7° CONGRESSO NAZIONALE ROI
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ROI
REGISTRO DEGLI OSTEOPATI D'ITALIA

30 ANNI DI OSTEOPATIA IN ITALIA
SVILUPPO, RICERCA E IDENTITÀ
24 - 25 - 26 GIUGNO 2022

Efficacia del trattamento manipolativo osteopatico per i disturbi del sistema gastrointestinale in neonati a termine e pretermine: una revisione sistematica

Domenico Monacis, Michele Belletta, Simone Ricciardi, Andrea Bergna, Francesca Buffone, Andrea Tarantino, Fulvio Dal Farra, Luca Vismara

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Disturbi Gastrointestinali in Neonati: Incidenza ed Impatto sulle Famiglie e sul Sistema e Sanitario

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Pediatr Gastroenterol Hepatol Nutr. 2019 May;22(3):207-216
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Pediatric Gastroenteology, Hepatology & Nutrition pghn

Review Article

Check for updates

Functional Gastrointestinal Disorders in Infancy: Impact on the Health of the Infant and Family

Yvan Vandenplas,[1] Bruno Hauser,[1] and Silvia Salvatore[2]

Open Access Research

BMJ Open

The costs of functional gastrointestinal disorders and related signs and symptoms in infants: a systematic literature review and cost calculation for England

James Mahon,[1] Carlos Lifschitz,[2] Thomas Ludwig,[3] Nikhil Thapar,[4] Julie Glanville,[1] Mohamad Miqdady,[5] Miguel Saps,[6] Seng Hock Quak,[7] Irene Lenoir Wijnkoop,[8] Mary Edwards,[1] Hannah Wood,[1] Hania Szajewska[9]

Table 3 Summary of costs of colic/FGID in England 2014/2015

Cost area	Value (million)
Prescriptions of colic/reflux/constipation medicines	£5.8
Prescriptions of colic/reflux/constipation formulas	£0.9
Health visitor appointments	£3.5
GP appointments (colic/reflux/constipation medicines and formula)	£26.0
Admitted patient care	£9.3
A&E visits	£3.6
OTC colic medicines	£13.6
OTC antiregurgitation formulas	£9.6
Total costs	£72.3

A&E, accident and emergency; FGID, functional gastrointestinal disorder; GP, general practitioner; OTC, over the counter.

Gastroenterology 2016;150:1443–1455

Childhood Functional Gastrointestinal Disorders: Neonate/Toddler

Marc A. Benninga,[1,*] **Samuel Nurko**,[2,*] Christophe Faure,[3] Paul E. Hyman,[4] Ian St. James Roberts,[5] and Neil L. Schechter[6]

Table 2. Prevalence, Pathophysiology, and Treatment of Functional Gastrointestinal Disorders in Neonates and Toddlers

Disorder	Age	Prevalence, %	Pathophysiology	Treatment	Outcome
Infant regurgitation	3 wk to 12 mo	41–67 (peak at 4 mo of age)	Small esophageal volume, overfeeding, infant positioning	Education, smaller feedings feeding thickening, positioning	Resolves in 90% by 12 mo of age
Infant rumination syndrome	3–8 mo	1.9	Emotional and sensory deprivation	Behavioral interventions, improved nurturing	Recovery with nurturing
Cyclic vomiting syndrome	Wide range	3.4	Activation of the emetic reflex and the HPA axis	Prevention of triggers, prophylactic medications, abortive medications, supportive measures	Usually resolves as child gets older but may continue or change to abdominal migraine or migraine headache
Infant colic	Early infancy to 5 mo	5–19	Results from normal developmental process Normal variations in development and temperament account for differences in crying Influence of parental perceptions	Reassurance No evidence that pharmacologic interventions are useful There is inadequate evidence whether elimination of cow's milk protein, probiotics, or herbal interventions provide viable and effective treatments These approaches remain problematic and controversial	Resolves by 5 mo of age
Functional diarrhea	6–60 mo	6–7	Dietary and motility abnormalities; increased mucosal secretion?	Education, dietary changes	Usually resolves by 60 mo of age
Infant dyschezia	Birth to 9 mo	2.4	Uncoordinated defecation dynamics	Education and reassurance, avoidance of anal stimulations and laxatives	Resolves in most cases by 9 mo of age
Functional constipation	Birth to adulthood	3–27	Results from painful defecation associated with withholding	Education, behavioral interventions, laxatives	Successful long-term treatment in 80% after first year, and increases over time

HPA, hypothalamic–pituitary–adrenal.

