

## CASE REPORTS

### **Premature Rupture of Membranes (PROM) and Labor Induction with Oral Castor Oil: A Case Report**

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**Background:** Spontaneous rupture of membranes (SROM) occurs before labor in about 8% of term pregnancies, a condition known as premature rupture of membranes (PROM). In cases where labor does not occur shortly after SROM, clients may wish to use safe and effective home-based strategies to encourage labor and avoid medical interventions. Castor oil (*Ricinus communis*) has traditionally been used to treat a variety of medical conditions, including the induction of labor, although its use to stimulate labor after PROM has not been extensively studied outside of one retrospective study from 1984.

**Case Description:** This case study describes the use of castor oil to induce labor after PROM in a home birth setting. Under the care of a certified nurse midwife (CNM), a 31-year-old female desiring home birth experienced PROM at 38 weeks' gestation. After more than 50 hours without onset of spontaneous labor, the client ingested a beverage containing 2 oz castor oil, 2 oz orange juice and 1 oz vodka under the guidance of her CNM. Active labor began within 3 hours, and the client gave birth to a baby boy with an APGAR of 9/9 at 1 and 5 minutes less than 8 hours after ingesting the cocktail. All measures of maternal and fetal health remained within normal limits for the duration of the birth and postpartum period. No adverse effects of the castor oil were observed, beyond mild gastrointestinal discomfort and unpleasant taste.

**Conclusion:** This case report demonstrates the potential utility of castor oil to induce labor in a home birth setting after PROM. The use of castor oil and other natural approaches for encouraging labor may be preferable to those who wish to avoid the potential adverse effects of synthetic oxytocin and prostaglandins. Castor oil appeared to induce labor in this client more than 50 hours post-PROM, allowing the client to avoid a medical induction and hospitalization. This intervention had only minimal adverse effects to the mother, and no adverse effects to the newborn were noted.

## **Nutritional Intervention for Gastrointestinal Reflux Disease in Client Diagnosed with Multiple Medical Conditions: A Case Study**

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**Background:** GERD is one of the most common illnesses in the United States. Over 25% of the population report symptoms of heartburn at least once a month, approximately 12% report weekly symptoms, and 5% experience heartburn daily. The disease creates a financial burden for individuals due to the high cost of anti-acid medications. Proton-pump inhibitors (PPI's) are typically prescribed and have been associated with increased risk of vitamin and mineral deficiencies; impacting vitamin B12, vitamin C, calcium, iron and magnesium metabolism.

**Case Description:** A 26-year-old obese male complained of mood crashes, skin allergies, fatigue, increased appetite and gastrointestinal discomfort. Previously diagnosed with GERD, ADHD, asthma, hyperlipidemia and irritable bowel syndrome; he was prescribed multiple medications that included anti-anxiety and proton-pump inhibitors. The client expressed concern that these drugs were no longer alleviating gastrointestinal discomfort and severely impacting daily life including constant heartburn, irregular and frequent bowel movements that often led to increased anxiety.

Initial recommendations focused on nutritional interventions, specifically the elimination of gluten and dairy products along with the addition of dark leafy greens (kale, Swiss chard, broccoli and asparagus), sulfur-rich vegetables (cabbage, radishes, garlic, Brussel sprouts), fatty fish (salmon, herring, sardines), fruits (brightly colored berries), bone broths and increased hydration. Shifting the dietary choices to whole foods was designed to improve potential vitamin and mineral deficiencies along with optimizing digestion.

Client remained compliant in eliminating gluten and dairy from his diet, along with suggested food substitutions, due to significant improvement in GERD symptoms. Subsequent visits prompted the addition of probiotics, vitamin D, B-complex vitamin supplements, an omega-3 capsule and a recommended physical activity plan.

Client's pattern of eating shifted from eating all day, to structured and balanced meals three times a day. After a third follow up visit, meals were structured: 50% non-starchy vegetables, 25% whole grains, 25% clean protein (dark chicken meat/wild caught salmon/wild caught cod/red meat in moderation).

