Presentation by Belén Vázquez

Infant colic
Microbiome, Gut, Brain
Clinical considerations for CST practitioners

IASCT AGM

October 2023

WHO AM I

Belén
Optimum Health

Nutritional therapist, MSc in Personalised Nutrition
Craniosacral therapist
Integrative Baby Therapy practitioner

Supporting children and their families
with:

- Baby colic
- Gut health
- Mood & Behaviour

When a baby cries, there is a story behind...

Prevalence & management

- Affects **one in four** infants under 3 months of age
- The main reason of **medical visits** during the first year of life
- Enormous **distress and suffering** for babies and their families
- A main **hurdle to breastfeeding**
- Long-term **health impacts**, eg higher risk of IBS at 4 years
- **Pathophysiology** and diagnosis remains **unclear.** A main hypothesis - **inflammatory dysbiosis, Gut-Brain disorder**
- **Lack of efficacy** of clinical interventions. **Manual or nutritional therapies** not recommended

CST -Research, 2006

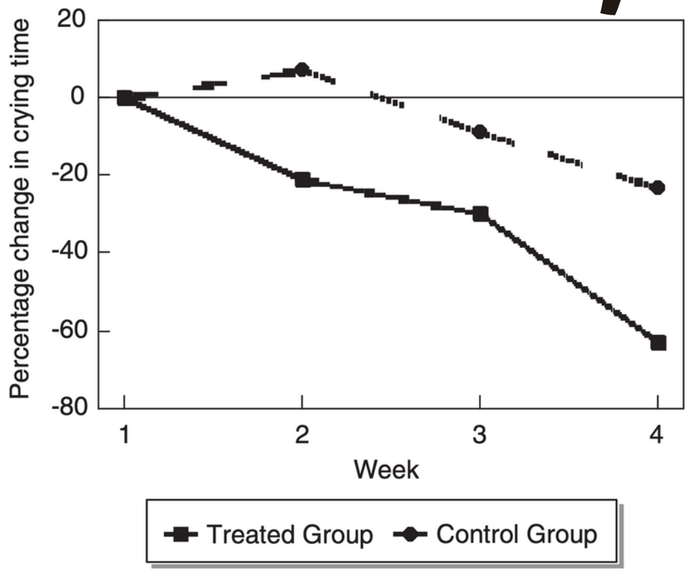

Figure 2 Mean percentage change in hours/24 h spent crying for treated and control groups.

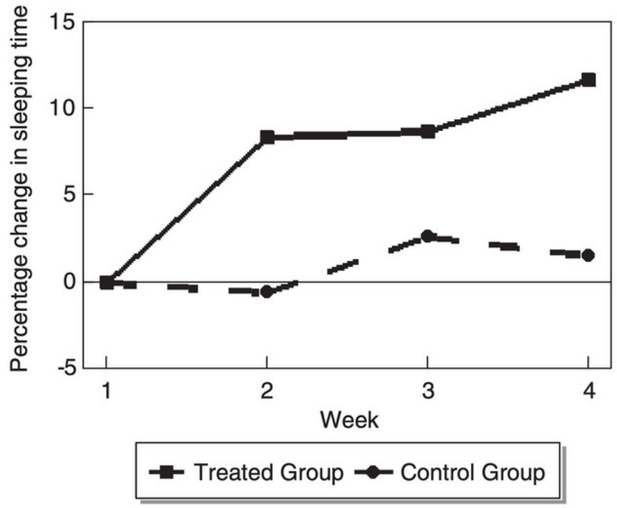

Figure 3 Mean percentage change in hours/24 h spent sleeping for treated and control groups.

Complementary Therapies in Clinical Practice (2006) **12**, 83–90

ELSEVIER

Complementary Therapies in Clinical Practice

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A preliminary assessment of the impact of cranial osteopathy for the relief of infantile colic

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KEYWORDS
Infantile colic;
Cranial;
Osteopathic manipulation;
Clinical trial

Summary In this open, controlled, prospective study, 28 infants with colic were randomized to either cranial osteopathic manipulation or no treatment; all were seen once weekly for 4 weeks. Treatment was according to individual findings, and administered by the same practitioner. Parents recorded time spent crying, sleeping and being held/rocked on a 24-hour diary. A progressive, highly significant reduction between weeks 1 and 4 in crying (hours/24 h) was detected ($P < 0.001$) in treated

This preliminary study suggests that cranial osteopathic treatment can benefit infants with colic.

