



University College of Osteopathy

Effectiveness of common interventions for the treatment of infantile colic, positional plagiocephaly and congenital muscular torticollis

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# **RESEARCH QUESTION**

How does manual therapy compare with other common treatments for infantile colic, positional plagiocephaly and congenital muscular torticollis?

## METHODS

Systematic review of systematic reviews and guidelines on the effectiveness of treatments for infantile colic, positional plagiocephaly and congenital muscular torticollis.

We extracted data of the included reviews, assessed their quality and compared treatment outcomes.



Take a picture for more information on the **methods** 



Probiotics for breastfed infants had the strongest evidence of benefit for the treatment of colic in terms of crying time.

There was mixed quality evidence to show that manual therapies were beneficial for reducing crying time for colic, improving symmetry in positional plagiocephaly and range of movement in congenital muscular torticollis.

The evidence showed that routine simethicone and proton pump inhibitors were not effective in the treatment of colic and carried a risk of adverse reactions.

Current clinical guidelines are inconsistent and do not reflect these findings.

#### Infantile colic

PROBIOTICS: moderate to high evidence in breastfed infants in reducing crying time. Low risk. MANUAL THERAPY: low to moderate evidence for reducing crying time. Low risk.

PHARMACOLOGY: mixed unfavourable evidence for proton pump inhibitors (e.g. Omeprazole aka Losec®) also associated with adverse reactions, and simethicone (e.g. Infacol®).

Colic	Effect on daily crying time (minutes)	Direction of effect	Level of certainty
Manual	-33 to -76	Favourable	Low to
therapy			moderate
Probiotics	-25 to -65	Favourable	Moderate
- breast			to high
fed infants			
Simethico	-8 to -30	Unfavourable	Low to
ne			moderate

#### Congenital muscular torticollis

PRACTITIONER-LED STRETCHING: Moderate evidence on ROM MANUAL THERAPY IN ADDITION TO HANDS-OFF PHYSIOTHERAPY: Low quality inconclusive

Congenital muscular torticollis	Control	Direction of effect	Level of certainty
Manual	Hands-off	No	Low
therapy	physio only	difference	
+ hands-off			
physio			
Practitioner-	Not	Favourable	Moderate
led stretching	reported		

### Positional plagiocephaly

MANUAL THERAPY: moderate to high evidence compared to repositioning. RE-POSITIONING THERAPY (with or without

pillow): moderate to high evidence compared to usual care.

HELMET THERAPY: low favourable evidence

Positional plagiocephaly	Control	Direction of effect	Level of certainty
Manual therapy	Repositioning advice	Favourable	Moderate to high
Manual therapy	Usual care	Inconclusive	Low
Manual therapy	Helmet	Inconclusive	Low
Repositioning	Usual care	Favourable	Moderate to high
Repositioning	Manual therapy	Unfavourable	High
Repositioning	Helmet	Unfavourable	Moderate
Helmet (orthosis)	Usual care or repositioning	Favourable	Low