**Conclusion:** The client reported significant improvement in symptoms due to dietary shifts and the assistance of his wellness coach (necessary due to ADHD). He continued to experiment with new whole food choices and food preparation techniques. GERD medications were eliminated entirely, along with reduced dosage of ADHD drugs. He reported that mood swings decreased while the ability to focus increased. Nutritional education and intervention improved symptoms and inspired better food choices that resulted in a positive quality of life for this client. This case study illustrates the power of nutritional interventions as therapeutics for those with GERD.

## **A Dietary and Botanical Approach to the Treatment of SIBO: A Case Report**

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**Background:** Small intestinal bacterial overgrowth (SIBO) causes abdominal pain, bloating, diarrhea, weight loss and nutrient malabsorption. There is no accepted treatment “gold standard” and therapeutic options range from broad spectrum antibiotics to nutritional dietary interventions, and dietary supplements including botanical supplements. SIBO and irritable bowel syndrome (IBS) have overlapping symptoms; consequently, a low fermentable oligo- di- mono- and polyol diet (FODMAP) has been used. Some dietary and botanical supplements have shown promising results as well.

This case reports on the use of a low FODMAP diet and botanical supplementation in a patient with a positive lactulose hydrogen breath test (LHBT), a non-invasive tool used to diagnose SIBO.

**Case Description:** This patient is a 31-year-old female presenting with intermittent eczema, constipation, abdominal bloating, and a suspected food allergy. During her first visit, a hydrogen breath test was positive for SIBO — hydrogen (H<sub>2</sub>) levels were 162 ppm by the sample at 100 minutes. The patient began a treatment plan consisting of a low FODMAP diet, dietary and botanical supplements including digestive enzymes, berberine, thyme, cinnamon, neem, uva ursi, and oregano. After 8 weeks of dietary modifications and botanical supplement regimen, a repeat hydrogen breath test revealed H<sub>2</sub> levels within normal limits, and the patient reported improvement in her abdominal bloating and eczema. After 12 weeks of continued treatment, the patient reported complete resolution of her eczema and abdominal bloating.

**Conclusion:** In conclusion, our case report highlights the usefulness of the lactulose hydrogen breath test in accurately diagnosing small intestinal bacterial overgrowth in a young adult female with multiple gastrointestinal complaints. In addition, antimicrobial botanicals—including berberine, oregano, cinnamon, neem, and uva ursi—were associated with elimination of the infection without the use of antibiotics. Future research may include large, experimental trials investigating the efficacy of a combination therapy of a low-FODMAP diet along with the aforementioned botanicals.

## Individual Yoga Therapy Case Report of Youth with High Functioning Autism

Searl K, Sullivan M

**Objective:** The purpose of this case report is demonstrate the feasibility and potential benefit of a yoga therapy (YT) program for children with High Functioning Autism (HFA) to help with anxiety, tolerance to stimuli and change, sleep disturbance, socialization, connection and the relationship to vagal tone.

**Case Description:** A 15-year-old male diagnosed with HFA, struggling with social stress, anxiety, Attention Deficient Hyperactivity Disorder (ADHD) and occasional insomnia, presented with rapid, shallow breath and several musculoskeletal imbalances. He slept 8-9 hours per day on average, with difficulty waking up. He is sensory-seeking and uses inappropriate language for attention. The client presented with attachment to communication specifically in geography, ethnicity, and numbers related to time. Additionally, the client is prone to anxious feelings and resistant to change.