CST -Research, 2012

A single-blinded, randomised, composition trial

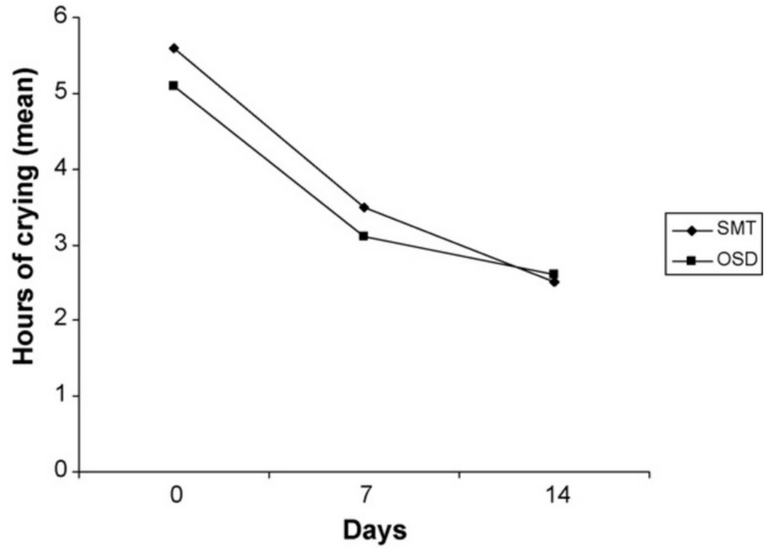

Figure 2 Reduction in mean number of hours of daily crying.

At day 14, the mean hours of crying were significantly reduced in both groups (SMT, by 3.1 h/day, $p < 0.001$; OSD, by 2.5 h/day, $p < 0.001$).
At day 14, the mean hours of sleep were significantly increased in both groups (SMT, by 1.7 h/day, $p < 0.01$; OSD, by 1.0 h/day, $p < 0.01$).

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Clinical Chiropractic

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ORIGINAL PAPER

Comparison of the short-term effects of chiropractic spinal manipulation and occipito-sacral decompression in the treatment of infant colic: A single-blinded, randomised, comparison trial

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Received 20 May 2008; received in revised form 12 September 2008; accepted 8 October 2008

KEYWORDS
Colic;
Chiropractic;

Summary

Objective: To compare two interventions in the treatment of infant colic.
Design: A single-blinded, randomised, and comparison trial.

Both treatments appear to offer significant benefits to infants with colic. Infants treated by SMT or OSD cried less and slept more after 2 weeks of treatment. There were no differences in outcomes between the two treatment approaches.

CST -Research, 2019

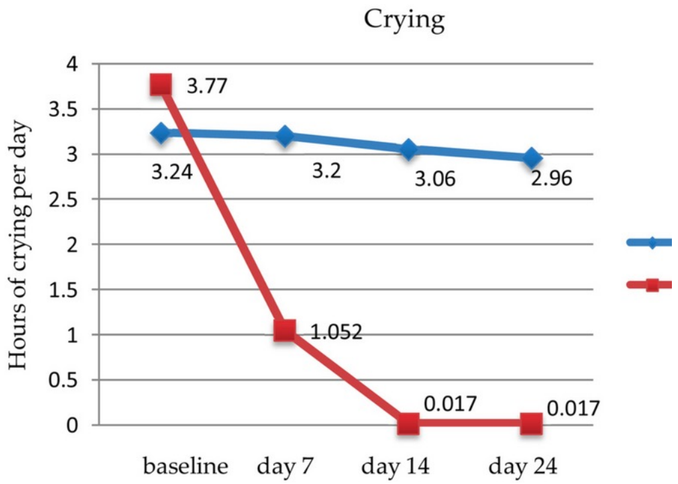

Fig. 2. Average length of crying chart.

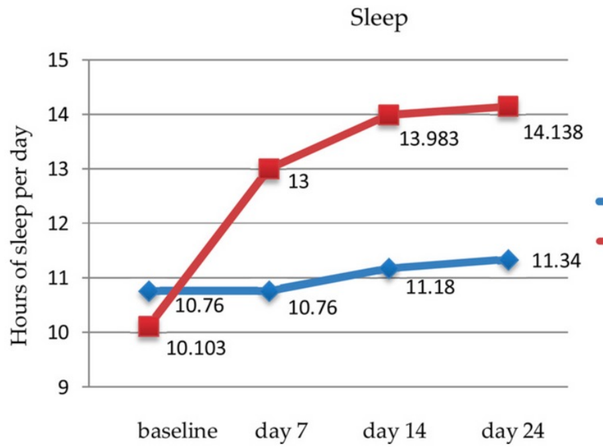

Fig. 4. Average length of sleep chart.

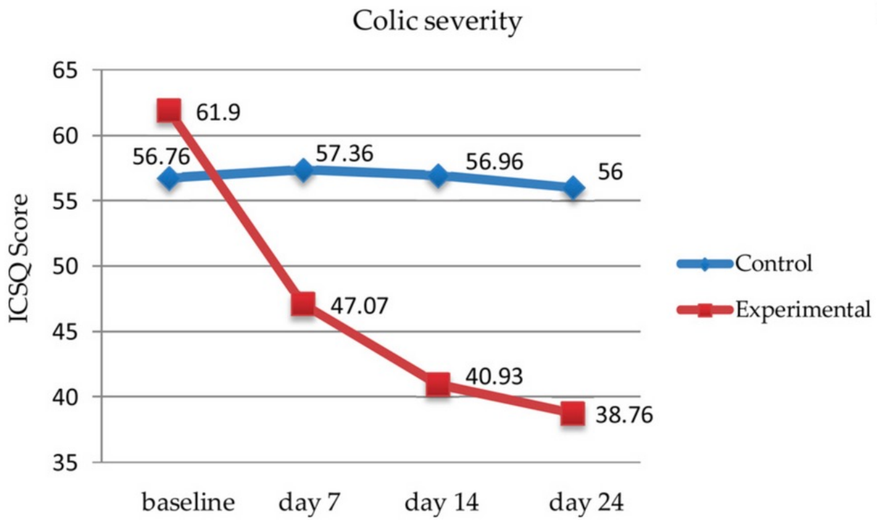

Fig. 3. Average score of colic severity chart.