Quale potrebbe essere il contributo dell'osteopatia?

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Materiali e Metodi

- Revisione sistematica eseguita seguendo PRISMA Check-list (Page et al. 2021)
- *Parole Chiave*: "osteopathic manipulative treatment", "osteopathic manipulation", "craniosacral", "gastrointestinal disorder", "gastrointestinal function", "infant", "newborn
- **L'ultima** ricerca **bibliografica risale a** giugno **2021.**
- N. di registrazione **PROSPERO** CRD42021293463

PubMed.gov

Scopus®

Cochrane Library

PEDro Physiotherapy Evidence Database

Embase®

CINAHL Available via EBSCOhost

Materiali e Metodi

Criteri di inclusione:

- studi controllati randomizzati (RCT);
- quasi-RCT o studi retrospettivi
- trattamento manipolativo osteopatico in relazione ai disturbi gastrointestinali
- campione: neonati a termine o pretermine (età in ingresso allo studio <12 mesi)
- gruppo di controllo (GC)
- lingua inglese

rayyan
INTELLIGENT SYSTEMATIC REVIEW

Ouzzani et al. 2016

- Valutazione degli studi in cieco con presenza di un terzo revisore in caso di discordanza;

Risk of Bias

- Cochrane Risk of Bias versione 2 (RCT);
- ROBINS-I (studi osservazionali non RCT);

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Outcome Primari e Secondari

1. Modifica della/e funzione/i gastrointestinali in neonati (a termine e prematuri)

2. Durata della degenza ospedaliera
   Percezione e grado di soddisfazione da parte dei genitori
   Eventuali eventi avversi