The YT intervention included greeting, poses for strength and flexibility, breathing regulation, chanting, meditation and ending practices, which were introduced and built upon over a series of visits. The initial intake was conducted over the phone with the parent. In the first session, informed consent, outcome measurements, breath and postural assessments were taken with a few yoga techniques practiced during the first 25-minute session. The outcome measurement tools used pre and post interventions were ABC-C, Neuro-QOL Item Bank 2.1 Pediatric Fatigue Short Form, The Journey to Wild Divine Biofeedback Software to assess self-regulation for tolerance to change, sleep disturbances, anxiety, and vagal tone. The YT intervention followed with 29 sessions ranging from 30 minutes up to 55 minutes of focused hatha yoga techniques. The first ten sessions were done with a two time per week frequency, and then the remaining 19 sessions were once per week. The home practice mirrored the in-session work; along with suggested games for the family to play together and build retention to reinforce in-session techniques.

**Conclusion:** The client showed improved focus and stillness by the end of this individualized YT program. The main finding of this case report is yoga therapy may help reduce the stereotyped behavior, abnormal repetitive movements such as repetitive hand, body or head movement. Yoga therapy may be a cost-effective, activity that can be done at home to help develop self-regulation. The limitations of this case report are the short intervention time and the vagal tone tracking based on the need for the software upgrade or switch. Additional research needed to examine the impact of yoga for HFA and the use of control groups.

## **Nano Colloidal Silver as Treatment for Dysbiosis Verified by Pre-Post DNA/PCR Based Stool Tests: Case Study**

Taylor A, Coetzee O

**Background:** Parasitic, bacterial, and viral pathogens in the gut microbiome can contribute to chronic GI illness, disrupt the normal microbial balance, and cause disease. Gut dysbiosis can be tested using DNA/PCR based stool analysis to identify the presence and quantity of various pathogenic organisms. This case study demonstrates that certain pathogenic organisms may be either eradicated or reduced by oral ingestion of nano colloidal silver.

**CASE Description:** A 12-year-old boy presented with bloating following a history of international travel, and of swimming in the Chesapeake Bay at a week-long summer camp. Dysbiosis was suspected, so DNA/PCR based stool testing (GI-MAP) was ordered. The cost of the testing was \$208 with an insurance card. Pre-treatment testing showed the presence and quantity of:

**Bacterial pathogens:** *C. Difficile* (Toxin A and Toxin B), *Vibrio cholerae*,

**Parasitic pathogen:** *Cryptosporidium*

**Normal Bacterial Flora:** *Clostridium* spp. (High levels which were reduced to normal levels)

**Dysbiotic/Overgrowth Bacteria:** *Bacillus* spp., *Enterococcus faecium*, *Morganella* spp., *Pseudomonas aeruginosa*, *Streptococcus* spp.

**Fungi/Yeast:** *Geotrichum* spp.

**Protozoa:** *Blastocystis hominis*, *Cyclospora* spp., *Dientamoeba fragilis*, *Entamoeba coli*, *Pentatrichomonas hominis*.

After dosing ½ tsp SilverBiotics-brand nano colloidal silver (10 PPM) for 14 days, the patient's bloating was reduced. New GI-MAP stool tests were run which showed either eradication of pathogens, or reduction of commensal bacteria from high to normal levels.

Note that the client also had *H. Pylori* and *Pseudomonas* spp. pathogens, which were not resolved by the ½ tsp 14-day colloidal silver regimen.

The SilverBiotics preparation of colloidal silver is suggested to differ from other brands in a patented process that allows a nano particle to steal one electron - which is claimed by the company to offer a longer lasting pathogen-killing activity than other brands/preparations of colloidal silver. The authors do not know if other brands/preparations would have the same effectiveness. The SilverBiotics 4 oz. bottle used in our case study was purchased from Amazon.com for \$13. Note that probiotics were not administered during the colloidal silver treatment phase.

**Conclusion:** The SilverBiotics nano preparation of colloidal silver may be a useful, cost effective treatment for eradicating and/or reducing certain (but not all) gut pathogens. Additional research would be valuable to evaluate efficacy in other patients with these same pathogens, and to see if non-nano preparations of 10 PPM colloidal silver are effective.