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iveness of craniosacral therapy in the treatment of infantile colic. A mized controlled trial☆

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LE INFO

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ABSTRACT

Objectives: To determine the effectiveness of Craniosacral Therapy (CST) for the treatment of infantile
Material and methods: This randomized controlled trial was conducted on 58 infants, aged 0–84 days, di
with infantile colic. The babies received a 30–40 minute CST session once a week (experimental grou
treatment (control group). Babies in the CST group received either 1, 2 or 3 CST sessions over a 14-day
Data were collected at 4 different times over the 24-day period, day 0 (baseline), day 7, day 14 and
Crying (primary outcome) and sleep (secondary outcome) were evaluated using a crying and sleep di
colic severity was measured using the Infant Colic Severity Questionnaire (secondary outcome).
Results: There was a statistically significant difference between groups (CST and control) in cryin
($F = 188.47$; $p < 0.0005$; $\eta 2 = 0.78$), sleep hours ($F = 61.20$; $p < 0.0005$, $\eta 2 = 0.54$) and colic
($F = 143.74$; $p < 0.0005$, $\eta 2 = 0.73$) across all the time points. In comparison with the control gro

Craniosacral therapy appears to be effective and safe for infantile colic by reducing the number of crying hours, colic severity and increasing the total hours of sleep.

CST -Research, 2022

On day 24, significant differences in:

- crying hours (mean difference = 2.94, at 95 %CI = 2.30–3.58; p 0.001)
- sleep hours (mean difference = 2.80; at 95 %CI = – 3.85 to – 1.73; p0.001)
- colic severity (mean difference = 17.24; at 95 %CI = 14.42–20.05; p 0.001)

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Treatment of infant colic with craniosacral therapy. A randomized controlled trial☆

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ARTICLE INFO

Keywords:
Craniosacral therapy
Manual therapy
Osteopathy
Infantile colic
Crying
Sleep

ABSTRACT

Objective: To evaluate the number of craniosacral therapy sessions that can be helpful to obtain a resolution of the symptoms of infantile colic and to observe if there are any differences in the evolution obtained by the groups that received a different number of Craniosacral Therapy sessions at 24 days of treatment, compared with the control group which did not received any treatment.

Methods: Fifty-eight infants with colic were randomized into two groups of which 29 babies in the control group received no treatment and those in the experimental group received 1–3 sessions of craniosacral therapy (CST) until symptoms were resolved. Evaluations were performed until day 24 of the study. **In this study crying hours served as primary outcome**. The secondary outcome were the hours of sleep and the severity, **measured by an Infantile Colic Severity Questionnaire (ICSQ)**.

Results: Significant statistical differences were observed in favor of experimental group compared to the control group on **day 24 in crying hours** (mean difference = 2.94, at 95 %CI = 2.30–3.58; $p < 0.001$) primary outcome, [illegible] (mean difference = [illegible] 1.73; $p < 0.001$) and colic severity

Babies with infantile colic may obtain a complete resolution of symptoms on day 24 by receiving 2 or 3 CST sessions compared to the control group

CST- Evidence-based practice (EBP)

CST

- Effective for infant colic: 4 randomized controlled trials (RCT), the highest quality studies
- Positive results from weekly sessions, 2nd-4th session
- CST is safe

Other manual therapies

- RCT & Reviews of RCT on acupuncture, osteopathy, chiropractic, baby massage, reflexology
- Similar positive results
- Help to expand the evidence

Limitations of EBP in CST

- Small number of studies / other manual therapies
- Small number of participants / probiotic trials
- Bias: not double-blinded / unethical?
- Limited outcome measures / similar other IC studies

Final thoughts

Within the current IC paradigm shift whereby IC is positioned as a gut-brain disorder, CST will likely gain more relevance due to its positive influence on the vagus/ANS.

Evidence is building on the use of CST for IC (4RCT) with positive outcomes regarding crying reduction and increased sleep.

Manual therapy is increasingly popular and it is being integrated into the healthcare sector as a safe method for colic relief. More awareness among healthcare professionals (GP, midwifes, health nurses, paediatricians and others working in the field of infant health) is needed.

While the gap between evidence and practice close, CST practitioners may be well placed to support parents and families as it is a gentle, safe and effective therapy.

CST practitioners are encouraged to pay special attention to mum&baby signs, symptoms and history to understand MGB influencing factors on colic, and in view to personalise and increase treatment effectiveness.

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