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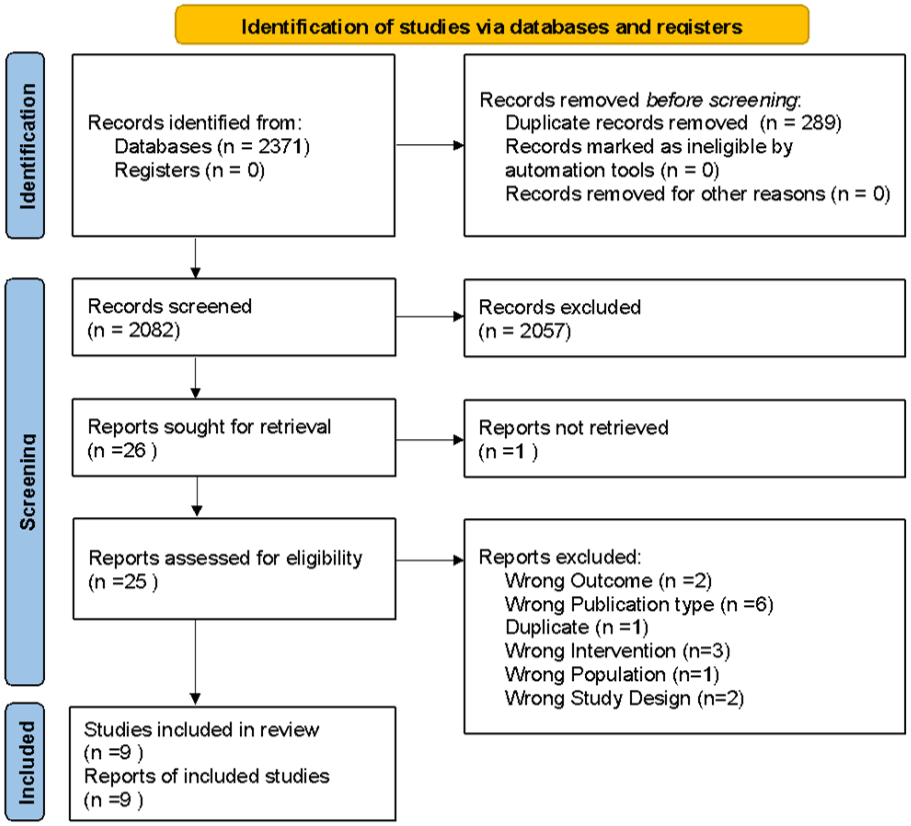
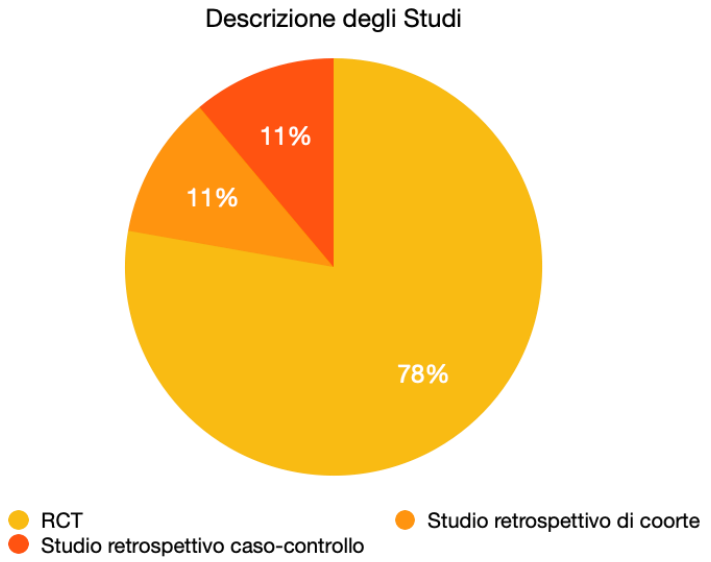
Selezione degli Studi

