowledge was found that posed little risk to the mother and fetus compared to some medications available.
- ❖ Cooperative care by attending physicians may have been lacking given the mother's concern of dehydration and malnutrition.
- ❖ The mother felt she suffered due to a delay in reviewing and using the presented research for proposed and relatively immediate relief.
- ❖ When treatment was finally given, the mother perceived a benefit of some extra 7 weeks without vomiting compared to her first baby.

What do we learn about HG?

- ❖ New knowledge gleaned from this historical research indicated that VNP and HG may have a cause related to an increase capillary permeability of the placental base releasing a “vomiting factor”.
- ❖ This case study comparing 2 pregnancies illustrates that this cause may be helped by treatment with Vitamin K and Vitamin C administered either orally or injection or IV.
- ❖ AK methods had sufficiently recorded the data and proposed other treatments that may be supportive of this theory.
- ❖ The null hypothesis was found false for this patient.
- ❖ This case adds to the sparse data for this method of treatment and should encourage further research. This data is specific to this patient and should not be taken as a general treatment for this condition.

Last Word from the Patient

Date