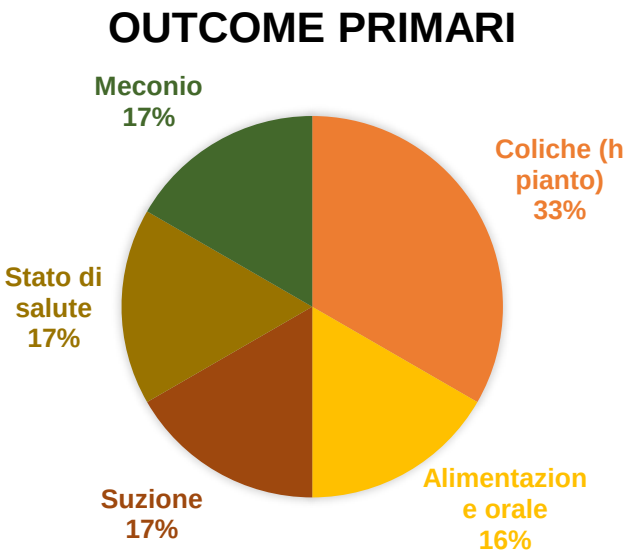


Totale Studi inclusi = 9



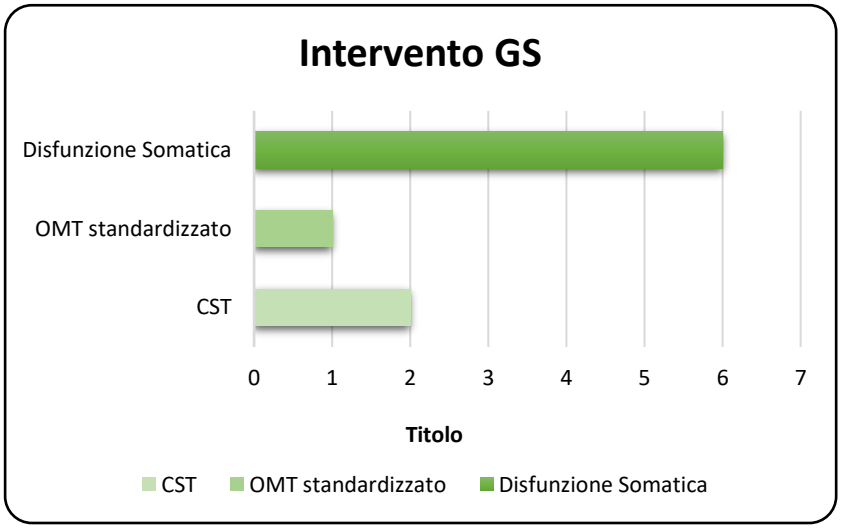
Descrizione degli Studi

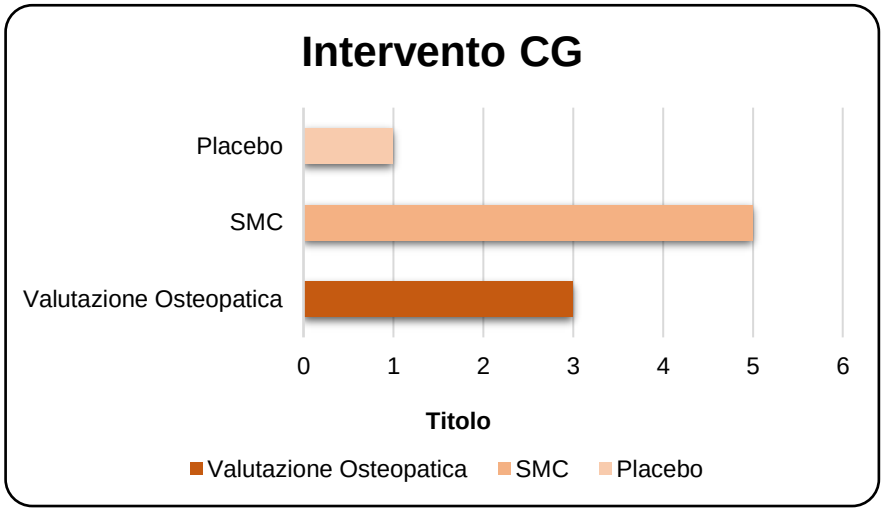
- Campione totale: 1368
- 5 studi (56%) su neonati a termine
- 3 studi (33%) neonati pretermine (<34 settimane)
- 1 studio (11%) neonati estremamente prematuri (< 187 giorni di gestazione)



Descrizione degli Studi

- OMT: 1-2 a settimana
- Durata: 20-60 min





GS = Gruppo Sperimentale
GC = Gruppo Controllo

CST = Cranio-Sacral Treatment
SMC = Standard Medical Care

Qualità metodologica degli studi

ROB 2: RCT

Figure 2. Risk of bias assessment graph for the included studies

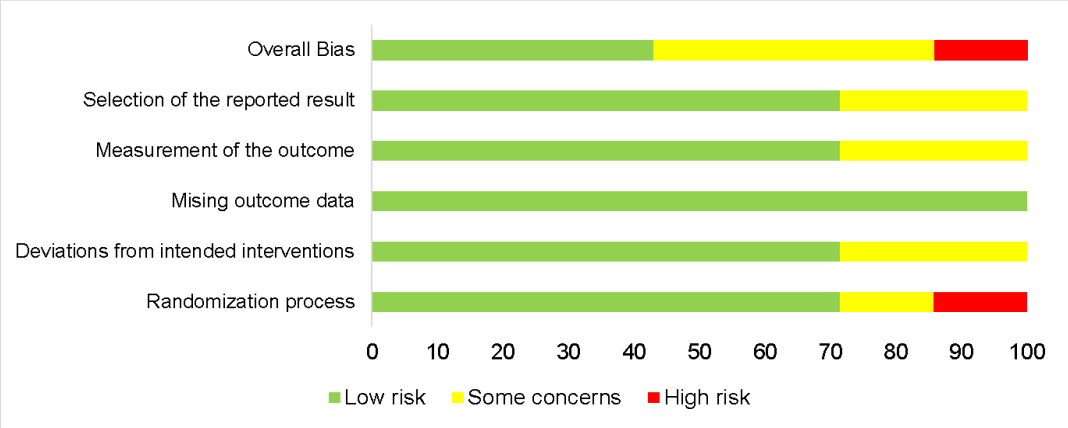
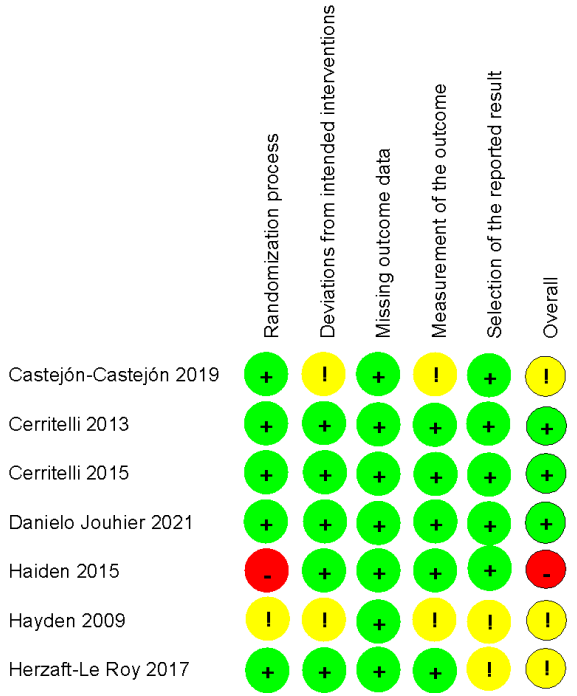


Figure 3. Risk of bias assessment graph for the included studies



ROBINS: studi osservazionali —> basso rischio di bias

Descrizione dei Risultati

Coliche Infantili

- ↓ ore di pianto dovuto a coliche gruppo OMT (Hayden et al. 2009, $p < 0.02$; Castejón-Castejón et al. 2019, $p < 0.0005$);
- ↓ intensità delle coliche gruppo OMT (Castejón-Castejón et al. 2019, $p < 0.0005$)

Alimentazione Orale ed Enterale

- ↓ tempo necessario per alimentazione orale – bambini prematuri - gruppo OMT (Vismara et al. 2019, $p = 0.042$);
- ↓ tempo necessario per alimentazione enterale GC (Haiden et al. 2015, $p = 0.02$);
- ↑ capacità del bambino di allattamento al seno (Herzaft-Le Roy et al. 2017, $p = 0.001$);
- No differenze significative per allattamento al seno (Danielo Jouhier et al. 2021, $p > 0.05$)

Meconio

- No differenze significative (Haiden et al. 2017, $p > 0.05$)

Aumento di peso giornaliero

No differenze significative (Cerritelli et al. 2013, 2015; Haiden et al, 2017; Vismara et al. 2019; Danielo Jouhier et al. 2021. $p > 0.05$)

Outcome Secondari

- ↓ LOS a favore del gruppo OMT (Cerritelli et al. 2013, $p < 0.03$; Cerritelli et al. 2015, $p < 0.001$)
- No differenze LOS (Vismara et al. 2019, $p > 0.05$; Haiden et al. 2017, $p > 0.05$);
- OMT generalmente sicuro

Discussione

Trattamento coliche infantili (Mills et al. 2021; Castejón-Castejón et al. 2019; Hayden et al. 2009)

Capacità del bambino di allattamento al seno (Herzaft-Le Roy et al. 2017) = Medio rischio di Bias

Medio-Alto rischio di Bias (Castejón-Castejón et al. 2019; Hayden et al. 2009)

No differenze significative per allattamento al seno (Danielo Jouhier et al. 2021) = Elevata qualità metodologica della ricerca

Limiti:

- Differenze nella tipologia dell'intervento OMT (tecniche, approccio, numero di trattamenti, durata, frequenza)
- Numero ridotto di studi
- Eterogeneità degli outcome

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Grazie per l'attenzione